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## THE ROLE OF PHYSICAL EDUCATION AND A HEALTHY LIFESTYLE OF YOUTH

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### ANNOTATION

*The article analyzes the role of physical education, the level of its development in the life of youth. The collective term of physical culture, healthy lifestyle, physical abilities and sports is derived. Various options for updating the derived concepts in the life of youth are considered.*

**KEY WORDS:** *physical culture, healthy lifestyle, student, physical abilities, health, sports activity.*

## РОЛЬ ФИЗИЧЕСКОГО ВОСПИТАНИЯ И ЗДОРОВОГО ОБРАЗА ЖИЗНИ МОЛОДЁЖИ

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### Аннотация

*В статье анализируется роль физического воспитания, уровня ее развития в жизни молодёжи. Выводится собирательный термин физической культуры, здорового образа жизни, физических способностей и спорта. Рассматриваются различные варианты актуализации выведенных понятий в жизни молодёжи.*

**Ключевые слова:** *физическая культура, здоровый образ жизни, студент, физические способности, здоровье, спортивная деятельность.*

### DISCUSSION

At present, the understanding of physical culture as a social and individual value has increased, which allows us to form new trends in the development of public opinion and personal motivations for the development of the values of physical culture by everyone.

Physical culture is part of universal culture, its special independent life. Physical culture uses in its influence on the human body the vital aspects obtained in the form of inclinations and abilities that develop under this influence. Considering the concept of physical culture already, we can derive its definition as “appropriate motor activity in the form of physical exercises that can effectively form the



necessary physical abilities, optimize the state of health" [4].

In the system of education, upbringing and recreation, physical culture manifests itself in a healing value. "Health is a normal psychosomatic state of a person, reflecting his full physical, mental and social well-being and ensuring the full implementation of labor, social and biological functions" [8, p. 166]. The result of health-improving sports activities is physical fitness, with the help of which the perfection of certain skills and makings of a person is achieved.

Physical culture and sports activity with a set of exercises carried out in it, which are an integral part of students engaged in physical education, is one of the most effective mechanisms for increasing the working capacity and concentration of students. The introduction of students to physical education and sports, based on taking into account the individual abilities of each, is a necessary part of an organized educational process.

Today, the connection between physical education and study at the university is especially acute, as they directly interact with each other. In turn, physical education is one of the fundamental factors for achieving success in educational activities. The subject of "physical education" requires the inclusion of students from all universities, starting with the first year in all training programs.

Interest in physical education is based on the emergence of natural needs for sports implementation. This is how the guiding and regulating force of personality behavior is developed. Needs cover a fairly wide range: for the normal development of the body there is a need for movements and physical activity. Physical culture also promotes communication, acquiring new contacts, spending free time with friends, emotional relaxation, self-affirmation, strengthening the position of one's self, which is important for a student. Otherwise, interest in physical education and sports education prompts the emergence of positive emotions, emotions of satisfaction, pleasure. The higher the level of interest becomes, the more important is objective significance. Interest encourages students to become more familiar with physical education; it is aimed at meeting the needs to possess this subject [2].

Based on the functions that physical education performs in a university, it can be concluded that physical education is beneficial for a student. In physical education classes, students achieve a certain level of physical development, and also strengthen their health. All this directly affects the general preparation of the student.

Any development, training is aimed at the study of personality-value orientation. There is no exception to physical education. Definitions for student personal ideals helps ensure professional self-

development and individual improvement. But it would be erroneous to consider that physical education in particular helps the student to develop individually, as if in separation from society.

In the process of uniting young people into collectives, clubs, organizations, unions, an integrative and organizational function is formed that allows you to learn and develop existing teamwork skills. Collective, teamwork also allows you to identify your creative potential, which is the basis for the comprehensive development of the individual. Also, teamwork contributes to the development of a communicative and regulatory function that reflects the process of behavior, communication, interaction of participants in physical culture and sports activities.

Ultimately, physical education is one of the components of the process of organizing student leisure. It not only satisfies the natural needs of the individual, but also helps to relieve emotional and psychological stress.

Speaking about the student's sports and physical life, we are focusing on such a concept as a healthy lifestyle. This attention to healthy lifestyle is caused by the achieved level of health of specialists graduated from higher education.

"A healthy lifestyle is an active activity of people aimed at maintaining and improving health, as conditions and prerequisites for the implementation and development of other aspects and aspects of lifestyle, to overcome the "risk factors" for the emergence and development of diseases, and to use them optimally in the interests of protecting and improving health social and natural conditions and lifestyle factors" [3, p. 282].

A healthy lifestyle reflects the structure of students' life forms, which are characterized by such concepts as self-organization and self-discipline, self-regulation, self-development. Assignment of these concepts helps the student to reach the highest level of self-realization in professional and everyday activities. A healthy lifestyle lays for the student such qualities that help to achieve the highest level of creative and social development, labor activity and self-improvement. Strict adherence to the principles of healthy lifestyles lays in the student a part of general cultural development, the ability to "build" himself as a person in accordance with his moral and ethical ideas. In general, a healthy lifestyle helps the student to become a spiritual person, developed both morally and physically [6, p. 177].

The main components of a healthy lifestyle are:

1. Compliance with the regime of work and rest, nutrition, sleep.
2. Organization of an individual regime of physical activity.
3. Refusal of bad habits.



4. The communicative aspect, allowing you to build the right student relationship in the team.

5. The development of leisure activities that have a developing effect on the person [7, p. 167].

These characteristics form a kind of barriers protecting the student from the need to constantly react to the variety of judgments, opinions, assessments, requirements existing around him.

Within these boundaries, the student can regulate his actions and try out new patterns of behavior. The components of a healthy lifestyle are not new, but for each student they add up individually and are acquired in the process of communicating with people in the course of everyday practice.

The most important factor for the development of the motivational-value component, which, in turn, reflects a positive attitude towards physical education, is knowledge: theoretical, methodological and practical. Knowledge, turning into a system, helps to shape the volitional efforts of the individual, cognitive and practical activities for mastering the values of physical culture, focus on healthy lifestyle, physical improvement.

The formation of a knowledge system is necessary for self-identification of a person in the process of physical culture and sports activities. Thus, the self-identity of the person. The experience of various emotions accompanying self-knowledge forms an attitude towards oneself and forms a self-esteem of a person. [8, p. 169].

Physical education is an integral part of the educational process. When developing standards for physical education in a university, first of all, the goal should be set to strengthen health and physical well-being, and then to achieve a sports result [9, p. 578].

One of the main criteria for assessing physical education in a university is the dynamics of the level of students' physical fitness, which can be tracked through the adoption of the same control standards [1, p. 92].

Physical culture is an organic part of human culture, its special independent area. This is a specific process, which is necessarily followed by a result, means and method of physical improvement of a person.

Physical culture exerts its effect on the vital aspects of the student's life, which are manifested in the form of inclinations and abilities. Physical culture satisfies both the physical and social needs of the individual.

The formation of a conscious attitude to their own health and teaching the basics of a healthy lifestyle of students is a goal that justifies all the funds spent on its implementation. [1, p. 93].

Today, the connection between physical culture and health, working capacity and labor productivity is felt especially clearly. The modern process of

teaching students requires a new physical world from them. As study becomes the main factor in the student's life, so physical education turns into an integral attribute of student life.

Thus, physical education for a student:

- 1) creates the conditions for comfortable physical activity;
- 2) explains to students the main points of a healthy lifestyle;
- 3) strengthens health and improves normative indicators in students;
- 4) forms a responsible attitude to one's own health;
- 5) popularizes sports, outdoor activities, tourism.

It follows from this that, as students develop personal physical culture, they perceive it both as an academic discipline and as an important step on the path to a healthy lifestyle [5].

Summarizing the above, we can say that physical education for a student is one of the most important components of his usual life. It is in this context that the students' attitude to physical education, sports and a healthy lifestyle should be formed. Physical education is not just one of the fundamental components of a student's life, but also forms its comprehensive development and improvement. Physical education at the university helps the student to correctly assess their abilities and develop them in the right direction, thereby strengthening their health.

There are many problems associated with students' attitudes toward physical education, for example, such as re-evaluating their own abilities or lack of motivation for playing sports. Physical education at a university is aimed at solving these and other problems.

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## FORMATION OF A HEALTHY LIFESTYLE AS THE MAIN TASK OF SOCIETY

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### ANNOTATION

*The article analyzes the ongoing reforms in the health sector. In the "Action Strategy for 2017-2021", approved by the Decree of the President of the Republic of Uzbekistan dated February 8, 2017, the fourth direction - "Development of the social sphere" - provides for the improvement of the system of social protection and protection of public health. The primary tasks in this direction are to preserve the health of the nation, reduce morbidity, mortality, increase life expectancy, create conditions and create motivation for maintaining a healthy lifestyle and improving the qualitative development of the demographic situation in the country.*

**KEYWORDS:** *healthy lifestyle, politics, reform, education, development*

### DISCUSSION

President of The Republic of Uzbekistan Sh.M. Mirziyoev's appeal to the Oliy Majlis on January 24, 2020 emphasized the need to find a wide decision on healthy lifestyle among the population [1].

Formation of a healthy lifestyle and human improvement are issues related to each other dialectically. If human maturity, a harmoniously developed generation, is a strategic goal, a healthy lifestyle is one of the ways to achieve this goal, a daily social practice. However, a healthy lifestyle is not just a daily practical experience, but it is the most effective and necessary means of educating a harmoniously developed generation. The active nature of the growing children, youth, the need of the young organism for various exercises and physical loads, the formation of a healthy lifestyle makes it a central part of the concept of a harmoniously developed generation and one of the main tasks. Scientists call it a "module of ACME Health". Two areas of social activity are important in addressing issues related to the creation of a health ACME module that will be the basis for communicating medical culture to people. In this case, it is advisable to take into account the laws and principles that apply to health and education. For this purpose, it is possible to base on the principles that reflect the conceptions formed in both areas during the years of independence in our country. It is known that such principles are defined in the laws of both spheres [2]. In fact, the origin of norms and principles established by official laws is essentially the right approach. But

it is difficult to reflect on all issues related to lifestyle in the laws. A healthy lifestyle is primarily an individual's personal life and an individual's attitude to this life. He chooses a lifestyle based on his individual interests and needs, the opportunities he has in himself, determines [3]. The pursuit of a harmonious generation and a healthy lifestyle to create a mature, ACME module has never stopped. They have occupied the minds of those especially philosophers since ancient times. It is therefore natural that such models still have hypothetical elements. In fact, optimistic hypotheses give anthropological significance to any social event, especially the idea of maturity, encouraging people to believe in the dreams of a bright future, an ideal society that has lived in the hearts of peoples for centuries. [4]. So we should not be afraid of the hypothetical elements in the models, but rather to apply the rational aspects in them to life, to look for ways, ways to integrate them into our everyday life. There is no model, theory, desire without hypothetical properties.

Ensuring the health of the population was one of the main issues that our independent, young state should solve. The main reason for this was the inhumane economic, environmental and medical policy pursued during the saline era. We will only sentimental one macro example of this, as much has been written about the negative consequences of the Soviet-period lifestyle. When we analyze the works of scientists in this direction, we can say that " for the leaders of some local party, state bodies, the prospects that will be after 25, 50, 100 years do not



have practical significance, except that such scientific proposals were only in the mouth, superficial support was provided. In 1980, the portable session of the science of UZSSR in Nukus introduced concrete scientific proposals on the ecological prospects of the Aral Sea region. However, these proposals remained unnoticed by the local party, state bodies. Scientists and specialists of our republic did not show perseverance, typos in the implementation of these proposals. As a result, the ecological problem associated with the drying of the Aral Sea has already come out of the regional Circle and has become a global phenomenon, a truly tragic one. After all, in the Sixties, the level of the Aral Sea was 65 thousand km<sup>3</sup>, the water volume was 1100 km<sup>3</sup>, the average depth was 16 meters, the salinity of one liter of water was 10 grams, in the next 20 years it decreased to 11,5 meters, the levels reached 18 thousand km<sup>2</sup>, the water in some places retreated. As a result of the increase in the level of mineralization by 44 grams, the living organisms living in it are becoming extinct, their biological productivity has decreased by more than 5 times. Some species of living organisms have come to the threshold of complete extinction. In addition, the plant world of 600 thousand hectares of land in the delta of the Aral Sea of Amudarya has been completed. The main reason for this is the invasion of salt from the dried up areas of the Aral Sea [5].

The fact that the infant mortality rate in our country is the highest in the former USSR testifies to the level of attitude to the health of the population. In such a situation, the newly independent Republic of Uzbekistan could not ignore the restoration of public health and the formation of a healthy lifestyle.

When the government of Uzbekistan began to radically reform social life, it provided for the improvement of the sphere of health care aimed at ensuring the health of the population. This process included three stages.

The first stage includes 1991-1998 years. (There are different approaches, opinions about these stages. We are concerned with the implementation of social economic reforms, proceeding from the grouping of stages envisaged by the people of Science) the tasks at this stage include achieving the restoration of the system of prophylactics and ensuring its effective functioning, improving the health care of children and mothers, development of rational indicators and norms in the field of demography, regions with strong environmental in 1993, the state program "Healthy Lifestyle" is adopted. In the same year, the order "for healthy generation" of I and II degree is established in order to reward people, specialists who have a special role in the upbringing of the younger generation as healthy, energetic and perfect people. Until now, 617 people have been awarded with this order, most of them are educators and medical workers. It was at

this stage that an appeal began to the historical cultural heritage, to the medical spiritual experiences left by our great ancestors. Parts related to medical issues in Avesto, Beruni's "Pharmacy in medicine" ("Китаб ассайдана фит-тиб"), Ibn Sina's "Medical Law" ("Al-Kanun Fit-tib") books were translated, references to medieval Central Asian medicine, population health experiences, increased interest. The revival of folk medicine is also observed. An important aspect for our topic was that at the first stage, it was learned that a healthy lifestyle should be considered in terms of National Medical (ethnomedical) inheritance, scientific and practical research in this regard should be considered in terms of harmony of national and universal values. The development of national democracy itself was also due to this harmony, therefore, the government of our Republic, in accordance with the principle of "do not break the old without building a new house", directed the provision of health and medical services created during the period of the Soviets, the maintenance of the system of training of qualified personnel, their service to national interests. It is known that on the eve of the transition to the market economy and independent development 101 medical institutions with 140072 seats and prophylactic clinics were present in Uzbekistan, such as Tashkent Medical Institute preparing qualified doctors(1931), Samarkand State Medical Institute(1932), Tashkent Pharmaceutical Institute, Andijan Medical Institute(1955), Central Asian medical pediatric institute(1972). Bukhara Medical Institute (1990). The growing population required the number of these institutions and the development of the types of medical services [6]. In the period up to 1998 year, the mortality of young children decreased by 40%, maternal mortality increased by 3,5 times, premature birth by 30%, respiratory muscle among children by 40%, abstinence from excessive pregnancy increased by 45% compared to 1993 year. As a result of the increase in day inpatient and outpatient services, the number of hospitals in the country was reduced by 20% and the number of beds by 46%. The number of hospitals in the state medical system fell from 1991 year 1388 to 1998 year 1175. As a result, the per capita visits of doctors increased from 7.2 to 8.2, while the treatment of clients in hospitals decreased from 14.9 days to 12.9 days [7]. At the same time, observations have shown that many are waiting for a solution to the problem. For example, among young girls in 1996 year increased by 15% of diseases compared to 1993 year, 37,5% of women gave birth with pathological defects. Despite a significant decrease in the birth rate of the population in 1996 year, there was an increase in the incidence of early marriage of girls, which did not have a negative impact on the health of future children. In 1995, 10, 31% of the budget was spent on health and wellness work, in 1996 it fell to 9,69%, in 1997 it fell to



6,69%. Among women, especially anemia, urinary sexual system, digestive organs, late toxicosis of pregnancy, among pregnant women, pathology was found to be high [8]. The second phase of radical reforms in the field of health care (1998-2009) is connected with the adoption of the state program on the reconstruction of the health care system for 1998-2005 years. According to this document, the following tasks were applied for the population: restoration of new types of rural medical units in rural areas, providing them with the necessary material technical equipment and specialists, the creation of a two-stage (district and regional) Treatment System, measures of social medical importance. Moreover, the radical improvement of the activities of emergency care institutions, the creation of scientific centers for the provision of emergency care and the expansion of the scope of Special Studies, the development of the State Register of Genetics, "Maternal and child screening" and others were carried out. Non-public publications "Welfare and health" and "Uzbek medical journal" appeared. In Uzbekistan, 1998 was declared the year of the family. This year, special attention was paid to educating the younger generation mentally and spiritually, developing sports and physical culture among children. As a result, children's health-improving exercises, sports activities increased by 2 times, that is, from 34% to 63% [9].

The aspiration of the population to increase health and the formation of a healthy lifestyle motivated our government to continue reforms in this direction. As a result, 1999 was declared "The Year of Women", 2000 "The Year of Healthy Generation", 2001 "The Year of Mother and Child", 2002 "The Year of Honor of the Elderly", 2003 "The Year of Prosperous Neighborhood", 2004 "The Year of Kindness", 2005 "The Year of Health", 2006 "The Year of Sponsors and Doctors", 2007 "The Year of Social Protection", 2008 "The Year of the Youth", 2010 "The Year of Harmoniously Developed Generation". The scope of work carried out in these years is difficult to cover in one article, even in two books. An important aspect of our theme is that the center for reforms in the field of health is focused on the formation of a new approach to health in the population of the entire medical system and educational institutions.

This new approach was viewed as a model of order, formed in advanced countries, that is, the greatest happiness that a person can achieve, wealth, an indicator of all success, a high value that can not be equated with anything. Service to the state in the era of the Soviets, the fulfillment of which was considered patriotism, loyalty to the communist idea, courage, although he spent all his time and health on the production plans, which he established. Forgetting about his family, social duties, the cultivation of healthy children, sooner or later the

fulfillment of the state plan was an activity that would be respected and rewarded. In the years of independence this view, a narrow paradigm has changed, human interests, health, longevity, happy life have become a key indicator, a sign of social progress.

The declaration of human life as a high value in the Basic Law (Constitution) of the Republic of Uzbekistan and the introduction of democratic, humanistic norms into our lives taught us to approach health from the point of view of a new paradigm.

The third stage includes 2010-2016 years. At this stage, the implementation and completion of the state programs adopted in previous years, the solution of problems in the field of medicine, the development of the concept of environmental education and its introduction into the education and training system were continued. Since it is directly related to our subject, the year 2010 has been adopted the "Conception of Bringing up a Harmoniously Developed Generation" and associated with it the "Year of a Harmoniously Developed Generation" program.

In 2010, the share of the population under 30 years of age was 64%. In general, young people in Uzbekistan have always made up more than half of the total population. This is not only the pride and luck of our people, but also the cause of certain social problems. It is primarily related to socio-economic, educational, employment, demographic, cultural and social and medical services. Based on the concept of educating a harmoniously developed generation, all the attention and expenditure was focused on raising the young generation as physically and mentally mature, intellectually rich, with their own independent thinking and life goals. This is in fact reflected in the Law "On the Fundamentals of State Youth Policy in the Republic of Uzbekistan", the Decree of the First President of the Republic of Uzbekistan dated May 18, 2007 "On additional measures for material and moral support of young families" and the 2008 "Year of Youth" was a practical continuation of the tasks assigned.

In order to consistently continue the wide — ranging reforms carried out in 2017-2020, in order to reach a new stage of development of the country in the conditions of New Uzbekistan in 2017-2020, the promotion of a healthy lifestyle among the population in the "strategy of action" on the five priority directions of development of the Republic of Uzbekistan was developed. In particular, in the "priority directions of development of the social sphere", which is the fourth direction of the strategy of action, among the solutions of a number of important social issues, the tasks related to the formation of a healthy lifestyle among the population are also defined, the performance of these tasks is directed to the upbringing of the harmonious



generation. However, a healthy society is the basis of a harmonious generation.

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# AN IMPACT OF COVID-19 ON INDIAN ECONOMY-A BRIEF VIEW OF SELECTED SECTORS

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## ABSTRACT

*It is imperative that society preserve both lives and livelihoods. The corona virus outbreak labeled as Pandemic by the World Health Organization (WHO) on Wednesday 11 March 2020, is a new public health crisis threatening the world with the emergence. WHO proposed calling the disease "2019-nCoV acute respiratory disease?" It is the first human catastrophe affecting a number of people all over the world. It is caused by Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2). It is believed that the virus originated in bats and was transmitted to humans in Wuhan, Hubei province, China in December 2019.*

*The only methods to prevent the disease are quarantining, social distancing. And follow the government instructions. The study covers the impact of COVID-19 on various sectors of Indian economy. A descriptive type of research and exploratory research design has been taken for the study. Having considered the implications of the pandemic, the study also recommends the socio-economic and political measures to combat the situation that would help us revive in the post Covid-19 World.*

**KEY WORDS-** COVID-19, Economy, WHO, Pandemic, Impact

## INTRODUCTION

Coronavirus pandemic was first testified in Wuhan, China in Dec. 2019. It is a large family of viruses that causes illness. This novel virus has not been recognized in humans so far. It has already been spread to more than 175 countries in the world.

The global economy is suffering the risk of global recession as most of the nations have declared lock down due to COVID 19. Countries that are experiencing COVID-19 have adopted different approaches to slow the spread of the virus. Some have tested extensively, carried out contact tracing, limited travel and large gatherings encouraged physical distancing, and quarantined citizens. Others have implemented full lockdowns in cities with high infection rates and partial lockdowns in other regions, with strict protocols in place to prevent infections.

Coronavirus will impact our economic growth which will directly reflect in our GDP. According to Arun Singh, Chief Economist Dun & Bradstreet this lockdown will decrease in GDP growth rate which is expected to moderate further from earlier estimate of 5% for FY 20 and it will also be uncertain in FY 21.

## CURRENT SCENARIO OF INDIAN ECONOMY

India is one of the fastest-growing economies in the world. In 2017, as per data of World Bank, India stood on 6<sup>th</sup> rank in largest economy with a GDP of USD 2.59 trillion. Our country is now suffering due to this global crisis. This epidemic hit our economy which is seen in our third-quarter GDP growth rate for 2019-201. As per recent data by NSO our economy raised at 4.7% during the third quarter. It is all-time lowest in the last six years.

**Table 1.1 Quarterly GDP growth rate at 2011-12 prices (%)**

Year	Q-1	Q-2	Q-3	Q-4
2015-16	7.59	8.03	7.2	9.09
2016-17	9.37	8.87	7.55	7.04
2017-18	5.99	6.77	7.69	8.13
2018-19	7.95	7	6.58	5.83
2019-20	5.01	4.55	NA	NA

Sources: - Ministry of statistic and programme implementation, 29 NOV 2019



The Government has declared a 21 days lockdown to protect the people and also break the chain of this virus for spreading. The complete lockdown has brought most of the sectors (Except essential services. Public Administration and Défense) to a cessation. It also impacts our GDP growth rate. Private consumption, investment, and external trade which are major contributors to GDP will have a significant impact due to COVID 19.

Moody's Investors Service said Covid-19 will likely depress global growth in 2020 below 2.5%, the recessionary threshold for the global economy. The Revised Budget Estimates for the financial year 2019-20 in terms of fiscal deficit was Rs. 7.6 trillion which will further balloon amidst COVID-19 shock in the month of March 2020. Moreover, the economic impact of COVID-19 will be visible on the Budget Estimates of fiscal deficit for the year 2020-21 which was approximated to Rs. 7.9 trillion.

It is reported by the United Nations Economic Commission for Africa (ECA), COVID-19 has peeled of USD 29 Billion from African economies and it is estimated that this crisis will wipe off 1.4 percent of the USD 2.1 Trillion cumulative GDP of Africa as more than ten countries within Africa have done total or partial shut- down in almost all sectors which have led many activities to be suspended (Kassema, 2020). It is expected by the World Trade

Organization (WTO) that global trade will fall up to 32% this year due to the coronavirus pandemic. (Fernandes, 2020). COVID-19 can affect the global economy through the impact on production, supply chain, and market disruption and financial impact on firms and the financial sector. According to the World Bank, Korea, Japan, and other Asian countries will likely experience slow growth in the first half of 2020 because of production slowdown in China. It is known that small and medium-sized firms may have greater difficulty surviving the disruption caused by COVID-19.

The purpose of this research paper is to analyze the impact of coronavirus on various sectors of the Indian economy. The approach is guided by a Qualitative research method in order to gain insight into economic implications due to coronavirus. The content analysis method is adopted by using the literature of peer-reviewed journals of social sciences and medicine, periodicals released by international and national organizations, to rationalize the approach of study.

### SECTOR WISE IMPLICATION

The Covid-19 pandemic has been a huge blow to India, especially since many sectors were already facing a crisis when the virus storm hit.

Sector	Implications
MSME (Micro, Small and Medium Enterprise)	<ul style="list-style-type: none"> <li>The MSMEs are the backbone of all Indian sectors.</li> <li>MSMEs are engaged in two key drivers of the Indian economy i.e. Manufacturing and export</li> <li>Today, almost all MSMEs are out of action due to the lockdown, chocking all production activities at major firms across sectors and have no money to pay their employee.</li> <li>leaders of this sector have appealed to the government to increase its relief package, which contributes to over 30 percent of India's GDP.</li> <li>"The government will also need to increase the insolvency limit for SMEs and MSMEs to 1 crore from 1 lakh.</li> <li>For bankruptcy protection and liquidity support, MSMEs could receive liquidity lines from their banks, refinanced by the Reserve Bank of India and a loan program for first-time borrowers could be administered through SIDBI.</li> </ul>
Tourism	<ul style="list-style-type: none"> <li>The travel &amp; tourism industry was one of the first sectors to be affected by the outbreak, and most likely will also be the hardest hit.</li> <li>Rajasthan, Kerala. Goa, Gujarat, and Maharashtra are the key states to visit for foreigners.</li> <li>Foreign tourist arrivals (FTA) in the month of March dropped 9.3 percent month-on-month and 7 percent year-on-year.</li> <li>In February 2020, there were 10.15 lakh FTAs, against 10.87 lakh in February 2019 and 11.18 lakh in January 2020.</li> <li>This shows the sharpest decrease since 2015 Due to COVID 19.</li> <li>Tour operators, travel agencies, and branded hotels from the organized sector may incur huge loss around Rs. 1.58 lakh crore.</li> <li>Apart from the organized sector, tourism also gives employment to small house stays and small Dhaba and hotel operators will also take a major hit.</li> </ul>
Pharma	<ul style="list-style-type: none"> <li>India is one of the top formulations of drug exporters in the world</li> <li>The U.S. and Europe are our largest consumers for Pharma.</li> <li>Since pandemic started in China, supply from their ingredients has much</li> </ul>



	<p>reduced.</p> <ul style="list-style-type: none"> <li>• there is a mixed gain and loss impact of COVID 19 on Pharma.</li> <li>• India imported around Rs 24,900 crore worth of bulk drugs in FY19, accounting for approximately 40 percent of the overall domestic consumption.</li> <li>• Local dyestuff units in India are heavily dependent on imports of several raw materials, including chemicals and intermediates, from China. Delayed shipments from China and a spike in raw material prices are affecting the dyes and dyestuff industry, especially in Gujarat.</li> </ul>
Information and Technology	<ul style="list-style-type: none"> <li>• The extended Lunar New Year holidays in China have adversely impacted the revenue and growth of domestic IT companies, operating out of China.</li> <li>• The global customers for Indian IT companies in China have started looking for other service providers in alternate locations such as Malaysia, Vietnam, etc.</li> <li>• IT companies are heavily dependent on manpower and are not able to operate due to restrictions in the movement of people arising from lockdown and quarantine issues.</li> </ul>
Auto	<ul style="list-style-type: none"> <li>• The Auto sector contributes 7.1% in GDP and also provides approximately 40 million employees in our country</li> <li>• As per the ET Auto report, the Indian auto sector earns gross revenue of around ₹ 2,000 crores each day and shutting down the production by the manufacturers will result in a revenue loss of up to ₹ 15,000 per day wherein the annual business of the sector stands at ₹ 7.8 lakh crore.</li> <li>• In passenger cars alone, the lockdown is estimated to have reduced production by ~240,000 units (~10% of total annual production).</li> <li>• After the lockdown is lifted, financial compulsions and low sentiment may drive roughly 35-40% of consumers to defer their vehicle purchase decisions for the next six months (until September 2020).</li> </ul>
Poultry	<ul style="list-style-type: none"> <li>• The poultry industry in different parts of the country has been hit hard amid rumors that the novel coronavirus can be transmitted through consumption of chicken, the prices of which have fallen considerably as a result.</li> <li>• People are avoiding consumption of meat, fish, chicken, and egg, etc</li> <li>• Due to the reduction in demand, the wholesale price of chicken had dropped by as much as 70 %. As a result, the chicken was now available at Rs 100-150 per kg in retail compared with Rs 180-200 earlier.</li> <li>• An official of a poultry feed company said that their sales have stalled, and they have stopped the purchase of maize and soybean and other items to prepare the chicken feed.</li> </ul>
Banking and Financial Institutions	<ul style="list-style-type: none"> <li>• The stock markets of the world crashed.</li> <li>• Investors started pulling out their money.</li> <li>• NBFCs of India are facing a liquidity squeeze post- IL&amp;FS crisis.</li> <li>• A Fitch report said, "The impact of the outbreak of the novel coronavirus raises further risks to economic growth and non-bank financial institutions' asset quality."</li> <li>• the economic slowdown due to the corona virus will also impact demand for loans which will dent further profits of NBFCs.</li> <li>• As per RBI's sectoral data, the loan outstanding against the trade (import and export industries) is the highest at Rs 5.19 lakh crore followed by MSMEs, where the outstanding loans are Rs 4.73 lakh crore.</li> <li>• For large corporations, banks could be allowed to restructure the debt on their balance sheets, and procedural requirements for raising capital could be made less onerous.</li> </ul>

For India, the trade impact is estimated to be the most for the chemicals sector at 129 million dollars, textiles and apparel at 64 million dollars, the automotive sector at 34 million dollars, electrical

machinery at 12 million dollars, leather products at 13 million dollars, metals and metal products at 27 million dollars and wood products and furniture at 15 million dollars.



## CONCLUSION

The pandemic has paralyzed economies, compelling businesses to re-evaluate their strategies. Companies will need to build their financial muscle and focus on developing a lean structure to stir through the uncertain business environment. Job loss and salary cuts are likely in the high risk of aviation, tourism, and hospitality it will lead the economy towards unemployment. We cannot ignore the truth that the market will come back to India in the next 12 to 18 months. Several measures have already been announced to provide liquidity, limit the immediate Non-Performing Loan (NPL) impact, and ease personal distress for needy households in India. This amount to around 0.8 percent of GDP. Given that India's fiscal resources are constrained, the Reserve Bank of India may need to finance a portion of such incremental government spending. Price increases could, however, occur in some sectors, such as food, so appropriate steps would be needed to maintain harvests and keep the food supply chain operating smoothly. The government should stay of GST payment for some period to remove liquidity crises.

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# ARTIFICIAL INTELLIGENCE AND HOW IT IS REINVENTING THE HR – PRACTICES IN MAKING THE ORGANIZATIONS MORE VISIBLE AND COMPETITIVE

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## ABSTRACT

*In this competitive business environment, for any kind of business human resource (HR) is an indispensable asset and input for enhancing the organizational performance. To be successful, organizations have to strive for higher customer satisfaction which is the key for their survival and to achieve this, organizations have to adopt innovative Hr-practices to enhance their performance and be different among its competitors. In near future, HRM is moving away from its base administrative functionality like recruitment, selection, appraising to more advanced progress like Automation, Augmented Intelligence, Robotics, and Artificial Intelligence that are completely re-defining and re-shaping the way of their workforce characteristics and organizations.*

*At, present the buzz word is AI and how it is completely transmuting the human resources is contrary to what is expected, and how AI is usurping millions of jobs globally in every sector. However, Hr is not traditionally associated with this nascent technology, failure to deploy AI with Hr practices could prove to be a dreadful sin which makes the organizations tough to grow and survive in this world with these different technologies. The global workforce is threatened by AI and advanced self-learning machines, and they are wiping away the interference of humans in every aspect. But, in reality, any advanced technology that is created and utilized must be for the benefit of humanity not for its destruction. To compete with AI and advanced machines the real challenge now lies within the respective Hr-departments that how well they train and re-transform their workforce in understanding and working in collaboration with AI & Robots.*

*The study that is presented in this paper tries to emphasize whether the integration of Hr-practices to AI leads to improve the organizational performance and stay competitive. The entire information that is presented in this paper is purely secondary which is collected from various journals, magazines, survey reports, etc. to throw some light on how these innovative Hr-practices are going to transform the organizations more visible and to stay highly competitive.*

**KEY WORDS:** Artificial – Intelligence, Robots, Workforce, Organizations, and Performance.

## 1. INTRODUCTION

The term AI has two words: 1: Artificial, 2: Intelligence. Artificial means which are not real it can be a fake because it is simulated. Take an example: A grass means which are not real but a simulated one which exactly looks like the original grass. So, in short, artificial means creating something which exactly looks like the original, but in reality, it is a simulated device.

Next, we have to understand really what intelligence is? In short, intelligence refers to be human behaviour, and one can exactly say that intelligence is related to one particular human trait, it is a combination of many diverse abilities.

### 1.1 History of AI

If we go back to the roots of history there was a belief that machines would never be able to behave intelligently like humans, but now machines are in a



position to dominate and overtake humans by a storm. Thanks to the person named A.Turing. (Emilia Bratu)

AI at present the buzz-word, but AI is not a new field of study, it has evolved around the year 1950s only which was developed by a generation of scientists, mathematicians, and philosophers. And, one such kind of person was Alan Turing, a young British poly-math who has explored the concept of AI mathematically by publishing a paper on AI in (1950), where he proposed for the first time that even machines can think and learn like humans. (Francesco corea).

And finally, Ray Kurzweil, a futurist well-known for his history of future-predictions, claims that by the year 2029 AI will pass a valid Turing test and achieves human-intelligence.

## 2. LITERATURE REVIEW

(Rajeev Bhardwaj) (2019) From hiring to employee engagement, artificial intelligence is transforming the way thanks to the advent of AI-supported systems. This extremely cumbersome process is now taken over by software search algorithms that can successfully prove out few people matching your requirements from a pile of irrelevant applications.

This is just one manifestation of the way artificial intelligence is reshaping and revolutionizing every sphere in life including HR management. It can be incorporated in a process like on boarding, performance, review, feedback, training, retention apart from talent acquisition. Hence, it allows the HR manager greater time and energy to focus on mentoring and motivating employees.

(Jeremy Nunn)(2018) Many scientists have been probing into the histories of human intelligence and reasoning. Like our ocean exploration, our huge strides in knowledge were followed by a lingering question: How can we apply what we have learned about us to help ourselves live and work better? It was techies who provide the final piece of the puzzle with artificial intelligence (AI) which was modelled after own.

There is no better meeting place for human and machine based-intelligence than our human resources department. Let's make one thing clear, AI technology will not put HR Managers and staff out of work, but it promises to transform HR Departments not to make them redundant. It can be employed in talent acquisition, employee screening. The use of AI allows for faster filtering of superb candidates from the merely great. All of these done without the limitation of human bias and capacity for error, making AI an HR management tool of the future, it benefits already ripe for picking.

(Kapil Gupta)(2018) AI in HR encompassed as to better informed in strategizing

people's decision. Though AI is not perfect it can be institutionalized by a biased or incorrect set of Assumptions.AI can assist Human efforts, and help to manage HR process more effectively. Today biggest challenge faced by the HR Department or Recruitment agencies is to screen resumes and compliment talent acquisition. The promise of AI for improving quality of hire lies in its ability to use data to standardize the matching between candidate experience, knowledge, skills and the requirements of the job.

(Prashant)(2018) As, the global workforce is threatened by the technological devil named as AI, but in reality integration of AI to business improves in taking strategic-decisions that reshaping and transforms themselves into super-powers

If, really AI is integrated with HR-practices like MPP, recruiting, PFM it can help in better decision making. So, with the use of AI, the organizations are leveraging their human capital to their best, which in turn leads to the overall improvement in the organization's performance.

(Barbara van pay)(2018)Many industries are looking into AI solutions for their businesses, especially when it comes to HR. Although many industries are scared of letting a non-human entity handle certain procedures of the business, the benefits of AI are huge. By using AI, organizations can reduce the time to hire a candidate. A huge part of the recruiting timeline, after you have found the perfect fit for the role, is interviewing. AI interviewing soft wares such as Hirevue and Mya are used to interview the hired candidates. Few organizations are already using this software. Implementing AI is cost-effective but is more beneficial for the future.

(Luciano Floridi)(2018) As many opportunities are there, so as risks also. Opportunities for AI are synonymous when they are used for good innovation and positive applications of technology. AI technology shows its negative impact when it is used for the wrong reasons. AI benefits are not fully realized by society, it offers multiple opportunities, but the utilization of those opportunities is completely based on the individual organization. Inadvertent overuse or wilful misuse of AI technologies is the risks with AI.

(Joshbersin)(2018) Present-day hype and expectations for AI are skies - high. There will be no wonder if we talk to our computers, drones will deliver our groceries; our cars will drive themselves. AI is not some magical computerized person, it is all a human-made machine. Systems can understand our instructions but can't initiate their thought process. AI machines, robots can do work very fastly when compared to humans, but when coming to emotional intelligence, it is a huge barrier for AI technology.

(Severin Lemaignan)(2017) Human-robot interaction (HRI) represents a challenge for AI.



Even though every work done by humans physically can be done through AI, it lacks emotional intelligence. As this is the major drawback of human-robot interaction becomes critical. Robots are able to do the tasks which are pre-instructed to them. They can't change their actions on their own as they are controlled by humans. It is a difficult task to impose the independent software modules, especially it is not, only a technical challenge, but it is also an architectural challenge.

**(Lorenzo and others)(2017)** Due, to the advent and impact of AI there will be a long-term reduction in head-counts in every sector. And the implementation and integration of AI is also a very costly affair forcing the companies to raise their budget two times than it is before. But, despite the cost, the benefits reaped out of AI are to be promising. For example Integration of AI with a company's recruitment process can help in the screening of thousands of qualified candidates quickly and picking the right candidate with the right skill-fix for the vacant job can effective. And, due to the AI implementation across various HR-practices can lead to higher-satisfaction, reducing employee turnover and it reduces the costs on various HR-practices.

**(Steve Goldberg)(2017)** The integration of AI in HR/HCM significantly has improved the aspect of service delivery, and also the engagement of employees' main advantage by integrating AI with HR is of getting the right mind of talent which is the key between the humans and machine-based integration.

**(Edge Admin)(2017)** Now the present age is ruled and revolved by advanced technologies, which is daunting the global workforce. Out of all the technologies, we can say AI is the most disruptive one. As important in the application of AI almost in every sector may it be banking, health care insurance, etc., but the results achieved are remarkable. AS most of the companies across the globe are adopting AI, India is also not an exception that new firms especially (start-ups) are now integrating their business with AI to stay more visible and to be competitive. Some of the start-ups that have integrated its business with AI in India are ARYA.ai, BOXX.ai, cuddle.ai, Imbibe, Edge-networks, and Haptik to name a few.

**(T.J.M. Bench-capon, Paul E. Dunne)** As from the last decade, argumentation has come to be increasingly central as a core study within AI. Initially, argumentation was adopted as a supportive approach that upshots a formal treatment. With the development of formal logical theory-in which context the significance of argumentation techniques concerning nonclassical logic was further emphasized.

**(Michael Heric)** As per the study conducted by Bain and the company, the results

showed that nearly 87% Of the Hr-leaders agreed that digital-technologies will reshape the way of HR and 57% Opined there will be nearly 1-10% Budget hikes for AI in the next two years. If, we observe the scenario throughout the globe AI, in all its forms from the RPA process to ML to NLP has shown remarkable results. To state as an example that AI-based screening of the candidate's in talent acquisition will improve the hiring accuracy.

### 3. THE INTEGRATION OF AI WITH HR-PRACTICES

#### 3.1 In Recruitment

As per the recent studies conducted in the market, AI will grow from 88 billion(2016) to 847 billion (2020), which is going to impact each business all over the globe and HR is not an exception to it.

AI has struck Human Resource by storm where it completely forced the traditional HR-process to transform into complete Automation resulting in higher satisfaction and Productivity. But Majority of the organizations are still lagging in integrating AI to its HR-Practices because of its cost associated with integration. Nowadays AI has been successfully integrated with one of the most important HR-Function: Recruitment. Previously it is used to take care of the recruiters and saved lots of money and time in scrutinizing the candidate's resumes. But, the advent of AI in the recruitment has completely reshaped the process used in selecting the candidates with Requisite skill-set. If we observe the current world of recruiting with AI can be divided into two:- (1) chat-bots Functionality (2) The Machine learning. **(J. Strange)**

Due to the integration of AI in HR/HCM, it benefits the organization by going into Automation and producing better results. Alexa is one of the best used by amazon in placing its orders more effectively and also helps in selecting the music that suits according to our taste. That's the reason AI in Hr is the next best exciting thing to happen in the next coming years ahead.

It is a known fact that AI is completely invading the workplace, and AI now has taken a new shape as a hiring manager. Present AI is largely related to the recruitment function. With the successful integration of AI to HR in recruitment benefited the companies in hiring the right talent.

Fama technologies a California based firm (A-Tech Firm) has developed AI-based software that searches the candidate's Profile that is meeting the interests of hiring managers. Another example is a Hyderabad based start-up named Param. AI which uses AI, which automatically Pre-screens the resumes for various companies and tells if the candidate is good, bad (or) Average based on the past hiring patterns.



The following table 1 shows the percentage of companies on how AI integration to HR is benefited for them:

84.00%	33.00%	22.00%	53.00%	69.00%
Members of the Toronto-based regulatory body of HR-Professionals association believes that AI is a useful tool for Human Resources.	Companies across the globe in some form are using AI in taking Hr decisions.	Indian companies that have leveraged AI to deliver HR-solutions.	Are the companies revamping traditional HR with AI-based digital tools.	Jobs in India under threat due to tom use of AI.

(Source:- World Bank, Deloitte, No more HR: How AI invades the workplace, Jan 1<sup>st</sup>, 2019, Financial express.)

The following table 2 clearly how has transformed its shape due to the advent of the digital era:

Old Rules	New Rules
HR department focuses on process design and harmonization to create standard HR practices.	HR department focuses on method style to make normal practices. Departments specialize in optimizing worker productivity, engagement, cooperation and career growth.
HR selects a cloud vendor and implements out-of-box practices to create scale.	HR builds innovative, company-specific programs, develops apps, leverages the platform for scale.
HR technology groups specialize in ERP implementation and integrated analytics, with attention on "Ease of use"	HR technology team moves on the far side ERP to develop different digital capabilities and mobile apps with attention on "productivity at work".
HR centres of excellence focus on process design and process excellence.	HR centres of excellence specialize in method style and method excellence. centers of excellence leverage AI, chat, apps, and different advanced technologies to scale and empower workers.
HR programs square measure designed for scale and consistency round the world.	HR Programs target worker segments, personae, and specific teams, providing them the maps related to their jobs and careers.
HR focus on "self-services" as a way to scale services and support.	HR focus on "enablement" to help people get work done in more effective and productive ways.
HR builds an employee "self-service portal" as a technology platform that makes it easy to find better transactional needs and programs.	Here an integrated platform called "employee experience platform" is built by HR using digital apps and employee's needs are assisted by AI and bots.

(Source: Global Human Capital Trends: Deloitte insights, 2017)

### 3.2 In Employee Learning

Most of the organizations design their training programs without any predefined parameters and, in truer sense organizations don't know how to train its people perfectly. Most of the learning Professionals argued that whatever the trainees learn during the training programs at least half is wasted (Forgotten, Inappropriately applied, wastage of time and money) (JOSH – BERSIN)

Now, the bigger question arises is how to make the T&D programs more effective by the

application of AI-based Algorithms that monitor and study the skills, behaviours, and attitudes of the employees working at various levels.

### 3.3 In Performance Management

Now the days are gone for traditional appraisals in evaluating the employee performances. Globally renowned companies like Accenture and Deloitte has put an end to its annual appraisal policy.

Most, of the employees, viewed that while conducting appraisals, most of the managers showed



biases and even the error rate is also very high. Now the bigger question is will AI integration in the company's performance management systems will improve the employee's performance?. The answer is yes were some top companies like Microsoft and Adobe have been successful with AI-based applications in evaluating the performances.

As of now, AI integration is largely related to recruitment practices and sooner AI is going to be implemented in each corner of Hr - practice through chatbots and AI-based applications. As, per the latest survey conducted in the year 2017 by IBM over 6000 executives', " Extending Expertise": How cognitive computing is going to transform her, and the key results of the survey are as follows:

1. 66% of the global company's CEOs believed that cognitive computing will have a significant value in hr.
2. 50% of the executives said that cognitive computing has power in transforming the key dimensions of hr.
3. 54% of the executives said that this cognitive computing will show its impact and affect the key HR – roles in any organization. (**Dom Nicaastro**).

But, coming to the implementation part of AI with Hr majority of the organizations are hesitating because of the cost associated with the implementation of AI. But, the majority of the experts argued that AI can measure the employee's value and prove this a survey was conducted among 800 enterprise decision-makers revealed the following key results: (**Chris Nerney**).

- 66% of the respondents believed that the use of AI in management systems will give rise to more transparent meritocracy in the workplace.
- 74% opined and predicted that within the next 10 years, AI will be standard practice for measuring employee performance.

But, in implementing AI to organizations it is from an organization's point of view has to transform and integrate AI with HR-practices. But, the facts were astonishing because the cost associated with AI is huge.

And, majority of the organizations were not interested in adopting AI, but sooner it will adopt AI, say coming in the next five years, some argued that their organizations were too small to use AI, and others opined that senior leadership did not see the need of such advanced AI-driven technologies.

#### 4. CONCLUSION

Integrating HR practices with AI-based applicants have a stronger impact on raising organizational performance. Even though AI applications may not possess like humans the emotional and cognitive abilities, but these powerful AI-based HR applications can analyse, predict,

diagnose, and can become a more powerful resource for any kind of organization.

But, the real fear that is daunting the Global workforce is how AI is showing its impact on job cutting across various sectors throughout the globe. But, the reality is that it is not the advanced technologies that are replacing people, but it is all about how people should change and view these technologies in creating wealth and prosperity. In, true sense there will be some percentages of employees are affected by the AI-based functions, so the HR leaders and organizations must focus on its employee needs and possible outcomes.

And, finally based on our study most of the organizations are successfully integrating AI-based tools in recruitment but in near future, AI is everywhere in HR: Maybe in recruitment, training, on boarding, performance analysis, retention, etc. To, conclude everybody should be optimistic, AI implementation should be viewed as an optimistic opportunity, because AI enriches the lives, but not take anything away from us, but AI creates a better future.

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## TRENDS AND PREDICTION OF PANDEMIC COVID-19 SITUATION IN UTTAR PRADESH, INDIA

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Gowrishankar Potturi – literature search, data analysis, statistical analysis, manuscript review  
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### SUMMARY

*COVID-19 is a disease caused by coronavirus that was first identified in Wuhan, China and was declared pandemic. Uttar Pradesh is one of the largest Indian states which is highly populous. There were 81999 confirmed cases in India as on 15th May, 2020 of which 3902 from Uttar Pradesh. Data of confirmed cases, recoveries and death trolls were collected from Ministry of Health and Family welfare and other reliable website. There is 53.1% recovery rate in the COVID-19 cases in Uttar Pradesh. A good health infra-structure, planning, high immunity in population, adequate isolation/ quarantine facilities, confrontational testing has increased recovery rates. Institutes like UPUMS are providing Ayurvedic preparation Raj Nirwan Ras (RNR) and nutritious diet along with breathing exercises showing high recovery rates. This type of treatment model could be implemented in other hospitals for a good and faster recovery rate. The prediction of transmission rate in next 30 days in Uttar Pradesh is not feasible as the number of migrant workers influx, people attending religious congregation, citizens not following lock down properly, and rapid testing could increase the number of confirmed cases.*

**KEYWORDS:** Uttar Pradesh, COVID-19, Raj Nirwan Ras, Recovery rate



## INTRODUCTION

COVID-19 is a disease caused by coronavirus that was first identified in Wuhan, China<sup>1</sup>. It belongs to the Coronaviridae family in the Nidovirales order; the subgroups of corona virus' family are alpha, beta, gamma and delta corona virus<sup>2</sup>. The SARS-CoV, H5N1 influenza, H1N1 2009 are some of the important infectious respiratory illnesses caused by these viruses. The World Health Organization (WHO) has declared the COVID-19 as a health emergency and pandemic<sup>3</sup>.

India is a subcontinent of ASIA, having a population of 1,387,297,452 people, 28 states and 8 union territories<sup>4</sup>. Uttar Pradesh is one of the Indian states which is highly populous with a population of 22,49,79,000 (based on 2019 population projection by NCP report) people<sup>5</sup>. The first case in India was reported on 30-01-2020<sup>6</sup> and in Uttar Pradesh on 5-03-2020, originated from Iran at Ghaziabad<sup>7</sup>. There were 81999 confirmed cases in India as on 15th May, 2020. Uttar Pradesh had a total of 3902 confirmed cases as on 15th May, 2020.

Through this study we shall try to find out the trends of death rate, rate of transmission and the recovery rates in Uttar Pradesh in comparison with Nation as a whole with an emphasis on prediction of transmission in Uttar Pradesh.

## METHODS

We noted daily data of confirmed, deaths and recoveries from 17<sup>th</sup> April to 15<sup>th</sup> May 2020 of Uttar Pradesh and India. Data of Levels of Hospitals and Isolation beds strength of Uttar Pradesh was collected. Various published papers were reviewed on COVID-19 in India. Data from Ministry of Health and Family welfare website of India and Uttar Pradesh were also collected. Data about the causes of death, methods of transmission and preventive measures from various reliable websites were also analyzed.

## RESULTS

Uttar Pradesh is an Indian state with a population of density of 828 persons per sq.km. It has a total of 75 districts with Lucknow as its capital. The isolation hospital bed facilities in Uttar Pradesh are Level 1 -3215 beds, Level-2-15837beds, Level 3-12090 beds. The total number of isolation beds including L1, L2, L3 and L1 covid care centres is 53459<sup>8</sup>. The total number of confirmed cases as on 15th May, 2020 is 3902, number of recoveries 2072, number of deaths 88. According to state health department data, 49.5 % COVID-19 cases in Uttar Pradesh are in 21-40 age group, while 25.6 % are in 41-60 age group.

As on May 15th, 2020, the numbers of confirmed cases in India were 81,999 in which 3902

were from Uttar Pradesh. The state contributes 4.75 % of the total cases in India. The trend of infected people from 17th April, 2020 to 15th May 2020 (Fig. 1 See Appendix). The death of the people in Uttar Pradesh by this virus (Fig. 2 See Appendix) was 88, that is 2.25 % of the infected people. This death percentage is low when compared to the country death percentage (3.22 %). The recovery rate of the patients is very high in Uttar Pradesh which is 53.1 % while the recovery rate in India is 34.1%. (Fig. 3- See Appendix). The important events in the timeline of COVID-19 are narrated in Table -1.(See Appendix)

The maximum number of cases were reported in the districts of Agra, Meerut, Kanpur Nagar, Lucknow, Gautam Budha nagar. The minimum numbers of cases were reported in Lalitpur, Sonbhadra, Hamirpur, Kushinagar, Mahoba. The maximum recoveries were found in Agra, Lucknow, Kanpur nagar, Saharanpur, Gautam Budha nagar. The minimum recoveries were reported in Mau, Shahjahanpur, Ayodhya, Kanpur Dehat, Balrampur<sup>9</sup>.

## DISCUSSION

In Uttar Pradesh, the COVID-19 services were provided by structuring the hospitals into Level-1, Level-2, Level-3 categories. There is more than 50% recovery rate in the COVID-19 cases in Uttar Pradesh. The state's recoveries have surpassed the number of active cases<sup>10</sup>. The robust health infra structure, robust planning, high immunity in population, adequate isolation/ quarantine facilities, confrontational testing could be the reasons for good recovery rate in Uttar Pradesh<sup>11</sup>. The high recovery rate and low death rate in the state can also be linked to the comorbidities among the aged population. The early lock down in Uttar Pradesh with strict surveillance measures also attribute the steady recovery rate, as the affected persons are quarantined disabling the infection chain<sup>12</sup>.

The recovery rate is high in the region of Agra can be attributed to the robust health planning provided in this region by Level-3 hospitals. One of the Level -3 hospitals, Uttar Pradesh University of Medical Sciences has shown records in the recovery rate. Almost 71 cases including a child of 9 months referred from Agra were recovered with full health and were discharged with negative COVID-19 results. Proper quarantine facilities, Sanitation, Advanced Biomedical waste Management, sophisticated Medical services, training of health care workers about the donning and doffing, infection control, ventilator management were few reasons for high recovery rates in UPUMS. The doctors at UPUMS are giving Ayurvedic preparation RNR and breathing exercise to the COVID19-cases along with good and balanced nutrition also contributed to the fast



and early recoveries. The other Level-3 hospitals in Uttar Pradesh also showed robust results in recoveries like GVSM, SGPPI, KGMU, medical colleges and others because of good state planning and rules passed by the government from time to time.

The prediction of any infectious disease can be done by SIR model (Susceptibility, Infection, recovery), Exponential Model, Logistic model, Susceptible infectious Susceptible (SIS) model<sup>13</sup>. In a published paper, it was predicted that the cumulative confirmed cases could be around 1800 by May 30, 2020<sup>14</sup>. However, the prediction was inappropriate as the number of confirmed cases were 3902 by 15<sup>th</sup> May itself. So it is evident that prediction of confirmed cases in near future in Uttar Pradesh may not be appropriate. The reasons being the state had a huge influx of around 13.5 lakh migrant workers during the Lock down period<sup>15</sup>. The testing of asymptomatic people has increased the number of cases as a part of ICMR project in Agra and Lucknow which could also reveal the hidden cases leading to rise in number of confirmed cases<sup>16</sup>.

## CONCLUSION

The number of recoveries is highest in Uttar Pradesh in comparison with India as a whole. The Robust health planning and optimization of health infrastructure, high immunity in population, adequate isolation/ quarantine facilities, confrontational testing, early lock down could be the reasons for the high recovery rate despite having high density population. Institutes like UPUMS are providing Ayurvedic preparation Raj Nirwan Ras (RNR) and nutritious diet along with breathing exercises showed high recovery rates. This type of treatment model could be implemented in other hospitals for a good and faster recovery rate. The prediction of transmission rate in Uttar Pradesh is not feasible as the number of migrant workers influx, members' attending from religious congregation, and their close approximates and rapid testing could increase the number of confirmed cases.

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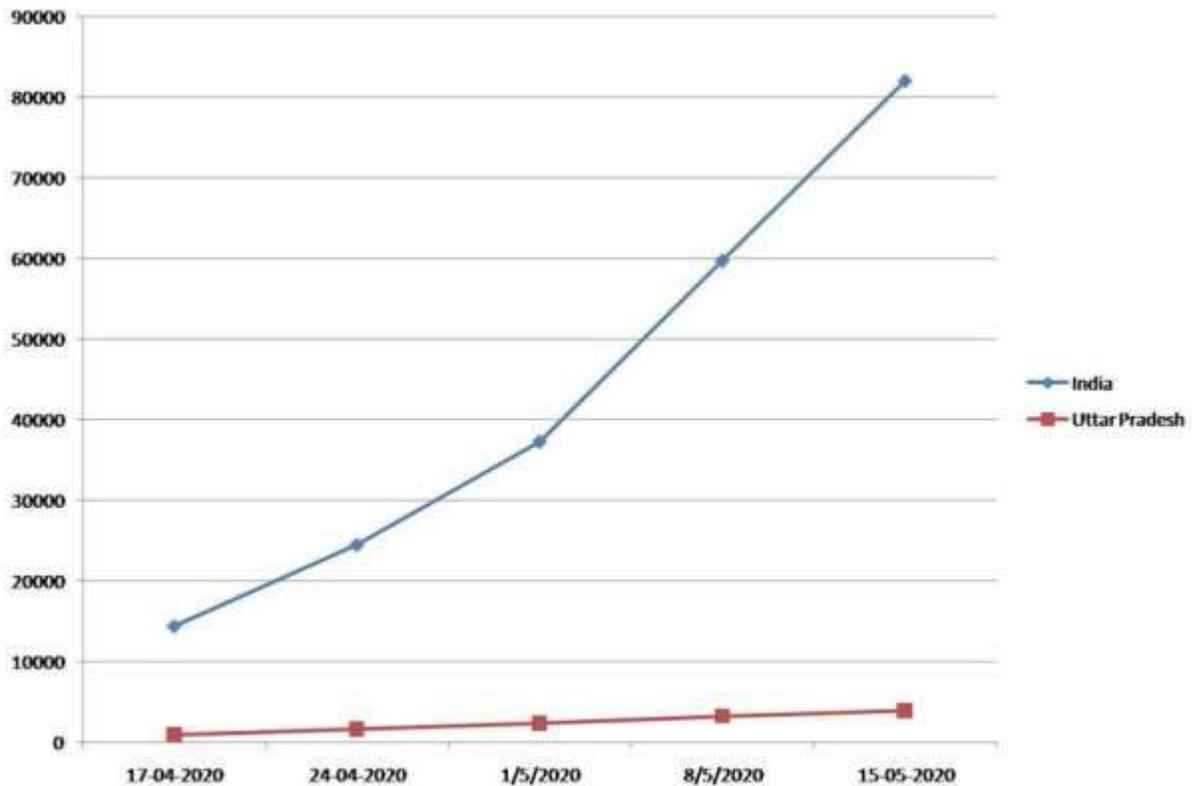
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### APPENDIX

**TABLE 1 : TIME LINE OF COVID-19 IN UTTAR PRADESH**

DATE	INCIDENT
05-03-2020	First case reported in Ghaziabad, originated from Iran
17-03-2020	Closure of all educational institutes, cinemas, shopping malls, swimming pool, gyms, multiplexes and tourist attractions
22-03-2020	The state government announced lock down in 15 districts of the state
01-04-2020	First death reported in Basti.
03-04-2020	59 cases reported on a single day originating from a religious congregation in Nizammuddin.
05-04-2020	Around 65,000 workers were brought back to the state



**Fig 1 : Number of Cases in Uttar Pradesh in comparison with India as a whole**

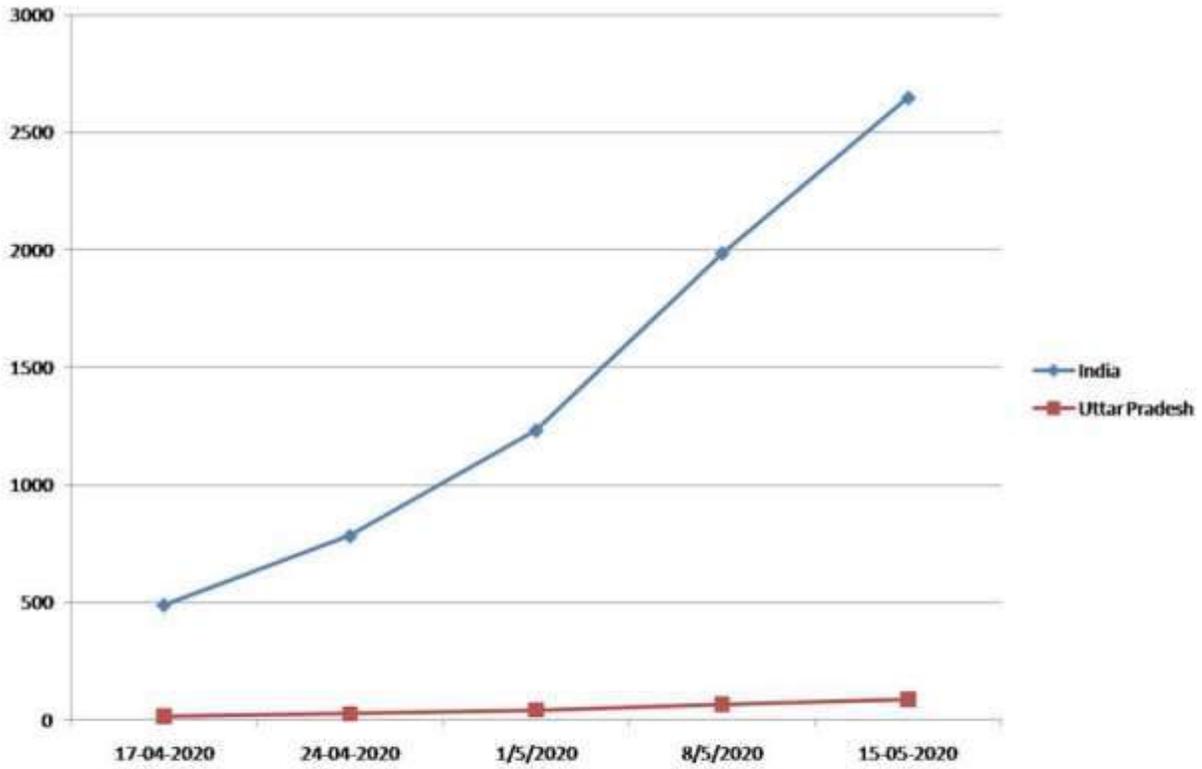


Fig 2 : Number of Deaths in Uttar Pradesh in comparison with India as a whole

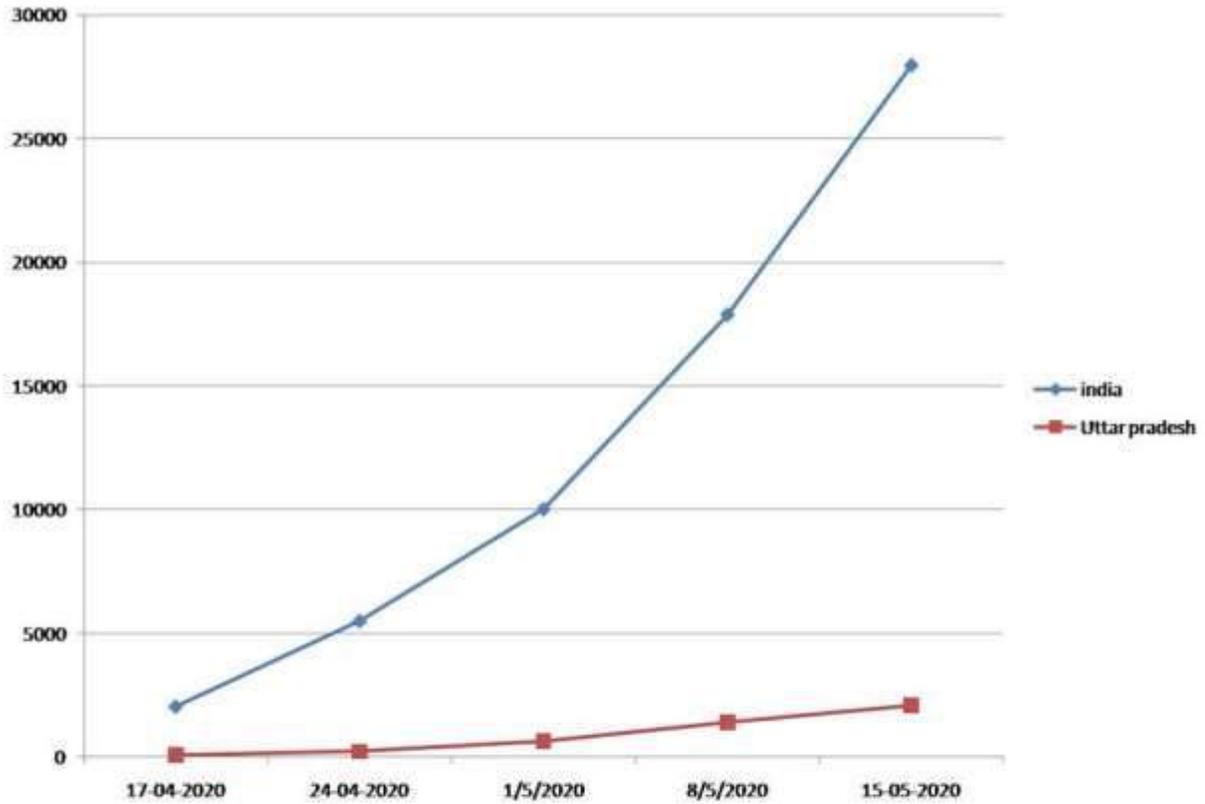


Fig 3 : Number of Recoveries in Uttar Pradesh in comparison with India as a whole



## INDIA: A GROWTH OPPORTUNITIES FOR MSME

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### ABSTRACT

*In recent years, the importance of MSMEs has been recognized in countries around the world for their significant contribution to the achievement of various socio-economic goals such as high economic growth and employment, output, entrepreneurship development, promotion and export support. IHR plays an important role in the industrial development of any country. The IHR sector is a pillar of the Indian economy to contribute to the growth of the Indian economy. This sector is very important for the country to move towards faster and more comprehensive development. The MSME sector can help achieve the national manufacturing policy target, which should contribute 25% to India's GDP by 2022. To this end, the Government of India has launched a good "Do in India" initiative. This document should focus on MSME operations and development and capabilities. It is concluded that this sector makes a significant contribution to employment, exports and output. The continued growth of the Indian economy cannot be overstated without acknowledging the contribution of the MSME. The MSME sector accounts for 40 to 50 per cent of India's total exports. Again, the MSME sector contributes an average of 30% of India's gross domestic product (GDP).*

**KEYWORDS**— MSME, Make in India, GDP, growth, employment, opportunities

### INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) play an important role in the economic development of a country due to their contribution to production, exports and employment. The sector contributes 8 per cent to the country's GDP, 45 per cent to industrial products and 40 per cent to the country's exports. It employs 60 million people in 28.5 million enterprises. It is noteworthy that the MSME sector has maintained a higher growth rate over the last one decade than the general industrial sector. According to the survey, exports from these enterprises are on the

rise despite rising raw material prices, sluggish global demand and fierce international competition. Today, the field produces a wide range of products, from simple consumer goods to high-purity, complex finished products. It has become a major supplier of consumer goods, as well as a manufacturer of electronic and electrical appliances, medicines and pharmaceuticals. The momentum for the sector is likely to have a multiplier effect on economic growth. According to the MSMED Act, MSMEs are determined on the basis of their investment in plants, machinery and equipment for service providers.



In most economies, MSMEs account for more than 90% of total business enterprises, and a large share of employment in industrial production and exports, which are credited with generating higher employment rates. In India too, MSMEs play an important role in the overall industrial economy of the country. With its agility and dynamism, the sector has demonstrated admirable innovation and adaptation to avoid the recent economic downturn and recession. The MSME sector has gradually come under discussion with more focus on the government and other government agencies,

corporates and banks. Policy-based change. Field investment; Globalization and India's strong economic growth have opened up many business opportunities for the sector.

#### **New criteria for classification of MSMEs:**

The changes in classification criteria were long awaited. Although it was proposed long back, government recently announced the same via Press Release on 13.05.2020.

Classification	Manufacturing & Service Sector (No distinction)	
	Investment in Plant & Machinery	Turnover Limits
Micro Enterprises	Less than 1 Crore	Less than 5 Crore
Small Enterprises	Less than 10 Crore	Less than 50 Crore
Medium Enterprises	Less than 20 Crore	Less than 100 Crore

#### **OBJECTIVE OF THE STUDY**

- 1) To evaluate the overall growth and developments in the MSMEs sectors in India.
- 2) To examine the Future Opportunity to the MSMEs sector In India.
- 3) To find key challenges and solutions faced by the MSMEs sector.

#### **POSSIBLE OPPORTUNITY AREAS OF MSME**

In the new wave of entrepreneurship, the growth of MSMEs focuses on innovation and technology, which will create opportunities for women entrepreneurs and develop skilled resources in the following areas of opportunity.

##### **1) Come Make in India:**

To promote the 'Make in India' ecosystem for foreign companies to invest in manufacturing, service and agriculture and agro-processing sectors to meet domestic and global demand.

##### **2) Digital India:**

To develop MSME preparation and service capabilities in the ICT sector in line with the government's vision.

##### **3) Export contribution:**

Facilitate the contribution to export by supporting and developing the MSME segment in order to be

competitive on the world market and introduce research and development, innovation and global technology.

##### **4) Public procurement policy:**

Contribute to the creation of an ecosystem for the defense and supply of public sector industries so that MSMEs contribute at least 25 per cent to the total defense and public sector procurement.

##### **5) Procurement by large Indian and foreign corporate across industry sectors from MSMEs:**

Promote an ecosystem, provide incentives for large corporate investments in vendor corporations, and specialize in MSME segments, especially for research and development, innovation and global technology.

##### **6) Indigenisation:**

Encourage all investments and outputs made by key players and their MSME suppliers, especially to allow indigenization and / or import substitution by adapting to research and development, innovation and global technologies.

##### **7) Traditional and heritage industries:**

Encourage and support any stakeholder who invests in the development, growth and opening up of global markets for India's traditional and heritage industries for agro and natural medicine and therapeutic products,



services and products and services. . Solid MSME backbone for the Indian economy.

## GROWTH OPPORTUNITY FOR MSME

There are about 46 million micro, small and medium enterprises in various sectors, employing 106 million people. Overall, the MSME sector accounts for 45% of Indian manufacturing and 40% of exports. While unorganized (about 94%) is informal and unregistered in most sectors, the initiative to register more businesses is on the right track. In some global economies, the contribution of the MSME segment to GDP is between 25 and 60 per cent. India's share of GDP in MSMEs is expected to increase from the current 8% to 15% by 2020

### 1) Growth Opportunity Areas in Major Sector:

In view of the expected growth trends in the main sectors and certain areas of opportunity, the proportion of MSMEs in these growth sectors may increase significantly. MSME can provide a strong backbone for the growth of the industry by acting as a quality supplier and vendor as well as a customer for large companies in various sectors.

#### I. Telecommunication:

- Domestic manufacturing of telecom networking equipment, including routers and switches.
- Next generation Software-defined Networking equipment
- Mobile Customer Data Analytics, services oriented towards analytical solutions
- Manufacture of low-cost mobile phones, handsets and devices
- Manufacture of Base Transceiver Station equipment
- Development of Value-added Services
- Over-the-top (OTT) service providers of innovative services and content to mobile subscribers

#### II. Electronics:

- Electronic Systems Design and Manufacturing including semiconductor design, electronic components design and hi-tech manufacturing. It has been proposed to establish a 'National Electronics Mission, a nodal agency for the electronics industry, to enable MSMEs to play a role
- Electronic components with focus on making components for electronic products customised for the Indian market
- Strategic electronics, with the Government of India keen to encourage domestic

manufacturing of products needed by the armed forces

- Low-cost consumer electronics, consumer durables• Nanoelectronics and microelectronics

#### III. Healthcare:

- Providing affordable healthcare, especially in rural areas
- Low cost medical devices, which can be used in rural areas
- Medical consumables like surgical gloves, scrubs, syringes etc
- Low cost surgical procedures to reduce the cost of healthcare
- Medical tourism
- Diagnostic labs

#### IV. Pharmaceuticals

- Generics and API manufacturing
- Contract research
- Nutraceuticals and nutraceuticals

#### V. Food and Agriculture

- Processed food, ready to eat packaged food, premixes, milk & dairy, bakery and processed meat
- Backend infrastructure such as cold chain storage, farm collection center, etc.
- Health food, health beverages, food additives such as vitamin additives, etc
- Food packaging, innovative packaging for processed food
- Contract manufacturing for crop protection chemicals, crop nutrients
- Poultry, feed and farm additives

### 2) Opportunities in Employment Generation:

With MSME's contribution to GDP increasing, it is reluctant to increase its share of employment by more than 50% over the next decade. This is also important for informal MSMEs who are not currently registered. Formal MSMEs need to be ecosystem made parts. Development incentives in the form of incentives or direct benefits for MSMEs will promote participation in registration and growth. In general, the MSME sector can provide comparative employment opportunities, especially in rural and remote areas, relatively. At low cost, part of the industrial ecosystem can provide opportunities for dismantling and system development. Works as a subsidiary to support large businesses. India needs to create 10 to 15 million jobs in the next decade to create jobs. Current MSME employment accounts for 28% of total employment. MSMEs can play a significant role in job creation and growth of the Indian economy. The MSME sector is a key driver for India's transition from an agricultural to



an industrial economy. MSMEs play a major role in industrial units. The total number of businesses in the MSM sector was 46 million with 106 million jobs.

### 3) Opportunity in Export:

The contribution of the services, manufacturing and agricultural to the overall exports from India is fairly twisted. While export of services led by IT and ITes sectors have grown significantly in the last decade, the contribution to exports from manufacturing output has been largely stagnant. The share of the top four commodities account for about 60 per cent of total MSME exports. While globalisation presented a number of challenges for the manufacturing MSMEs, it also opened up ample opportunities to shore up the growth of the manufacturing sector. India can seize the opportunities provided by the dynamics of globalisation which has resulted in a dramatic shift of manufacturing to developing countries over the last decade. India can significantly diversify its export portfolio, both in terms of products and goods exported as well as regional coverage.

### 4) Opportunity in Value Addition in Products & Services:

The average technical value of products exported by Indian industries is about 88%, which is much lower than other stabilizing countries. When it comes to global demand for value-added products and services, a clear opportunity is missing.

#### I. Building Brand India:

Demand for goods and services is expected to increase over the next decade, thanks to efforts to promote and promote international awareness of the Made in India label in overseas markets. To help MSMEs, international exhibitions have marketing schemes for Indian goods / brands. Participating in global markets will not only help MSMEs grow their business, but also transform globally competitive enterprises.

#### II. E-Commerce:

The availability of online trading platforms is a key component of MSMEs' exports. Traditional handicrafts clusters and freelance craftsmen and entrepreneurs are connected to the world today and work in the global market through e-commerce platforms. The penetration of e-commerce into business with urban and rural MSMEs is growing, and is expected to further boost export growth.

#### III. Indigenisation:

India is heavily dependent on imports of a large number of goods and services. Although the importation of specific products such as raw materials is inevitable, many other products in the consumer sector, such as white electronics, lighting and consumer

goods that are no more than technology, are likely to be replaced by local businesses. In addition, it is possible to encourage investment in high-tech sectors to promote the potential to replace and localize high-tech imports in health, automotive, defense, and many other areas. Electronics and telecommunications.

### 5) Opportunity in Traditional & heritage industries:

India's cultural diversity offers a considerable number of regional village industries that produce traditional and heritage-based products across the country, from traditional weaving to pottery, art, and even medicine. Virtually every state has its own culture and traditional village industries. These industries have enormous potential for export to world markets. Many traditional industries are based on the principle of using natural colors, eco-friendly materials, etc., offering a special competitive advantage in the global market. Given appropriate momentum regarding global market exposure, financial support, and basic infrastructure, village industries can play a key role in transforming India's rural landscape. Given the significant increase in exports of products from traditional and village industries, there is considerable potential for further growth in these segments. Local industrial groups such as the Leather Export Council, the Loom Export Promotion Council (HEPC), and the Craft Export Promotion Council (EPCH) must work in concert with the central government and government. A state that promotes these products in a market that has not yet been developed.

## CHALLENGES FACED BY MSMEs

### 1) Availability of finance:

First, lack of adequate and timely access to finance remains the biggest challenge for MSMEs and has hampered their growth. The sector is unable to invest in its manufacturing, buy raw materials in a timely manner, access new technologies or acquire new skills due to lack of funds, which is a particular disadvantage in particular in its fight with its global competitors. The slowdown and liquidity tightening led to NPA problems, prompting Finance Minister Nirmala Sitharaman to announce on ASSOCHAM's recent anniversary that restructuring of the MSMEs sector can be done without classifying loans as a postal code.

### 2) Upgraded Technology:

Technology is a big problem for MSMEs. MSMEs require efforts to inform new developments and technologies, and to keep track of local conditions so that they can be useful, how local people understand and integrate. IITs, ITIs, Academics, Process and Product Development Centers, Tool rooms and Training Centers and similar institutions should be



encouraged to connect / enable local MSME clusters, understand and appreciate their technology related issues and problems and undertake projects. Specific issues. Students should be encouraged to join local units and suggest innovation as part of their projects.

### 3) Lack of formal registration:

Total of 55.8 million MSMEs, only 8.2 million are MSMEs registered and the remaining 47.6 million are unregistered MSMEs. Given the scenario above, the first and greatest challenge for MSMEs to overcome is to get all MSMEs that are not registered in the official fold to be eligible for a service package. The unregistered nature of MSMEs also acts as a deterrent to their access to credit from official credit sources.

### 4) Competitive market environment:

MSMEs operate in a competitive environment and require an environment in which growth can be sustained. The three main measures that can create the environment are legal and regulatory support, government support, and support for financial infrastructure. The government is taking a number of steps to provide adequate assistance in these areas, such as proposing to change the definition of MSMEs, introducing Pradhan Mantri Mudra Yojana (PMMY) to allow MSMBs to easily apply for loans, and the electronic market for MSMEs, a program of two percent interest subsidy, introduction of the TReDS platform for discounting bills, implementation of credit melas, restructuring of stressed MSMEs loans, etc.

### 5) compliance issue:

The GST has become the biggest compliance issue before MSMEs. It is time for GST bottlenecks / problems to be addressed and resolved as soon as possible. Then there are problems associated with labor resources, research, infrastructure and other problems for the IHR. Some new labor codes are already in place and others are being developed. It is also important to advise state / local governments not to impose an excessive compliance burden on these units. In addition, ongoing research and development through publicly funded institutions can be of great importance in improving the international competitiveness of the IHR. It appears that the government is now considering IHR issues as a priority. To assist the RSI, the government has announced the launch of the Bharat Craft e-commerce portal, which will serve as a direct interface between sellers and buyers. In order to expand job opportunities, the RSI ministry, led by Nitin Gadkari, launched a "second financial assistance program" to help PMEGP and Mudra develop or modernize.

## CONCLUSION

In conclusion, the MSMEs sector in India today is on the verge of global growth due to its competitiveness and product quality. Micro, small and medium-sized enterprises contribute to India's economic development in various ways, such as job creation in rural and urban areas, by providing goods and services at affordable prices. However, government assistance is needed to minimize transaction costs for technology upgrades, market penetration, infrastructure upgrades, etc. The MSMEs sector is often called the "growth engine" for developing countries. We will start by reviewing this sector in India and look at some recent trends that emphasize the development and importance of this sector to the Indian economy. We analyze the growth of MSMEs in the areas of fixed investment, productivity, job creation and investment. In particular, we discuss employment opportunities, infrastructure development, export promotion in the MSME sector. We also look at the opportunities offered by the Indian economy to improve MSMEs. It is concluded that the RSI in the Indian economy has shown tremendous growth and excellent results due to the contribution of the political framework and the effective steps that the government has taken from time to time to grow and develop the RSI. The Government of India has taken several initiatives to make this sector a more active and significant actor in the development of the Indian economy.

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# THE PERFORMANCE EVALUATION OF REGIONAL RURAL BANKS IN INDIA

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## ABSTRACT

*In my research paper measuring performance of regional rural banks over all India. Regional Rural Banks are the banking organizations being operated in different states of India. They have been created to serve the rural areas with banking and financial services. This research aim is that to analyze the financial performance of pre-amalgamation period and post-amalgamation of India.*

*In my study are deals from secondary sources that are from the published annual reports of RBI for the financial period from 1985-86 to 2015-16. Analyzing the financial performance of RRBs at post and pre merger scenario measuring on the basis of deposit and credit ratio. The other financial indicators such as no. of RRBs, branches, district coverage, deposits and credit disbursement have shown growth throughout the analysis period.*

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## INTRODUCTION

The banking system in India plays a crucial role in the accomplishment of basic objectives of our national policy such as growth, modernization, self-reliance and social justice through its carefully designed credit development policy. Banks are the purveyors of money and credit; thus they help in the acceleration of growth. It plays a strategic role in increasing the savings rate, in canalizing the available saving for financing investment and better utilization of available resources in all sectors of economy through adequate supply of credit.

Finance is the life-blood of every economic activity of developing economy. The flow of credit is very much like the circulation of blood in the body. The circulation of blood should be smooth and uniform throughout all the organs of the human body. Similarly, credit should flow steadily and equally through credit structure of the country.

There are financial institutions in both the organized and unorganized sectors of the money and capital markets in India that meet the credit needs of the various sectors of the economy. The organized sector comprising the moneylenders and indigenous bankers cater to the country side. The organized sector of the

money market consists of the Reserve Banks of India at apex level and the Co-operative Banks, Commercial Banks and Regional Rural Banks in India.

Although some form of banking such as money lending types has been in existence in India since as ancient times. The earliest institutions that undertook banking business under the British regime where 'Agency House' that carried on banking business in addition to their trading activities.

The first bank managed by Indians was 'Oudh Commercial Bank' founded in 1881, subsequently the 'Punjab National Bank' was established in 1894 and 'People's Bank of India' established in the year 1901. The Swadeshi Movement of 1906 provided a great fillip and stimulus to the starting of several commercial banks in India. But this Indian banking system experienced a series of crisis and as a consequence it witnessed a number of bank failures. Hence in spite of the establishment of considerable number of commercial banks in India, the growth of banking industry in terms of deposits, advances and to a certain extent, branch expansion was quite slow and unstable during the first half of the twentieth century.

For the improvement of the banking sector the three Presidency Banks, Bank of Bengal, Bank of



Bombay and Bank of Madras were amalgamated into the Imperial Bank of India in 1920 but this bank was not charged with Central Banking functions. The Reserve Bank of India was established in 1934 and started functioning on April 1, 1935 as Central Bank of India. This was followed by the nationalization of the Imperial Bank. In 1955 the State Bank of India Act was passed to transform the Imperial bank of India into State owned bank name as 'State Bank of India'. The State Bank of India (Subsidiary Bank) Act was passed in 1959, empowering the State Bank of India to take over 8 State-associated banks as its subsidiaries.

In term of Regional Rural Banks is the banking organizations being operate over all Indian State. They have been created to serve the rural areas with banking and financial services. However, RRB's may have branches set up for urban area as well as rural area. Regional Rural Banks were established under the provisions of an Ordinance passed on 26 September 1975 and the RRB Act.1976 to provide sufficient banking and credit facility for agriculture and other rural sectors. These were set up on the recommendations of The Narasimham Working Group during the tenure of Indira Gandhi's government in a vision to include rural areas to deal about 70% of the rural population operated.

The present paper discusses role of several sources and agencies engaged in extending credit to rural people, mostly Regional Rural Banks gives adequate credit to the farmers. In this paper analyses the growth pattern and performance of RRBs in India.

## REVIEW OF LITERATURE

A number of studies are carried out regarding to performance, viability, profitability, trend and operational efficiency of Regional Rural Banks in India. Here, as a part of my research paper an attempt has been made to review the literature pertaining to RRBs. Some of the main selected studies have been discussed below.

Co-operative banks at various levels were supported by their respective state governments and RBI. Much was expected from the cooperative banks but because of not having the adequate financial resources it couldn't meet the credit requirement of rural sector according to the needs of farmer's movements. According to the survey in 1969 of The All India Rural Credit Survey Committee, recommended a multi agency approach to funding the rural sector.

Verma and Reddy (2000): conducted a study analyzing the causes of overdues in Cooperatives under SWOOD, to assess recovery and NPAs position in these banks. Policy distortions in liberalized economy and inefficient management were identified as main reasons

for poor recovery. Utilization of credit, political interference at every level, successive crop failures, non-remunerative prices of agriculture produce, inadequate income and natural calamities, were some other factors, which affect the working culture of co-operative banks considerably. To improve the working of these banks, the study suggested that available credit size should be need based and production-oriented. Effective supervision of loans to minimize utilization and close social relations with debaters were two other suggestions to improve the profitability and productivity of these banks [1].

Nathan (2002): the current policies of the financial liberalization have had an immediate, direct and dramatic effect on rural credit. There has been a contraction in rural banking in general and in priority sector lending and preferential lending to the poor in particular.

Khankhoje and Sathye (2008) in his study attempted to measure the variation in the performance in terms of productivity efficiency of RRBs in India.

Dr. B.K. Jha (2008): found that the effective banking services helps to promote rural entrepreneurship and improve the picture of rural India.

Robson William B. P., Bergevin Philippe (2012): This study argues that Canada's federal government, which began issuing real-return bonds (RRBs) in 1991, should issue more RRBs of more types than it currently plans to do. Issuing more RRBs would not only better satisfy existing demand from investors; it has the potential to spur the development of other price-indexed instruments. Experience elsewhere suggests that more federal RRBs could encourage other entities to issue price-indexed debt, and would let intermediaries provide such products as inflation-linked annuities, thus providing more Canadian savers with protection against intentional or accidental inflation [2].

Kanika and Nancy (2013): jagged out that RRBs have successfully achieved the objectives of taking bank services to the door steps of rural households particularly in banking deprived rural area, to avail easy and cheaper credit to weaker rural section of the society [3].

Raghavendra and Chaya (2014): expose that credit borrowing, loan & advances, branches, and credit deposit ratios continue to be unsatisfactory and the RRBs are still hesitant to purvey credit to small and marginalized farm sector.

## OBJECTIVE OF THE STUDY

1. To analysis the financial performance of RRBs in India during the period from 1985-86 to 2015-16.



2. To evaluate the performance of RRBs in term of India during post amalgamation and pre merger periods.
3. To study the growth pattern of Regional Rural Banks in India.

## RESEARCH METHODOLOGY

The present study is based on the availability of secondary data, available in the R.B.I. publication, particularly Reports on Currency and Finance, Bulletins, NABARD's publications Reports of several studies by the Government and RBI.

Further it is found that there is glaring increase in the data for various variables under study over the period of time. To regulate these scattered absolute data, percentage change has been used for each variable over the given time period and other tests have been used. The study also shows the three decade financial performance from 1985-86 to 1995-96, from 1996-97 to 2005-06 and from 2006-07 to 2015-16. In my study, statistical and econometric tools are applied for analyzing the data and getting the results to derive logical conclusion. Besides simple statistics like mean, standard deviation, and correlation coefficients are used.

## HYPOTHESIS

**H0:** The flow credit pattern have not changed from 1989-90 to 2017-18.

**H1:** There is no major difference in performance between pre-amalgamation period and post-amalgamation period in spread ratio.

## REGIONAL RURAL BANKS (RRBs)

On the recommendation of the 'working group of rural banks' the Government of India initially had established six Regional Rural Banks [4] in the country with the objective of spreading banking facilities in rural areas where even co-operatives are not in a position to cater to the credit needs of the rural society and to provide credit facilities at lower rate of interest, especially to the target group, which consisted of small and marginal farmers, rural artisans and small traders, and, to inculcate the habit of thrift and savings. In addition to this RRBs were established to supplement commercial banks as (i) in spite of the impressive progress of the rural branches of commercial banks, there was no hope of their spreading to all the unbanked pockets, even in the course of a decade. (ii) Commercial banks suffered from two deficiencies in relation to rural credit i.e. (a) lack of rural background, and (b) high cost structure of operations. The main aim was that, the farmers as well as the rural poor could be saved from

the clutches of private moneylenders [5], who charge a very high rate of interest.

Generally, the Regional Rural Banks (RRBs) are sponsored by scheduled commercial banks. Each Regional Rural Banks has on authorized capital of Rs. One crore issued and paid up capital of Rs. 25 lakhs. The 50 percent share capital of Regional Rural Banks (RRBs), is subscribed by the central government, 35 percent by commercial banks and 15 percent by state government. As in march 1997, there were 196 Regional Rural Banks (RRBs), by 27 SCBs and one State Co-operative Bank were operating in the country with a network of 14,484 branches spread over 523 districts as on March 31, 2005 [6]. Consequent upon the amalgamation, the number of RRBs declined to 56 operating in 28 states and in one union territory covering 525 districts with a network of 21747 branches as on March 31, 2018.

## PERFORMANCE EVALUATION OF REGIONAL RURAL BANKS (RRBs)

Regional rural banks (RRBs) form an integral part of the Indian banking system with focus on service to rural areas. RRBs were created with the objective of combining the good features of co-operatives and commercial banks to provide regionally-oriented institutions that could direct credit to the under-privileged sections of the rural population. The Government of India promoted the formation of RRBs under the RRB Act, 1976, with a goal of formation of a new set of regionally-oriented rural banks which would combine the co-operatives' local feel and familiarity with problems and the commercial banks business acumen i.e. ability to mobilize deposits, access to central money market and modern outlook [10]. Therefore, the RRB Act mandates the RRBs to "develop rural economy by providing credit and other facilities" [11].

Thus, RRBs can be regarded as an ideal institution for achieving financial inclusion in rural areas. With the onset of financial sector reforms, a number of changes were brought about in the policy framework relating to RRBs to impart operational freedom to these institutions and improve their weakening financial health. These changes were primarily reflected in the restructuring, amalgamation and recapitalization of RRBs along with the application of prudential regulatory framework to these institutions. The process of amalgamation of the RRBs was initiated by Government of India in September 2005 in a phased manner. Prior to the process of amalgamation, 196 RRBs sponsored by 27 SCBs and one State Co-operative Bank were operating in the country with a network of 14,494 branches spread over 525 districts as



on March 31, 2017. Consequent upon the amalgamation, the number of RRBs declined to 82 operating in 26 states and in one union territory covering 619 districts with a network of 15,475 branches as on March 31, 2010. Additionally the role of RRBs in financial inclusion, priority sectors, which have generally constituted a major portion of the total advances of RRBs, occupied a share of about 82 percent in their total advances at end March 2010<sup>[11]</sup>. However, the share of agricultural credit in total credit from RRBs is on a declining trend in the recent years.

Hence, it is significant to analyze whether the RRBs performance was up to the level of the mandate with which they were established. The performance of

credit and number of RRBs has been analyzed over the period from 1988-89 to 20017-18 P.

Among the main objectives of establishing the RRBs, the mobilization of rural savings and channelizing them for supporting productive activities in the rural areas is important one. Table-1 gives a clear look on number of banks and Deposit of RRBs in India. The number of banks from 1988-99 to 2003-04 was 196 and after amalgamation period become only 134. Further the first and second decade constant number banks over period but last few years decrease the number of banks and it was only 56 banks in the country. The average mean of banks about 140.63, standard deviation (SD) is 61.99 and coefficient of variation (CV) is 27.81 percent.

**Table-1**

**No. Banks and Deposit of Regional Rural Banks (1988-2018 Provisionally)**

Year	No. of Banks	Index	AGR	Deposits	(Rs. Crores)	
					Index	AGR
1988-89	196	100	0	NA	NA	NA
1989-90	196	126.19	26.19	3815	100	0
1990-91	196	147.62	21.43	4560	119.53	19.53
1981-82	196	178.57	30.95	5271	138.17	18.64
1992-93	196	205.95	27.38	6370	166.97	28.81
1993-94	196	223.81	17.86	8045	210.88	43.91
1994-95	196	230.95	7.14	10848	284.35	73.47
1995-96	196	233.33	2.38	13370	350.46	66.11
1996-97	196	233.33	0.00	16971	444.85	94.39
1997-98	196	233.33	0.00	20977	549.86	105.01
1998-99	196	233.33	0.00	25428	666.53	116.67
1999-00	196	233.33	0.00	30051	787.71	121.18
2000-01	196	233.33	0.00	35995	943.51	155.81
2001-02	196	233.33	0.00	42494	1113.87	170.35
2002-03	196	233.33	0.00	47644	1248.86	134.99
2003-04	196	233.33	0.00	53390	1399.48	150.62
2004-05	134	233.33	0.00	58286	1527.81	128.34
2005-06	94	233.33	0.00	64195	1682.70	154.89
2006-07	90	233.33	0.00	83143	2179.37	496.67
2007-08	90	233.33	0.00	99093	2597.46	418.09
2008-09	84	233.33	0.00	120189	3150.43	552.98
2009-10	82	233.33	0.00	145036	3801.73	651.30
2010-11	82	233.33	0.00	166232	4357.33	555.60
2011-12	82	233.33	0.00	186336	4884.30	526.97
2012-13	64	158.33	-75.00	211488	5543.59	659.29
2013-14	57	111.90	-46.43	239494	6277.69	734.10
2014-15	56	107.14	-4.76	273018	7156.44	878.74



2015-16	56	107.14	0.00	315048	8258.14	1101.70
2016-17	56	100.14	0.00	371900	9748.36	1490.22
2017-18P	56	100.14	0.00	371900	9748.36	0.00
mean=	140.63			mean=	104503	
SD=	61.99			SD=	114773.42	
CV=	44.08			CV=	109.83	

Source: 1. Handbook of Statistics, 2009-10, Reserve Bank of India., 2. Annual Reports, NABARD, Various issues.

Table-1 gives a clear look on deposits of RRBs. The amount of deposits mobilized by the RRBs increased from Rs. 3815 crores in 1989-90 to Rs. 25428 crores in 1998-99 i.e. the year of first decade. It retained on increasing and reached to Rs. 120189 crores in 2008-09 the year of second decade, further it increased to Rs. 371900 crores in 2017-18

The study of the annual growth rate of deposit mobilization by the RRBs shows that while the annual growth rate was 19.53 percent in 1990-91, increased

sharply to 170.35 percent in 2001-02. But it decreased thereafter except in the year of 2002-03 with percentage change of 134.99. Further the deposit mobilization managed to grow with an annual growth rate of 154.89 percent in 2005-06. In 2016-17 the annual growth rate of deposit mobilization of the RRBs was 1490.22 percent. The average deposit over the analysis periods is calculated as Rs. 104503 crores, SD is 114773.42 and CV is 109.83 percent.

Graph-1 deposits

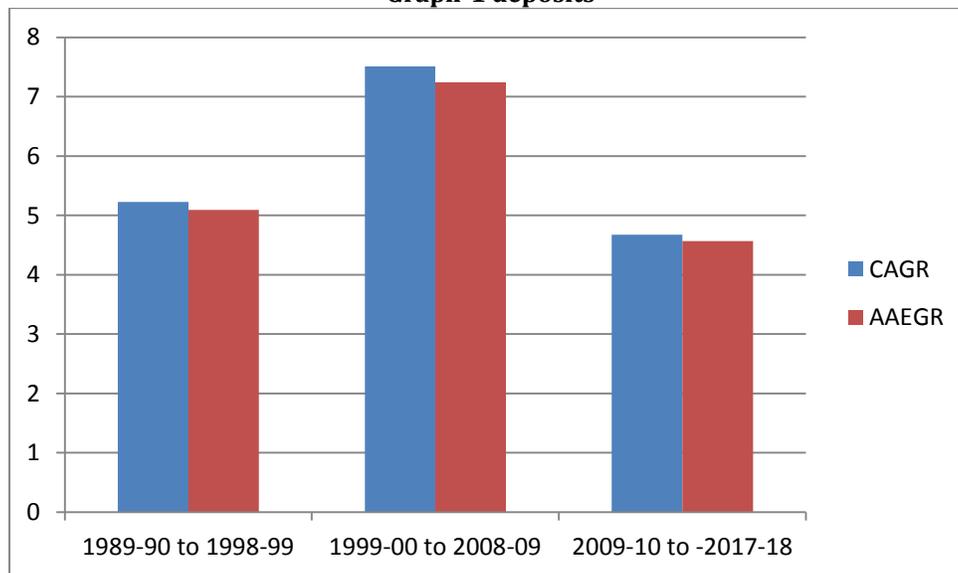


Table-3 reveals that the compound annual growth rate and average annual exponential growth rate is sharply decline from 8.59 percent in 1989-99 to 4.65 percent in last decade 2009-18 and further from 8.24 percent to 4.54 percent in the similar over analysis period.

From table-2, credits disbursement through RRBs has shown growing trend in annual growth rate

in first analysis year reached minimum about 2.58 percent and further it has continuously been increasing. After first period it improved somewhat but again declined in the year 1995-96 is only 31.92 Percent and another second time decreased the annual growth rate in the years 1997-98 was only 33.53 percent.



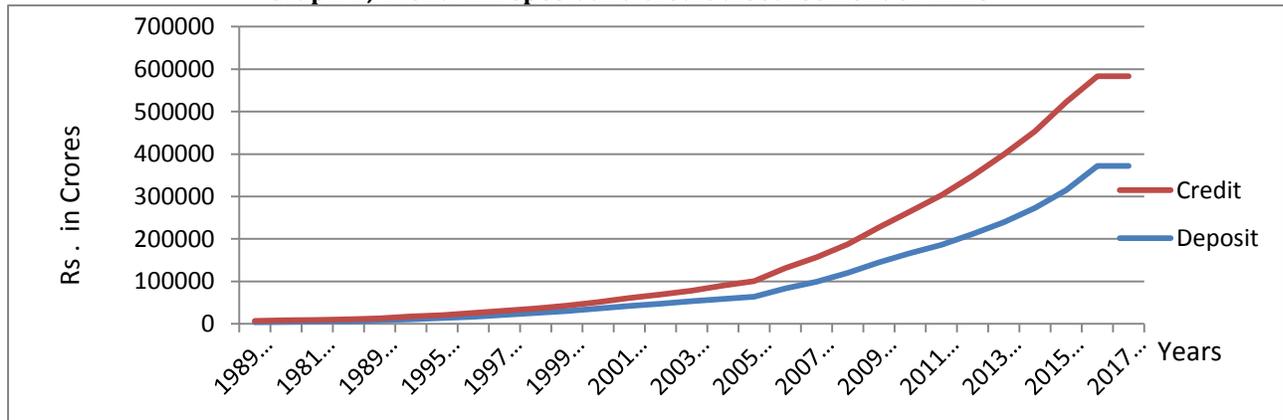
**Table-2**  
**Annual Growth Rate of Credit Disbursement of RRBs and Deposit /Credit Ratio**

Rs . In Crores					
Year	Credit	Index	Annual	Deposit	Deposit/Credit Ratio
1989-90	3409	100	0	3815	1.12
1990-91	3497	102.58	2.58	4560	1.30
1981-82	3951	115.90	13.32	5271	1.33
1992-93	4451	130.57	14.67	6370	1.43
19893-94	5024	147.37	16.81	8045	1.60
1994-95	6201	181.90	34.53	10848	1.75
1995-96	7289	213.82	31.92	13370	1.83
1996-97	8544	250.63	36.81	16971	1.99
1997-98	9687	284.16	33.53	20977	2.17
1998-99	11016	323.14	38.99	25428	2.31
1999-00	12663	371.46	48.31	30051	2.37
2000-01	15211	446.20	74.74	35995	2.37
2001-02	18033	528.98	82.78	42494	2.36
2002-03	21359	626.55	97.57	47644	2.23
2003-04	25057	735.02	108.48	53390	2.13
2041-05	31651	928.45	193.43	58286	1.84
2005-06	36050	1057.49	129.04	64195	1.78
2006-07	48420	1420.36	362.86	83143	1.72
2007-08	57417	1684.28	263.92	99093	1.73
2008-09	67096	1968.20	283.92	120189	1.79
2009-10	82119	2408.89	440.69	145036	1.77
2010-11	98917	2901.64	492.75	166232	1.68
2011-12	116385	3414.05	512.41	186336	1.60
2012-13	137078	4021.06	607.01	211488	1.54
2013-14	159406	4676.03	654.97	239494	1.50
2014-15	180955	5308.15	632.12	273018	1.51
2015-16	207279	6080.35	772.19	315048	1.52
2016-17	211534	6205.16	124.82	371900	1.76
2017-18P	211565	6206.07	0.91	371900	1.76
Mean=	62112.55				
SD=	71293.79				
CV=	114.78				

*Source: 1. Handbook of Statistics, 2009-10, Reserve Bank of India., 2. Annual Reports, NABARD, Various issues.*



**Graph-2, Trend in Deposit and credit disbursement of RRBs**



Source: Figure from Table-1 and 2.

**Table-3**

Time Period	Credit		Deposit	
	CAGR	AAEGR	CAGR	AAEGR
1989-90 to 1998-99	5.22	5.09	8.59	8.24
1999-00 to 2008-09	7.51	7.24	6.21	6.02
2009-10 to 2017-18	4.67	4.57	4.65	4.54

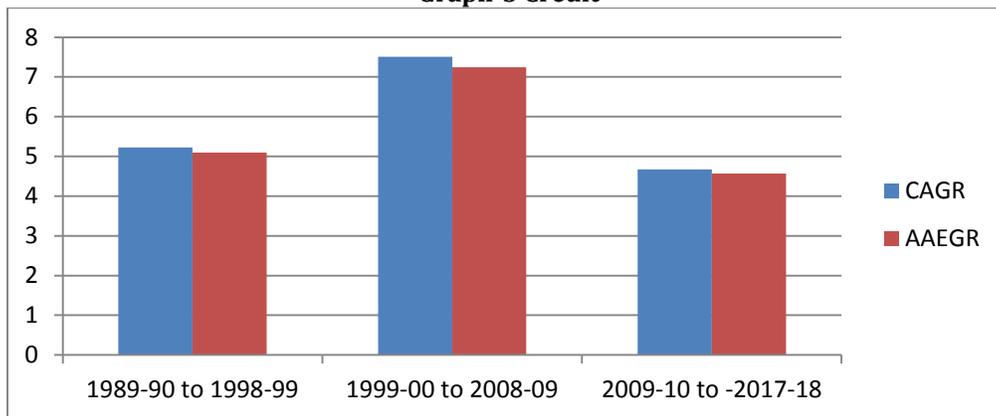
Source: Calculated from Table-1, 2.

Over the period of analysis was increasing trend can be seen in the percentage change figures but it shows instabilities. The annual credits growth rate disbursement increased from 38.99 percent in 1998-99 to 772.19 percent in 2015-16 but again declined to 124.82 percent in 2016-17 and 0.91 percent in 2017-18 (P). The average credit disbursement for the entire study

period is calculated as Rs. 62112.55 crores, SD is 71293.79 and CV is 114.78 percent.

HO: There is no major difference in the performance of Amount of deposits and credit Amount over the period from 1989-90 to 2017-18, so therefore the first hypothesis has been tested true.

**Graph-3 Credit**



In Table-3 reveal that CAGR and AAAGR of credit disbursement is 5.22 percent and 5.09 in 1989-90 to 1998-99 and rose in second decade and become 7.51 percent and 7.24 percent respectively. Further last

decade it has decaling again become 4.67 and 4.57 percent in 2009-10 to 2017-18.

H1: There are no significant differences in the ratio of deposit and credit ratio, thus second hypothesis also tested and proved true.



## CONCLUSION

From the above analysis, the expansion of RRB at a rapid rate of growth has helped in reducing significantly the regional disparities in respect of banking facilities in India. The efforts made by RRB in deposit mobilization, number of banks in respect to pre-amalgamation period and post-amalgamation, branch expansion, and credit disbursement mostly in rural area. RRB successfully achieve its main objectives like to take banking facilities and services to door steps particularly in banking poor rural areas, to avail easy and cheaper credit to poor rural area who are dependent on private lenders, to encourage rural savings for productive activities, to generate employment in rural areas and to bring down the cost of providing credit in rural areas.

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# THE NEED FOR COMPASSION FOR HUMAN EXISTENCE

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## ANNOTATION

*The article analyzes the bolster of love in family relationships on the basis of values, the essence, content, forms of love. The form, method, means and specific features of expressing affection in strengthening Uzbek family relations are described. It is based on the deep thinking of the people, the nation, the individual, the formation of empathy on the foundation of deep philosophy, skills, traditions, habits, hard work, and the need for compassion weakens the individual, furthermore compassion weakens society.*

**KEYWORDS:** Value, rational, irrational, kindness, compassion, kindness, ruthlessness, loneliness, shyness, aggression, depression, depression.

## DISCUSSION

Mercy as a social philosophical, moral category is a phenomenon associated with the understanding of man by others, emotional intimacy, and the satisfaction of his need for communication. It is necessary to explore its social functions while understanding that kindness is an independent reality and identifying its manifestations. In this way we can express the inner qualities of love. In order to know the internal properties of the object under study, it is also important to study the system functions to which it belongs.

Mercy is a complex social phenomenon. It is the product of a long-lasting socio-historical development in society. The functions of mercy are considered in a dialectical communication, together with the functions of the society to which it belongs.

One of the most important tasks today is to bring up the young descendant in a healthy and harmonious way, to provide them with effective education and upbringing. It requires the organization of the process of education and upbringing, taking into account the factors that cause a feeling of unkindness in society, as well as their impact on individual characteristics and mental state.

Mercy is manifested in society with negative consequences such as loneliness, shyness, aggression, disagreement, frustration, family quarrels, indifference, cruelty, nervousness, brutality.

Childhood, early childhood, adolescence and youth are important periods in the development of a person as a fully developed person. The love of

parents and relatives, the socio-psychological environment in the family play a special role in this regard [1].

Praising and ignoring or criticizing more in the upbringing of young people also makes it difficult for the child to choose the right path.

Time does not wait. In the matter of kindness, wasting time leads to a more explicit expression of kindness. A person may feel abandoned and sooner or later become ill. In many cases, people like to travel to get rid of boredom or loneliness. But even if one goes to the other side of the world, one cannot escape from oneself.

There are many activities in the community that assist the progress of personal development. These include reading, research, creativity, and physical education. A person communicates not only to take something from others, but also to give them something. In a successfully organized learning process, there is a desire to share the acquired knowledge with others. Effective creative activity is valued.

It is clear that in the largest cities of the world there are many people who feel loved and ignored. Indigenous peoples make up a very small proportion of the population of any major city. The rest are migrants who have come to the big city from different places. Although several generations live in the city, they try to preserve in their families the traditions, customs, and customs inherited from their ancestors. Every village, aul, or town has its own dialect, a sign that only the locals understand, the accepted norms of behavior [2]. This is why many



city dwellers face difficulties in finding a suitable partner or interlocutor. This leads to a lack of the kind of love that a person can give to a person, such as water and air, which is necessary for a person to be satisfied with life and feel happy in society.

The danger of being unkind is that it may not be felt at an early stage. At the end of the work day, when everyone is scattered from house to house and the streets are empty, when the phone calls stop, he begins to feel that he lacks affection. Because of this loneliness, nightclubs and discos have been set up in big cities to overcome the perceived lack of love. But in many cases this does not give the expected positive effect. Cruelty manifests itself and leads to various disagreements and crimes. Meanwhile, night calls are becoming one of the means of communication with others. It manifests itself as depression and suicide prevention.

Anxiety and depression increase in a person who feels compassionate and neglected. The longer a person stays in an environment of unkindness, the greater the need for communication with people.

The problem of cruelty has deep roots in its origins. First of all it is a mental illness. A human child feels protected when he is in his mother's womb. This condition persists in a person for a lifetime, and he seeks to find a partner, a sympathizer, with this feeling. Even when a person sings with interest in a choir, he feels in tune with people.

The more a mother loves and respects her child, the more positive it will be for her to communicate with people in the future. Most people are unable to share positive energy with those around them as a result of low self-esteem. A situation arises in which a person condemns himself to loneliness and cannot get out of this shell.

Value as a philosophical category embodies such essence as preserving, nurturing, firmly established, requiring constant repetition. It is also distinguished by its possession of a certain value, value.

When it comes to strengthening love on the basis of values in family relationships, it is necessary to pay attention to the analysis of problems related to the essence, content, forms of manifestation of values. "Since ancient times, people have valued the world around them, the things in it, the events and happenings, the relationships between people, and thought about their value. Over time, with the development of society, the problems in this area have increased, and the importance of solving them has increased" [3]. The theme of values underlies a number of worldviews, forming a central part of them.

The natural-historical values of mankind are manifested in connection with his life as a biological being, living being, health, birth, death, periods of life, childhood, adolescence, youth and girlhood, man

and woman, old age. Natural values, like any living thing, belong to every generation, tribe, nation, and people of the human race.

Values related to the spiritual and moral image, elegance and beauty of a person are reflected in dialectical harmony. They represent the degree to which universality is manifested in relation to the image of the individual. Every form of personal values related to spiritual and moral appearance, sophistication and beauty can be the basis for distinguishing one type of people in society. These forms, on the other hand, are extremely diverse, as can be seen in the following.

- The meaning of a person's life, ie the purpose of life, the values associated with memory, inheritance, inheritance, dreams, hopes, happiness, etc.;

- Values related to the environment, homeland, period, family and life, love, parents and children, the beauty of life, etc.;

- values related to the freedom, liberty, equality, faith, access to information, property, independence in the choice of residence, inviolability;

- personal responsibility, ie the values associated with the understanding of social necessity, its observance, discipline, honor, duty, conscience, dignity, etc.;

- values related to a person's delicacy, spiritual beauty, aesthetic sense, taste, culture, delicate attitude to himself, others, nature and the environment.

The role of the mother is important in the formation of a person as a full-fledged person in society. In particular, the child's ability to grow and develop freely from infancy, to behave calmly, is directly related to the satiety of love in the mother's womb. The mother is the first person in her life to communicate. The child's sense of solidarity from such communication plays a special role in his or her direct contact with other people. Whether or not a child is satisfied with his mother's affection is important in his future life. Motherly love is the power that ensures the overall harmony of human existence.

"Let's conditionally accept that in social relations, love is a product of work and service," he said. Increasing compassion, on the other hand, does not require much effort on our part. Use your children in relation to each other. Because this method increases the mutual affection between them. Remember that clapping comes from both hands. What people do for each other is small, and trivial things increase the love between them. It is good that the number of these actions is greater. Apply this exercise to yourself and your loved ones. Mutual service becomes an important tool for creating mutual love [4]... " Laughter, smiles, doing good, sincerity, helping each other cause a person to



develop mutual love. At the same time, there are factors that can dampen affection, such as slapping in the face, pushing from the chest, sighing, comparing to others, over-controlling, hitting the ground in front of others, not supporting when needed.

In the upbringing of a child, special attention is paid, first of all, to his formation as a kind person. The notion of humanity, which is the basis of such an educational requirement, meant first and foremost kindness. In the upbringing of children in the family, certain values are formed in order to increase their love for their parents, grandparents, elders, close relatives, neighbors, brothers and sisters. In particular, all forms, such as sight, hearing, perception, were effectively used in the loving upbringing of the child's personality. Great care has been taken at all times to ensure that the child is adequate in the mother's womb. It is provided for growth in the mother's womb without any obstacles until the age of 3-7 years [5].

Mercy is the will of the individual and the foundation of the strength and stability of society. It is formed on the basis of the deep thinking, deep philosophy of the people, the nation, the individual. Skills, traditions, habits, hard work are strengthened and refined. Just as the need for compassion weakens the individual, so compassion weakens society [6]. Only sincere love can firmly unite individuals and society. The maturity of the individual, of society, depends directly on his level of kindness. It directly strengthens social immunity. It heals the individual and society.

From time immemorial, attention has been focused on inculcating compassion as a value. This is reflected in religious worldviews and even in their oldest forms. While each religion has its own system of divine values, in essence, the concept of kindness, compassion, kindness has played a key role. Certain divine value systems are embodied in the Qur'an, the Bible, the Vedas, the Upanishads, and other religious books. As the historical forms of religions improved, so did the concept of compassion in their value system.

The irrational interpretation of mercy, its connection with divine aspects, is especially common in religious teachings. Nevertheless, the expression of affection also has a rational basis. This process is formed directly on the basis of labor, work, service.

Every action of a mother in relation to her child directly requires a certain amount of time, effort, knowledge, experience. Time, energy, knowledge, and experience are of rational importance. Carrying, giving birth, breastfeeding, washing, dressing and so on. The mother becomes attached to her child as a result of doing this activity over the years. Initially, the mother interacts with the child on the basis of his worldview, skills, way of thinking, but gradually, as the child's personality is formed, it also adapts to his character traits.

Enhancing a mother's love for her child A number of family events, including the "Beshikka belash", "Alla" song, "Qadam kulcha", and "Hair scissors", each play an important role in expressing the mother's love.

The rational importance of affection between husband and wife in the family is important for the stability of the family. In this regard, along with our age-old values, it is necessary to introduce new traditions that will reflect the changes of the times, the requirements of the time, and serve to strengthen the bonds of love between them.

However, it should be noted that the strengthening of individualistic nature in human behavior reduces the effectiveness of its management through customs, rituals and traditions. Man begins to live with customs and rituals that directly benefit him. In fact, any habits, rituals are also viable because they are beneficial to people. The mother-child relationship is of particular importance in this regard.

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## THE PROBLEMS OF TOLERANCE IN UZBEKISTAN

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### ANNOTATION

*This article reveals the problems of the development of tolerance in Uzbekistan and the reasons for their origin, in which the author focuses on the historical roots of the formation of tolerant relations in social and cultural life. It also reveals the forms of tolerance, their nature, and the aspects of ideology in the form of the original force that characterizes tolerance. It also reflects the harmony of social and interpersonal relationships and the rules of law that govern them.*

**KEY WORDS:** *problems, tolerance, history, assets.*

### DISCUSSION

The solution of problems, arising in tolerance development, introduction of the received results in practice are considered as one of actual problems today. In the conditions of terrorism and extremism strengthening, necessity of studying of tolerance and its possibilities for struggle against reactionary forces are put forward. From this point of view, at the reference to historical roots of tolerance, it is obvious that it had positive influence on cultural and economic interrelations of the various nations. In the process of cultural and historical development of world nations, along with creation of various spiritual and material, original bases of a civilization have been developed. This sort of civilization has been connected with the features of a geographical settlement. In the given process an environment, social and economic conditions, aspects of housekeeping were taken into consideration, etc. The civilization located in the centre of Central Asia, possessed original possibilities of the influence. Its environment very much approached for a settlement of ancient people and their life way. There were unique aesthetic processes since the Stone Age. Step-by-step, Central Asia turned to the original centre of cultural and spiritual traditions, interferences of customs and values. Thanks to its geographical arrangement and possibilities of political influence Central Asia has appeared as the basis which has affected progress of many people, their solidarity. Possessing many advantages from the strategic point of view, Central Asia has managed to reflect many aggressive campaigns. From historical sources it is known that the country which does not have the army or stable system of safety cannot be generated as the integral state. In this respect Sahibkiran Amir Temur

marked the following: «Each power leans against three things» (1). Developing the given thought, in one of his famous manuscripts he writes: « Power of the state - in fidelity and selflessness of soldiers-citizens » (2). From this judgment it is obvious that without army, without mutual respect of the people it is impossible to present neither the countries, nor tolerances. Power of army, its spirit and invincibility inseparably linked with such lines of tolerance, as a harmony of belief, mutual help and assistance. Thus, the national consciousness receives its expression under condition of durability of national army. Tolerance is formed at cooperation of the people and national army, in accordance with their sights and belief. To explain the concept of tolerance it is necessary to pay attention to its concrete value following from a context. In the « Public dictionary» published in Russia value of tolerance reveals as follows:

- a) the loyal relation to vital way, behavior, customs, feelings, sights, ideas, belief of the alien person;
- b) the tolerant relation to the events resulting as an inattention to undesirable factors;
- c) the tolerant relation to influence of undesirable, unacceptable emotional factors.

It is necessary to know that tolerance at all does not represent the tolerant relation to all unpleasant and even frankly things and facts. The life shows fidelity of the statement that tolerance is absolutely reasonable and fair. So if in the system of inter religious relations tolerance gets one value, it has specific sense on ideological front. As an example we can see inter religious tolerance which calls believing people for consolidation on the ways of light ideas and wishes, love to the native earth, the native land. The



religion of the most ancient historical times expressed also cultural wealth. Existence of national values throughout centuries also testifies that the religion expressed at all times the most sacral thoughts and wishes of people. Hence, all world religions are based on ideas of fidelity, friendship and peace. The religion calls people for honesty and sincerity, mercy and tolerance. Now this idea assumes cooperation on good and mercy ways not only religious figures, but representatives of all society as a whole consortium. Religious tolerance, representing the important factor of hardening of the world and stability, is a basis of national consciousness.

Recently variety of the actions directed to formation at young generation of the sincere attitude to the rich history of a native land, sacred religion of our ancestors on strengthening of ideological immunity of youth by means of influence on them of various ways, methods, means and factors is spent in Uzbekistan.

In this process the great value is got in a life of people, the people and a society by the ideological direction chosen by them, national ideology. Any ideology is capable to appear in the form of original force characterizing tolerance by the aspects which are mentioned below:

- Ability to carry away certain idea;
- Ability to unite;
- Mobilization;
- Spiritual stimulation;
- Ideological and political education;
- Presence of the program of action;
- Formation of ideological and political immunity.

If all listed above finds its reflex in life practice of the people of the nation positive tolerance is formed, otherwise negative tolerance is developed. Thus, only under condition of the solving of these problems it is possible to reach practical results. As a result of the tolerant relation to social, cultural and political differences in forms of individual public relations, life way, beliefs and sights such displays of tolerance, as a pithiness, political maturity are appeared. Hence, the tolerant relation to other person develops and it does not threaten our independence. These results are considered by the fact that our personal qualities in comparison with natural and public concepts differ smaller tolerance. In particular, recognizing tolerance pertinent, we cannot concern tolerantly the hooligan breaking an order in a public place or activity of carriers various infectious infection. At the same time tolerance is pledge of search of compromises and the peace resolution of conflicts. For this reason, it is necessary to concern tolerantly to some negative phenomena, that take place in our life and to search for ways of their step-by-step solution. According to the nature of tolerance, that represents a spiritual duty, political and legal necessity call for the valid relation, understanding of various aspects display of cultures of the different people and human individuality. It is not a concession or ingratiating at

all. This represents high level of culture and morals, mutual understanding, the relation generated on the basis of recognition of the universal rights and the basic personal freedoms. There is a lot of examples of such kind of tolerant relation. It doesn't mean the tolerant relation to social injustices or renunciation of own belief to please to alien belief. It mostly testifies that tolerance welcomes freedom of beliefs, recognizing this right for all people, and does not suppose the violent reference of the person in alien belief. Tolerance is a comprehension of the distinction, alien advantages and features as the integral, important part of a single whole. In other words, people with various belief and sights on a basis consciousness of life integrity should come to the conciliatory proposal. It shows that the national consciousness turns to national tolerance. For this purpose, it is necessary to be patient, constrained, and tolerant as intolerance means the scornful relation to the truth of a public life. Proceeding from the concept of the system approach to the validity, features of social and political display of tolerance can be classified as follows. This point was mentioned in several researches before of us where the following forms of tolerance have been offered. (4)

- International tolerance;
- Interstate tolerance;
- Political tolerance;
- Tolerance of values;
- Religious tolerance
- Territorial tolerance;
- Collective tolerance.

Many researchers (5) give the core attention to a tolerance problem, especially expression of forms of tolerance. First of all, we have addressed to definition of their essence. International tolerance represents features of mutual relations. Here there is in view of, first, interference of the nations on public relations, and on the other hand, an influence of the given relations on prosperity of each state. Speaking in another way, at the heart of social aspect in international relations and still much strengthening of national independence in social development mutual integration of the nations, change of sights lies, and it gets great value in transformation of social reforms, public relations. Besides the Uzbek nation, representatives of other nationalities also possess the public status in business of strengthening of independence of the native land. International tolerance in the view of integration into public structure of representatives of each nation, on the basis of values and the advanced views of the Uzbek nation, deduces on the foreground such tolerant properties, as own cultural wealth, customs. As a result of an international unification Tolerance signs characterized for tolerance as a result of an international unification are formed. In the given process the people who are serving as a basis of all reflections of tolerance, appear as the subject conforming given relations. In all causes of international tolerance social and interpersonal relations take place inseparable from each other. The



maintenance of the first consists of not only relations of concrete people, but also includes a place occupied with each person in a society. That is, in particularly certain actions of each person the universal behavior following from public installations is expressed. Hence, their subject is not only the person, but also a society as a whole. However, the public importance of the person is defined not by its concrete activity, and that, how much the person has realized the place in the given process. Particularly, representatives of some professions (a teacher, an engineer) in a certain measure are included into mutual relations with the persons breaking established public norms (criminals, disgraceful people). In each of these positive and negative relations arising in any society such aspects as interpersonal dialogue, mutual understanding respect each other are put forward. As a result, there are relations such generalizing, but at the same time defining a person's character nicknames and good or bad judgments of type: «the full fool» "bootlicker", («the guy that is necessary!» «It is worthy any praises», etc. Difference of interpersonal relations from the public consists in connection with feelings, experiences. The given phenomena promote conjunctive association of people, their rapprochement by means of public work of each of them. During the given processes such positive properties of tolerance, as an interpersonal unification, valid relation, and also such negative lines, as intolerance, aversion of another's opinion are shown. The original thinking of each member of a society, its point of view, mutual relations of people, occurrence in them of positive or negative emotions are defined by criteria of the above-stated forms of tolerance. This phenomenon pulls together people or, on the contrary, averts them from each other, takes the important place in public progress. It is obvious that under condition of the solution of relation problems in aspect of interpersonal, international tolerance, it is possible to pass to interstate tolerance, to carry out the analysis on the basis of revealing of its essence. Thus, in any display of tolerance (among the population and its layers, intercultural environment, etc.) it is necessary to give particular attention to the laws actuating mechanisms of mutual relations in area spiritual values, traditions. In particular, in such forms of tolerance as tolerant relations between political parties or between different religious confessions, proceeding from unity of relations and activity, from the social point of view it is possible to open new routes, directions in their mutual relations. Mutual relations of all industrial, public enterprises and the organizations, farms are also included here.

In the conclusion it is necessary to notice that in the process of harmonization various tolerance merits, despite a variety of culture, customs and values on the basis of reflex in a spiritual life of the Uzbek people of national originality and universal values education of the valid relation to them is carried out. According to this idea, tolerance in our national

consciousness develops on a basis: a) the spiritual; b) the religious; c) the economic; d) the political; e) the territorial; f) objective living conditions of the people, and then gets the concrete directions promoting business of prosperity of the native land. At more complex approach to tolerance system it is possible to assert with the big basis that it represents an original spiritual treasury of such advantages of the Uzbek people, as tolerance of the Native land; the valid relation to traditions and customs of other people; cooperation on a basis equal in rights with representatives of other nationalities; Honesty, justice, mercy, reasonable firmness of judgments, honoring of seniors; a conscientious attitude to public opinion; good neighborhood and related communications; national values, traditions and customs; a unification and the consent; interstate, international and international relations; the valid relation to the state legal certificates and symbolic; kindness and nobleness.

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## CURRENT PROBLEMS WITH STUDYING THE TERMINOLOGY

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### ABSTRACT

*Nowadays, the study of terms in science has become one of the most important issues. In recent years, a lot of scientific work has been done in this area and this process continues.*

*This article describes the types of terms and their application in various fields of science.*

**KEY WORDS:** *terminology, standardization of terminology, development, methods, translation, localization.*

## AKTUELLE PROBLEME BEIM STUDIUM DER TERMINOLOGIE

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**Abstract:** *Heutzutage ist das Studium von Begriffen in der Wissenschaft zu einem der wichtigsten Themen geworden. In den letzten Jahren wurde in diesem Bereich viel wissenschaftliche Arbeit geleistet, und dieser Prozess wird fortgesetzt.*

*Dieser Artikel beschreibt die Arten von Begriffen und ihre Anwendung in verschiedenen Bereichen der Wissenschaft.*

**Schlüsselwörter:** *Terminologie, Standardisierung der Terminologie, Entwicklung, Methoden, Übersetzung, Lokalisierung.*

Die Qualität der Terminologie bestimmt zu einem wesentlichen Teil die Qualität eines Fachtexts, sei es ein Originaltext oder eine Übersetzung. Denn dessen Klarheit und Verständlichkeit hängt weitgehend von der darin verwendeten Terminologie ab. Daher ist die Terminologie für die Kommunikation und die Wissensvermittlung von massgeblicher Bedeutung. Redakteurinnen, Übersetzer, Dolmetscherinnen, Juristen, Kommunikationsfachleute, Wissenschaftlerinnen, Techniker usw. haben tagtäglich mit Terminologie zu tun.

Terminologiearbeit umfasst auch die Extraktion von Terminologie aus Texten sowie die

Einarbeitung von Terminologie in Texte und kann sich auf eine Sprache oder auf mehrere Sprachen, auf ein Fachgebiet oder auf mehrere Fachgebiete erstrecken.[1,s.10]

Ziel der Terminologiearbeit ist es, die Terminologie einzelner Fachgebiete in einer oder mehreren Sprachen zu sammeln, zu prüfen und bereitzustellen. Existierende Fachwörter werden aufgezeichnet, neue bei Bedarf festgelegt.

Wir unterscheiden folgende Formen der Terminologiearbeit:

- einzelsprachlich – mehrsprachig (übersetzungsbezogen)
- fachbezogen – fachgebietsübergreifend



- punktuell – systematisch (textbezogen/fachgebietsbezogen)
- deskriptiv – präskriptiv/normend

Die punktuelle Terminologearbeit dient zur Lösung eines aktuellen terminologischen Problems. Meist handelt es sich um die Klärung von Benennungen, Neologismen oder fachsprachlichen Wendungen, die (noch) nicht in Wörterbüchern enthalten sind, oder es werden Äquivalente gesucht bzw. ungesicherte Äquivalente von Benennungen überprüft.

Die punktuelle Terminologearbeit geschieht meist unter Zeitdruck und mit einem relativ hohen Aufwand und erzielt nicht immer zufriedenstellende Resultate. Es besteht ein relativ hohes Fehlerrisiko.

Systematische, textbezogene Untersuchung stellt eine vorbereitende terminologische Untersuchung bei der Übersetzung umfangreicher Fachtexte dar. Der Text sollte sich auf ein einheitliches Fachgebiet konzentrieren, damit eine mehrfache punktuelle Untersuchung vermieden wird. Sind mehrere Texte eines Fachgebiets zu erwarten, sollte man sich eventuell für eine sachgebietsbezogene Terminologearbeit entscheiden.

Im Vergleich zur punktuellen Terminologearbeit werden in sachbezogenen Untersuchungen auch Nachbarbegriffe bearbeitet, die Arbeitsvorbereitung und Einarbeitung fallen nur einmal an, Quellen werden rationell genutzt und Sachgebietsexperten rationell eingesetzt. Es entsteht eine umfassende und vollständige Terminologiesammlung eines Gebiets.[2,s.21]

**Terminologienormung, terminologische Normung:** Normung von Begriffen und ihren Benennungen sowie von Begriffssystemen durch autorisierte und dafür fachlich, sprachlich und methodisch qualifizierte Gremien mit dem Ziel, terminologische Festlegungen in Normen zu schaffen

**Terminologieplanung:** Maßnahmen, die darauf abzielen, die Terminologie eines Fachgebietes zu entwickeln, zu verbessern, umzusetzen und zu verbreiten

**Terminologische Festlegung:** verbindliches Vereinbaren von Begriffen und ihren Benennungen sowie das Ergebnis dieses Prozesses

**Terminologische Grundsatznormung:** Normung von Grundsätzen und Richtlinien für die Terminologearbeit  
 Terminologearbeit wird in den folgenden Arbeitsfeldern eingesetzt:

- **In der Wirtschaft** wird firmenspezifisches Terminologiemanagement immer wichtiger durch Outsourcing von Übersetzungsleistung. Oft ist jedoch eine Argumentation für den Nutzen der Terminologie notwendig. Der elektronische Handel und das elektronische Beschaffungswesen erfordern den Einsatz von terminologischen Methoden und Werkzeugen. Es bestehen neue

Anwendungsbereiche wie z. B. die elektronische Warenklassifikation.

• **Zur (Fach-)Wörterbuchproduktion** werden meist lexikographische Methoden und eine spezifische Konzeption von Terminologiesystemen für die Fachwörterbuchproduktion eingesetzt, z. B. bei CATS und Electronic Publishing Partners (Arcolada).

• **Im Übersetzungswesen** (in Sprachendiensten, Übersetzungsbüros und bei EinzelübersetzerInnen) wird professionelle Terminologearbeit eingesetzt. Dazu gibt es eine Vielzahl an Terminologiewerkzeugen.

• **Die Dolmetscherbranche** wurde in diesem Bereich vernachlässigt. Hier findet Terminologearbeit oft nur im Rahmen der Vorbereitung auf einen Dolmetscheinsatz statt.

• **In der Lokalisierung** finden Übersetzungs- und Terminologiewerkzeuge zunehmend Einsatz. In dieser Hinsicht besteht eine extreme Notwendigkeit an einer konsistenten Terminologie(verwaltung) mit Einbezug in den gesamten Prozess. Auch für die technische Redaktion (als Teil des Lokalisierungsprozesses) sind professionelle Methoden der Terminologearbeit notwendig.

Terminologearbeit besteht – vereinfacht dargestellt – aus folgenden Schritten:

Was nützt Terminologearbeit?

Durch konsequente Terminologearbeit werden Ihre Übersetzungen schneller fertig, denn es werden aufwändige Korrekturen der Terminologie nach Abschluss des Übersetzungsprojekts vermieden. Es entfallen zeitaufwändige Terminologierecherchen während des Übersetzens. Durch konsequente Terminologearbeit wird die Produktivität Ihrer Übersetzer gesteigert, denn es entfallen zeitaufwändige Terminologierecherchen während des Übersetzens. Es können Fachbegriffe während des Übersetzens per Knopfdruck direkt aus dem Terminologieprogramm in die aktuelle Übersetzung übernommen werden. Durch konsequente Terminologearbeit wird die Qualität Ihrer Übersetzungen gesteigert, denn die Einheitlichkeit der Übersetzungen wird unterstützt, besonders wenn ein größeres Projekt im Team erledigt wird. Das gesamte Übersetzungsprojekt kann automatisch auf terminologische Konsistenz überprüft werden. Es gibt einen breiten Diskurs darüber, wie indigene Völker korrekt zu bezeichnen sind. Deshalb soll an dieser Stelle ein Überblick über die Terminologie gegeben werden, um so zu erklären, warum Survival International bewusst diese oder jene Bezeichnung verwendet.

Survival ist sich darüber im Klaren, dass alle Begriffe problematisch sind und für jedes einzelne Wort rechtmäßige Einwände geltend gemacht werden können. In jeder Sprache versuchen wir den Begriff



zu verwenden, der jeweils am besten von der Allgemeinheit verstanden wird und die Eigenbenennungen nicht verletzt.[3,s.87]

Viele Firmen haben eine Terminologie aufgebaut, um durch eine Standardisierung der Texte die Kosten zu senken und die Dokumentations- und Übersetzungsqualität zu erhöhen. Stimmt aber die Vorstellung, dass eine Terminologie zu haben, quasi zwangsläufig zu einer hohen Qualität führt? Die Praxis zeigt ein anderes Bild.

Es gibt keine Allzweck-Terminologie. Welche Termini man braucht und mit welchen Zusatzinformationen man sie ausstattet, hängt immer vom Einsatzzweck ab. Wenn also für einen spezifischen Einsatz (z. B. die Vereinheitlichung von Produktbezeichnungen in einer Online-Produktdatenbank) die entsprechenden Einträge und Attribute nicht aktuell sind, dann ist die Wirksamkeit der Terminologie eingeschränkt.[4,s.102]

Wie drückt sich das für Autoren und Übersetzer konkret aus? Für Autoren ist es zuerst wichtig, dass das Terminologieverwaltungssystem (TVS) alle Einträge erfasst, die sie für ihre tägliche Redaktionsarbeit benötigen. Sind wesentliche Fachbegriffe, Produkt- oder Funktionsnamen nicht vorhanden, dann ist die Tür für einen Wildwuchs an neuen Benennungen und Synonymen offen. Die Praxis liefert immer wieder solche Beispiele bei Firmen, die bereits eine zentrale Terminologie pflegen. Das ist insbesondere im Hinblick auf die modulare Erstellung von Dokumentationen oder auf den Einsatz von Translation Memories von Bedeutung.

Ähnliches gilt für Konstrukteure oder Softwareentwickler, die Produktkomponenten oder Funktionen neu benennen, wenn sich dafür im TVS keine Vorgabe findet. Angaben zum Status, zum Einsatzbereich (Marketingtexte, Visualisierungstexte...) oder zur Verwendung (erlaubt bzw. verboten) sind für Autoren wichtig, da sie sonst nicht in der Lage sind, zwischen Alternativen zu entscheiden.

Weil Autoren Produkte beschreiben, haben sie aufgrund ihres Wissens oft weniger Probleme mit dem Verständnis einzelner Begriffe. Für Übersetzer ist dies nicht der Fall. Der Auftraggeber erwartet von ihnen, dass sie die Inhalte exakt verstehen und ohne Verzerrung in die eigene Sprache übertragen. Dabei müssen sich Übersetzer im Alltag ständig mit Synonymen, unpräzisen Ausdrücken, uneinheitlichen Schreibweisen und Homonymen (ein Wort, mehrere Bedeutungen) auseinandersetzen. Hier sollen gut gepflegte Zusatzinformationen etwaige Fragen gleich für alle Fremdsprachen beantworten. Dabei ist auch auf die Qualität der Informationen und Definitionen zu achten, denn nicht alle Definitionen sind hilfreich formuliert.

Für die Sicherung der Übersetzungsqualität muss die Terminologie alle Termini beinhalten, die übersetzungsrelevant sind. Das ist deswegen wichtig, weil nicht jeder Übersetzer standard-mäßig die neue Terminologie zum Übersetzungsprojekt extrahiert. Übersetzungsprojekte betreffen aber quasi per Definition neue Produkte oder Merkmale. Sie enthalten also oft Termini, die bisher nicht definiert wurden. Wie wirksam ist eine Terminologiekontrolle, die nur zwei Drittel der Einträge in einem Dokument prüft? Dazu gehören auch Termini, die aus dem Blickwinkel des Autors nicht so wichtig sind, weil "selbstverständlich". Es sind Wörter für die die Fremdsprache(n) mehrere Äquivalente kennen.

Ein Beispiel dafür ist das Wort "**Bedienungsanleitung**" wird ins Usbekische als

- "foydalanuvchi qo'llanmasi"
- "foydalanish uchun ko'rsatma"
- "foydalanuvchiga yo'l-yo'riq"
- "qo'llash instruksiyasi" usw.

Neben inhaltlichen und sprachlichen Kriterien spielen auch datentechnische Kriterien für die Zuverlässigkeit der Terminologiearbeit eine Rolle. Heute ist die Arbeit der Autoren und Übersetzer ohne softwaregestützte Prüflösungen für die Terminologiekontrolle kaum vorstellbar. Aber was ist, wenn die eingesetzte Software die Terminologie nicht erkennt, die Wörterbücher meistens in der Grundform im Singular erfassen? Schließlich kommen in Texten oft ganz andere Formen vor als in der Terminologiedatenbank. Viele Terminologieprogramme können zwar bereits einige Wortformen wie Pluralformen erkennen. Bei 30 oder mehr regelmäßig eingesetzten Sprachen wird diese Erkennung schon schwieriger.

Wenn also komplexe oder unregelmäßige Varianten in Dokumentationen vorkommen, dann muss man manchmal entgegen aller Regeln diese Formen als alternative Terminologieeinträge erfassen, etwa bei "Zimmermann - Zimmerleute" im Deutschen. [5,s.72].

Darüber hinaus kommen Einzelwörter in Komposita vor oder haben unterschiedliche Schreibweisen. Wenn "Logikeinheit" als "Logik-Einheit", "LOGIKEINHEIT" oder "logische Einheit" erscheint, ist dann sichergestellt, dass die eingesetzte Software die korrekte Verwendung der Terminologie immer noch prüft?

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## EFFECTIVE SECURITY OF POPULATION EMPLOYMENT IN THE LABOR MARKET

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### ANNOTATION

*This article discusses the labor market, labor market regulation, solving the problems of ensuring employment and creating new jobs, the role of small business and private entrepreneurship in ensuring employment, problems and prospects of development of the labor market in Uzbekistan.*

**KEYWORDS:** labor market, labor resources, small business and entrepreneurship, employment, labor force, wages

## ЭФФЕКТИВНОЕ ОБЕСПЕЧЕНИЕ ЗАНЯТНОСТИ НАСЕЛЕНИЯ НА ТРУДОВОМ РЫНКЕ

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### Аннотация

*В данной статье рассматривается рынок труда, регулирование рынка труда, решение проблем обеспечения занятости населения и создания новых рабочих мест, роль малого бизнеса и частного предпринимательства в обеспечении занятости населения, проблемы и перспективы развития рынка труда в Узбекистане.*

**Ключевые слова:** рынок труда, трудовые ресурсы, малый бизнес и предпринимательство, занятость населения, рабочая сила, заработная плата

### DISCUSSION

The labor market is a system of economic mechanisms that reflects the balance of interests between enterprises participating in the market, employees, state and public organizations. It is through the mechanisms of the labor market and the norms established by it that the use and reproduction of labor is ensured. Labor as a commodity realizes itself in the labor market, which is a sphere of socio-economic

relations, the main of which are relations between employers and an employee based on supply and demand. The labor market is an integral segment of the structure of a market economy, functioning along with other markets for raw materials, materials, goods, services, housing, capital, securities, etc. In general, the labor market is understood as a special subsystem of a market economy in which on the one hand, employers (owners of the means of production), on the other hand,



hired workers. As a result of these relationships, the volume, structure and correlation of supply and demand for labor are formed. On the labor market, it is not labor force that is sold, but the ability to work, and its price is wages. The labor market is subject to the general laws of the interaction of supply and demand.

In a market economy, an important task of the state is the regulation of the labor market, which manifests itself in increasing the level of employment of the able-bodied population. This task is carried out mainly in two ways: the direct creation of new jobs at the expense of government spending, most often, to perform work in the public interest. In addition to the creation of new state enterprises, this includes work in the field of environmental protection, construction of roads and railways, as well as the organization of public works - the improvement of places of residence, etc. Creation in law and practical implementation of standards that ensure favorable working conditions and a healthy competitive environment for small businesses, which manifests itself:

- firstly, in a truly competitive environment, that is, the creation of a level playing field for small businesses, protecting it from the anti-competitive actions of the monopolists;

- secondly, the creation of relatively better conditions compared to large enterprises. It is assumed that as a result of this, small enterprises, developing, will create new jobs, contributing to the employment of the population. This circumstance is the main reason for the close attention of the leadership of the Republic of Uzbekistan to the development of small business and private entrepreneurship.

The main source of stimulation of small businesses is the banking system, while their support is mainly a state prerogative. In countries with market economies, government intervention in the economic activities of enterprises is predominantly indirect, that is, by regulating taxation and credit and financial mechanisms.

In Uzbekistan, as a result of the implementation of systemic measures aimed at the consistent solution of the problems of ensuring employment of the population and creation of new jobs, the number of people employed in the economy in 2016 according to preliminary data reached 13 million 298 thousand people, which is 1.8% more compared to 2015 year. According to official statistics, in 2016 the total resident population of Uzbekistan increased by 1.7%, to 32 million 121 thousand people. The share of the employed population in the non-state sector of the economy amounted to 80.0%, including 77.0% in small business and private entrepreneurship. The highest rates of employment growth occur in construction, housing and communal services and consumer services, trade and public catering, transport and communications. Positive trends are also observed in the sectoral structure of employment. Employment in agriculture decreased significantly, in which in the early 1990s more than 40.0% of the total number of employed workers in sectors of the economy worked.

In 2015, only 25.0% of the total number of employees was employed in this industry. At the same time, significant employment growth occurred in the services and transport sector from 36.0 to 54.0%, as well as in construction. This positive, in our opinion, tendency to change the sectoral structure is approaching the structure of employment in developed countries.

In Uzbekistan, a national model for creating new jobs in the sectors of the economy has been developed and is being consistently implemented, which in fact is recognized to contribute to the growth of employment. So, in particular, the implementation of these state and regional targeted programs has allowed to increase the number of new jobs from 85 thousand in 1995 to 980 thousand in 2015.

In solving the most acute social problem for Uzbekistan - providing employment, the role of small business and private entrepreneurship is especially high. If in 2000, 49.7% of the total employed population in the country's economy worked in this sector, then in 2005 this indicator reached 64.8%, and in 2016 - 79.0%. The number of new jobs created in this important sector of the country's economy has increased by more than 13 times since 1995.

In the small sector of the national economy, the service sector is developing rapidly. Currently, its share in the country's GDP is more than 54.0%. High-tech and infrastructural types of services, such as communication and informatization services, computer programming, repair and maintenance of technological equipment, financial and banking services and others, are growing at the fastest rates, which contributes to the creation of additional jobs.

The republic annually creates about 80 thousand jobs in the home-based labor sector. More than 220 thousand large women, disabled people and other citizens who need social protection are involved in its various fields. The country has created a holistic system of incentives for enterprises, employers and the population engaged in home work. In particular, enterprises are exempted for 5 years from paying a single social payment in the amount of funds paid to homeworkers wages, tax breaks on property transferred to homeworkers and others. Work at home allows you to attract a large part of the population, including in rural areas with excessive labor resources, by placing orders of industrial enterprises. Cooperation with homeworkers allows large industrial enterprises to organize work on family production or the development of new products, to free up production space for high-tech products, by transferring to homeworkers some of the operations that require large labor costs.

The reforms implemented in Uzbekistan are primarily aimed at ensuring a decent standard and quality of life for every citizen of the country. The growth of population incomes largely depends on their employment. The transition to market relations has changed the previous income structure of the population. New sources of income appeared (entrepreneurial income, property income), the role of



individual sources of income, their significance for various groups of the population, has also changed.

In Uzbekistan, the tendency is clearly observed in the structure of the population's cash income balance: if earlier, wages were the main source of population's income, now business incomes are becoming significant. Compared to 2000, real per capita income grew by 8.6 times, in the past 16 years, the share of income from business and property, including income from agriculture, in total household income has more than quadrupled. At the same time, in terms of social welfare, including life expectancy, family well-being, low unemployment, access to social infrastructure, Uzbekistan has consistently occupied one of the highest places in the world community. Along with these successes in Uzbekistan, a number of problems related to employment and effective regulation of the labor market have not yet been resolved. Among these problems can be identified:

- forecasting employment;
- identification of areas for improving labor market infrastructure;
- improving the efficiency of public employment services.

To solve the above problems, as well as create new jobs in the sectors of the economy and improve state regulation of the labor market, it is proposed:

- commissioning of new large industrial facilities, reconstruction and expansion of existing enterprises;
- implementation of industry-specific programs for modernization and technological renewal of enterprises, localization of production;
- stimulating the development of small and family business, as well as private entrepreneurship, the service sector;
- expansion of various forms of home-based labor.
- Creation and expansion of farms and dekhkan farms specializing in the production of livestock, poultry, beekeeping, fish farming, horticulture and other products;
- in-depth processing of agricultural products.

The government of Uzbekistan pays great attention to providing jobs to the population, especially young people. To this end, a state youth policy has been developed and implemented.

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# 1942 QUIT INDIA MOVEMENT AND ASHTI REVOLUTION

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## ABSTRACT

*Quit India, the moment of India's most anti-imperialist struggle, provides a good opportunity us to examine the contours of the Indian nation as it had emerged on the eve of partition and independence. The intensity of the Quit India movement, of course, had a good deal to do with war-time positions. Its distribution too was in different parts of the subcontinent, the government's preparedness to put down difference of opinion among nationalist leaders and parties about the stand to be adopted in the face of the national and international crisis of 1943. The year 1942 is a great landmark in the history of the city of Bombay as far the Indian national congress is concerned. It was on August 8, 1942, that the all India Congress committee met at the Gowalia tank maidan in a spacious pedal and passed the historic resolution popularly known as quite India resolution. The AICC was presided over by Congress president, Maulana Abdul Kalam Azad and among another present on the dais were Nehru, Sardar Vallabh Bhai Patel, Babu Rajendra Prasad, and Mahatma Gandhi. The speeches of Gandhi and Maulana Abdul Kalam Azad were heard with rapt attention. Gandhi's speech of slow, direct and without much rise and fall. Maulana's speech was how full fire is. The fair complexion of Maulana appeared red when he spoke with great passion and Vigour. The resolution moved was passed with practical unanimity only 13 members dissenting.*

**KEYWORDS-** 1942, Quite india movement, Ashti Revolution,

## MEANING OF MOVEMENT

The movement is organized and organized or self-inflicted collective struggle against the perception of organized exploitation and injustice by the organized power system, its purpose is to improve power or system improvement. In addition to the political reforms or the aspiration of change, it is run for social, religious, environmental or cultural goals. In other words, the general atmosphere of frustration between the ruling ruler and the governors, the effectiveness of known streams of communication, the separation of the person and Strict discipline and constant conflict situation. In this, people are organized and opposed to the system, which opposes the principles of injustice, the people's opposition to ending the exploitation system and the struggle takes the form of movement after a time. It is evident from the above that the movement is mainly exploitation, injustice, economic crime in self governance, political judgment, disability, violence and crime tendency, the horrors of police atrocities and unemployment, deprivation and dearness, lack of social security, harassment of untouchables society, The insecurity of minority society, the tendency of abduction of civil liberties and the weakening of

constitutional institutions Display tyrannical and unwellarist government, the rising voice of the people against the unconstitutional government and opposed. These are the mainly creator of the movement. Thus movement is a collective process and is reflected in the vast informal group of people's organizations. Its focus is focused on a particular issue and emphasizes partial change. Movement is different from individual actions. In fact, collective action is different from sporadic events; it takes the form of movement. The movement works to awaken people, but automatic unorganized resistance or action can't be considered as movement. A leader should have all the qualities of giving leadership to the movement so that he successfully lead the agitation and take the right decisions related to them. This is a complex technique that is not equal in every person. The imbalance in the movements is often not due to the nature of the agitators, but also due to wrong leadership and intellectual leadership. The manager works with the personnel of his own under his command. In this, the behavior of the manager is like the ideal, etc. The employee displays the same behavior. That's why the manager's leadership would be like that, the staff would also do the same work.



Hence leadership is the only option which maintains balance in the movement. The leader should be in touch with the agitators so that they do not have the possibility of mutual differences, hatred, malice etc. Because an agitator is also a well-behaved person like a leader and he also has a dignity, so the leader should not behave in such a way that the person feels that he is being treated separately or working under pressure. The policies of the leader should be of this kind so that the agitators get a sense of confidence. Leaders must have such qualities, from which the agitators will respect him. It is a skill in the Leader that he can work with the agitators, in the absence of the proper arrangement with the people, and he can also convince the people about their issues. The leader should pay attention to the problems that arise during the agitation so that people are not able to create a sense of despair. If the problems arising at the time of the movement were seen or tried to suppress it, then there is an adverse impact on the movement. The leader should consult with the agitators and understand their thoughts and make appropriate suggestions on it. The leader needs that he should always keep the agitators informed for the purpose so that their work skills can be checked periodically so that no other work can be done against the purpose. The person who has led the movement has the ability to make appropriate decisions and it should have an impression that their hard work, honesty etc. have special effects. This leads to progress of movement and for this progress the leader needs to encourage the agitators. The success of the leader in the movement depends on the fact that he also includes some basic rules in his practice. Doing so keeps the balance between the agitators and the leader. Sometimes, many kinds of problems are seen among the agitators, and all the agitators keep the problem in front of the leader, in such a situation, the leader should work endlessly and calmly thinking about all problems and problems should be properly diagnosed. By doing this, the belief of the agitators remains forever towards their leader. Public presence in the movement is an indispensable feature. The purpose of the public is through unity, integrity, cooperation, stability. In relation to public and movements, Choli-Daman is concerned. High-low of movement depends on the public. For the success of a movement, it is necessary for the public to have unity, conviction, resolve etc. The people involved in the movement only have to play the role. Despite the inequality of education-business or intelligence in the masses involved in movements, similarities are reflected in their feelings, thoughts and actions at that time. The public's attention in the movement is focused on a common goal at that time and all are attempts to achieve that goal. Society, group or community is determined to achieve something. This type of collective thought inspires one-sided movements. In every system, the

public has less or more rights. For example, the state and the government are supreme in socialist countries. The people of the same order blindly follow them. There can be no movement against the government and the power here. If the public is being exploited. Atrocities, oppression, chaos are increasing. As a result, the public life and property are threatening. In such a situation, the public agrees to attract the attention of the government to these evils. Thus, the public agitation against social injustice and exploitation.

#### **PUBLIC MOVEMENT OF 1942**

On September 3, 1939, Viceroy stabbed India in a war against Germany to advise without any provincial cabinets or any Indian leader. The meeting of the Congress Working Committee took place in Wardha from 8th to 15th September 1939, and for many days after the deliberations, the Congress released the statement on September 14, 1939, in which the party's approach was a clear interpretation. If the objective of the war is to protect the realism, socialism, supremacy, colonization, vested interests and privileges, then India can't have any interest in it, but if the issue is of the world order of democracy or on the basis of democracy, then India's deep Interests. An independent and democratic India will happily provide mutual security and economic cooperation against the invasion of independent countries, But cooperation should definitely be of equal proportion and agree to mutual consent. Therefore, the executive urges the British government to declare clearly that what are the aims of the war in relation to democracy, imperialism and conceptualized new system. Specifically, how to implement those objectives on India, how to implement them at this time. The correct investigation of any announcement is in its present use. The committee announced that till the freedom of equality of Indians was not given to the Indians, they would refuse to cooperate in the war. The Committee reminded that the promises of British politicians have been disputed and broken in the past. In World War I, other countries were mixed in their state, how good behavior with turkeys and the promise of political progress in India have been neglected.

In the summer of 1942, a favourable situation arose. Japan captured Rangoon on 8 March. Cripps Mission was announced on March 11. On March 22, 1942, the Cripps Mission came to India and he placed his proposal in front of various political parties and leaders of India.

First Proposal- Proposal for post-war times (a) - "Dominion status" for a new Indian Union, which could be different from the British Empire if desired".

A Constituent Assembly will be formed immediately after the end of the war. The British will be the representatives of India and Indian princely states.



Constitution constituted by the Constituent Assembly will be accepted by the Britain on two terms.

First proposal, any province of British India or any country state has the right to remain outside the union or to remain in its present condition or to maintain equality and create separate Dominion and make new legislation. There should be a treaty in Britain and the 'Legislative Assembly' so that "the British Government has to defend the religious and ethnic minority classes, which he has promised."

The second proposal - Proposal to be implemented in the war period - The British Government will keep the burden of India's defense in its own hands as part of its global efforts. But leaders of major Indian parties will be invited to participate in the immediate and efficacious manner of consultation with the British Commonwealth and Allied Countries.

Mahatma Gandhi, while criticizing the proposal, said, "If this is your proposal, then my advice is to return home with the second aircraft."

On 7th and 8th August 1942 in Bombay, the All India Congress Committee debated and deliberated on the 'Quiet India proposal'. In which arguments were argued for the end of British rule in India. The rule of this government is making India weak. As a result, India is becoming unable to support the cause of the world's freedom. It was suggested in the proposal that the establishment of a temporary government, which will be mixed, and it will be representative of all the special parties and categories of the people. The first task of this Government will be to protect India by taking advantage of the allied arms and non-weapon forces together with allied forces and prevent other attacks. This Government will formulate a plan for the Constituent Assembly and this meeting will be the maximum autonomy for all the people of India. Except certain things, all the rights will be governed by the governments of those parts. "Freedom will make India worthy of this, with the determination of the people and with its power, it can compete effectively in the attack."

In other words, the British were ordered to leave the country. That is why this is called 'Quit India proposal'. The message to the Indians of the Mahatma was 'Do or die', it meant that gain independence or die. This message was given by Mahatma ji on 8 August at 10 pm on the grounds of Gwalia tank in Bombay. Before sunrise on August 9, the message echoed in the corner of the country. On 9th August 1942 morning Gandhi ji and members of Congress Working Committee were arrested. On 9th August, all the leaders were arrested and sent to jail. Thousands of workers were also arrested. The Congress and various organizations related to it were declared illegal. The Indian Security Act was enforced so that people could easily be imprisoned

and kept in jail for a long time. But government repression had the opposite effect. From this, people started protest, strike in all the part country. The agitation was more pronounced in Uttar Pradesh, Bihar, Bengal, Odisha, Karnataka, Tamil Nadu, Andhra Pradesh. In this, the participation of laborers in Delhi Kanpur, Tatanagar, Lucknow and Madras was on a large scale. The first stroke of the British Government was sudden like the breaking of a heavy iceberg.

On Sunday 9th August the police raided Virala House, where Gandhiji and his companions were staying. Police showed warrant of arrest and said that all of you are ready to leave in half . Gandhiji's secretary Mahadev Desai, his wife Kasturba and Sarojini Naidu, along with Gandhiji was taken to Poona in Anga Khan Palace. In Bombay all the members of the working committee were arrested and imprisoned in the Ahmednagar Fort, then many members were arrested in India and put in the jail.

With the arrest of all the leaders, the Congress remained a leadership organization. Because no leader has left the province, district and town level. The outline of the movement was not even made, before that the government choked. For this reason, the movement was replaced by a broken bust, which was neither organized nor prepared, nor it was lead by anyone. Some perturbed people were walking around without any leadership.

There were many influences on the public - the Forward Block of revolutionary Subhash Bose, the socialist followers of Jai Prakash Narayan, who were involved in the Congress; But they were opposed to non-violence. Apart from this, there were many anti-social elements, who were looking for opportunities for nuisance. The Government had hoped that repression of incidents would be speedy. That's why the government took stringent action in the whole country. But the government's guess was wrong. With the closure of all the Congress committees and putting all the Congressmen in jail, the entire country felt a great shock, because its reaction too quickly. As the news spread on 9th August, large meetings were held in Bombay, Ahmadabad, Poona, the procession came out and demonstrations, and after this such proceedings took place in Delhi and other cities of north India. As the news spread on 9th August, large meetings were held in Bombay, Ahmadabad, Poona, the procession came out strike, and after this such proceedings took place in Delhi and other cities of north India. From one end of the country to the other end, there was a lot of strikes, rallies, civil disobedience etc. There was a sense of rebellion against the government that the people have decided to end the cruel government. Post offices, telegram, telephones, railroads became main targets. A sense of disgust was filled with people against the police and the courts and these organizations were attacked by people. People were



tried to destroy the government property. In this sequence, police stations, telegraphs, railway stations were burnt and plundered and the pool was blown up. Such incidents occurred at large places in other places like Bombay, Poona, Nagpur in Maharashtra.

Sufi Amba Prasad has written in *The Indian Revolt of 1942* that in this movement, police shot 538 times and killed nearly 7,000 people and 60,229 people were arrested, according to non-government sources numbers of total death peoples were 10,000. The government accused Gandhiji of spreading violence, but Gandhiji wrote a letter to Viceroy Lord Linlithgow and described this allegation as baseless and said that this suppression policy of this government has led the masses on the path of violence. Gandhiji started a 21-day fast on 10th February 1943, with the aim of atoning the violence in the movement, which has severe reaction in the country and abroad. In addition to the Muslim League, all the parties requested Gandhiji to end fast.

As the news of Gandhiji's fast spread, the indignation of the people increased. Strike, exhibition and procession all over the country seemed to be tenacious. Aga Khan Palace where Gandhiji was detained, where many people reached. From abroad Manchester Guardian, New Statesman, Nation News Carnival, Chicago Sun, the Communist Party of Britain, the Woman International League, the Australian Council of the Union and the Ceylon State Council also advised to release Gandhiji. In support of Gandhiji, MSN, N.R. Sarkar, and H.P. Modi resigned from the Viceroy's working council. But in spite of all this, British Prime Minister Churchill announced that "when we are winning the world from everywhere, how can we bow to a weaker bug at such a time?".

Gandhiji ended his 21-day fast. Later the government left Gandhiji in May 1944 looking at his bad health. So far, the Quit India Movement had become very impoverished, so considering the political situation, Gandhiji justified the movement. Soon all the Congressmen and the closure leaders in jail were released.

### **ASHTI REVOLUTION**

In the 'Quit India Movement' of 1942, Ashti Gaon introduced the bravery. In Ashti village, both Hindus and Muslims live together lovingly. There was no Hindu-Muslim quarrel ever in Ashti village because there was no relation between the residents of communalism far and wide. The people of Ashti village were followed the principle of secularism and unity. The people of this village decided to do satyagraha on Ashti police station. Satyagrahis decided to hoist the flag of freedom on Ashti police station. At 11 o'clock in Vadala, a crowd of 250 people reached the gate of the police station while shouting slogans with Congress slogan and demanded to come inside the police station. There was a dispute started between Sub Inspector Ramnath

Mishra and Constable Lal Singh and Satyagrahis. The Satyagrahis started sloganeering and demanded to hoist the Congress flag at the police station. Subsequently, the sub-Inspector Ram Nath Mishra allowed him to come inside the police station. All satyagrahi sat in the verandah of police station. There was a dispute between the police and the satyagrahis that the police station handed over the document to the Satyagrahis so that the British government could be opposed by burning it. But the talk was completely unsuccessful and the police did not agree to this. There was a break start in the police station. Some people broke the window behind the police station and entered the police station and brought the document out and started burning it. Constable Samad and Vinayak fired on Satyagrahis after the crowd was uncontrollable. Five people were injured in this shoot. In this shoot, Govindmalpe ji, Nawab Rashid Kha, Sadal Kha, Keshav, Shraavan dhonge, Punchi Polsu Gond, Udhebhanji Domaji became martyred. sub-Inspector Ram Nath Mishra put Pandurang Savlakhe and Motiram Hole, who were leading the Satyagrahis, in jail. As soon as the news of this shoot is heard, thousands of people from around villages of Ashti village moved towards Ashti Police Station between 12:30 and 1 a.m. There were sticks and stones in the hands of all the people. Seeing the injured and dead of own people, the crowd attacked on the police with sticks and stones. The police started shooting in their defense. Ramnath Mishra himself had lens with his pistol. The police firing was not affecting Satyagrahis, the police force was forced to retreat. Head Constable Imam Khan, Constable Samad, Narayan, Safdar Beg, fled to the forest while Constable Mahadev Prasad and Lal Singh Vinayak took shelter in the sub-inspectors room. The crowd of satyagrahis was constantly throwing stones at the sub-inspector's house. Meanwhile, Satyagrahis rescued Pandurang Sawalakhe, Moti Ram Hole from the police station. Meanwhile, Satyagrahas killed sub-Inspector Ramnath Mishra. After the assassination of the sub-inspector, they also killed to Mahadev Prasad, Vinayak, and Lal Singh. Now the next target of the agitated crowd was Samad, which ran towards the forest. He was eventually murdered.

### **PUNISHMENT TO ASHTI VILLAGE'S SATYAGRAHIS**

On December 16, 1944, the Wardha Court ruled out the sentence of 10 accused related to Ashti movement. On December 16, 1944, Anna, Nathu, Dalpat, Ramrao, Venkati, Maroti, Panjabrao Gunpatt, Pandurang, punished by P.V. Bhambal the Sub-Divisional Judge of Wardha Court. A special court was formed on August 21. On August 21, a special court was formed and Rao, V.N. Deva became Special Judge. After 62 days on Saturday, Justice Rao Bahadur sentenced all under Indian Penal Code



149, ten of them were sentenced to death. 54 people were sentenced to life imprisonment, 16 people were sentenced separately and 32 were released, No woman was punished.

All people were accused of violence, loss of government property and killing. Therefore, all people were charged under various 148, 224, 225, 302, 337, 395, 396, 436, 452 and 109 and 149 Indian Penal Code and Indian Security Act 35 under the Penal Code. 40, 152, 302, 396, 395, allegations were made against the accused based on Indian law.

In this entire judgment, 10 people were hanged. Those who convicted, they were Pandurang Jairam Kalar accused No. 2, Raghunath Pandurang Kumbhar accused No.12, Tulsiram Sakharam Panchghar accused No. 13, Bakaram Ramji Mukdam accused No.16, Vaman Baliram Teli accused No. 25, Unakanya Anandrao Bhoi accused No. 42, Kalekhan Vilayatkhani accused No 46. , Nathu Jairam Mali accused No. 52, Madhav Shraavan Deshmukh accused no 60 and Gulabrao Vitthalar Wav accused no 89. All of them were found guilty of the murder of sub-Inspector Ramnath Mishra and Constable Samad, Mahadev Prasad, Lal Singh, Vinayak. Apart from this, these people were found guilty for provocation, smashing the police station, tearing the papers, setting fire to the police house.

At the same time 54 people were sentenced to life imprisonment in this verdict. Those sentenced to life imprisonment, accused No. 1 Mahadev Baliram sawalakhe, accused No. 3 Motiram Chaitu Gond, accused No. 6 Kashiram Baliram Malpe, accused No. 7 Shraavan Jamba Sutar, accused No. 8 Bapura Krishnarao Malpe, accused No. 9 Ganpat Vithu Mali, accused No. 17 Lodya Kachanya Kotwal, accused No. 20 Vinayak Bapu Brahman, accused No. 21 Champ Hmady Bhoi, accused No. 22 Udhy Ganpat Kasar, the accused No. 24 Bapuo Madhav Teli, accused No. 27 Rambhau Shivram Patil, accused No. 28 Surabhaan Shivaram Patil, accused No. 30 Rajaram Shiv Bhoi, accused No. 32 Ishwar Bapuji Teli, accused No. 33, Ithathya Sakharam Mali, accused No. 34 Laxman , Accused number 36 Bapuo Nathu Teli, accused No. 37 Ngo Ganpat Rao, accused No. 38 Maroti Rajaram Gurav, accused No. 39 Mallik Accused Narayanagappa Gawli, accused No. 40 Madhav Narayan Mukadam, accused No. 41 Rama Chaiti Gond, accused No. 42 Shankar Tulsiram Kunbi, accused No. 45 Shivaram Paku Mali, accused No. 47 Maniram Laxman Mali, accused No. 48 Maroti Bhanaji Mali, accused No. 49 Bandayappa Sadashivayappa Wani, accused number 50 Baba Bakaram javaade Teli, accused No. 53 Shankar Sabboba Koshti, accused number 55 Balamuku The Ramlal Bania, accused number 56 Shankar Tulsiram Mali, accused No. 58 Kashinath Mali, accused No. 59 Pandurang Ramji Mali, accused No. 61 Shamrao Nagora Mali, accused No. 63 Namdev Baliram Sonar, accused No. 64 Nathu Krishnamo Rame,

accused number 66 Krishnarao Govindrao Kunabi, accused number 75 Nathu Raghaji Nagpure, accused number 76 Janarwa Anandrao Kunabi (Khadki), accused number 78 Narayan Dhannu Nanded (Khadki), accused No. 79 Chandrabhan Shivaram Nagpure (Khadki), accused No. 83 Shamrao Raghaji Nagpure (Khadki), accused No. 85 Gangadhar Bhagwan Nagpure (Khadki), accused No. 86 Sunabhan Dhanaji Munande (Narsapur), accused No. 87 Vaman Govind Bhadke (Narsapur), accused number 88, Bankerao Vitoba Bharke (Narsapur), accused number 90 Daulat Balaji Wagh (Sirsoli), accused No. 92 Vishnu Tataji Wagh (Sirsoli), A Judge No. 120 Krishnarao Baliram Kohli (Delwadi), accused No. 101 Tukaram Buckram Mahar (Anthora), accused No. 108 Rangarayana Venkatrao Kunabi, accused No. 109 Patna Mohanji Kunabi, accused number 110 Bhimrao Rajaram Bhivapure Kunabi (Kinhara), accused No. 114 Baldev Balakrishna Kunabi was there.

In this case, a total of 34 people were declared innocent. Those who have been acquitted are accused No. 5 Mahadev Chinnuji Kalar, accused No. 11 Ganpatlal Ayodhalal Bania, accused No. 14 Laxmanrao Borade Mali, accused No. 15 Bhanudas Bacaram Malpe, accused No. 18, Shamrao Vithoba Kumbhar, accused No. 19 Mahadev Hari Teli, accused No. 26 Nathu Govind Teli, accused No. 29 Ramkrishna Uknanshvi, accused No. 31 Devidas alias Bhayya V. Thakurda Bania, accused No. 35 Pandheri Atmaram Mukaddam, accused 43 Atmaram, younger brother, accused No. 51, Nana Shankarappa Junk, accused No. 54, Kalulal Bhawanjidas Bania, accused No. 57, Narayan Sitaram Sonar, accused number 65 Gulab Narayan Mali, accused number 65, Balaji Mali, accused number 67 Rajaram Seetaram Dhobi, accused No. 68 Khushal Bhajanaka Kalar, accused No. 69 Hansram Tulsiram Kunabi, Abhay Judge No. 73, Little Ukrainia Mahar, accused No. 74, Shamrao Punjaji Kunabi, accused number 80 Tulsiram Harisa Sonar, accused No. 82 Gulab Jhangoji Kunabi accused 84, God Kalka Prasad, accused No. 91 Lakshman Sitaram Kulvi, accused No. 93 Nathu Jago Maratha, accused No. 95 Pundalik Khushal Kunabi, accused No. 97 mapping Madhavrao Kunabi, accused No. 98 Pundalik Madhavrao Kunabi accused No. And 100 gunwant Bapurv Kunbi, accused number 107 Balwant, accused number 112 Damodar Anandlal were Marwari.

In this case accused No. 58 Kashinath Nathu, accused No. 88 Bakerao, accused No. 103 Manohar were who received apologies.

The letter was written to the governor to save people from execution and punishment. Petitions were filed in the High Court for this. Then the British government re-examined the decision and appointed Justice Polo. Justice Polo left 6 out of 16 people. On February 7, the Hanging Prevention Committee was



formed, whose Chairman Dr. Khare and Anusuiabai became the Executive Chairman. The provincial governor canceled the execution of four people on January 29, 1945.

The letter was written to the emperor of England to save other people. But the application was cancelled. Gandhiji said that those who have committed violence, if they are hanged, will be killed. Gandhi ji wrote a letter to Vyasaroj on July 13. Gandhiji met all the Governor, Viceroy and the Indian Minister to consider the hanging sentence. Dr. Rajendra Prasad wrote a letter to the new government of England. On August 16, a telegraph was sent to the Viceroy that the sentence of execution of people was cancelled.

But all the allegations against him were rejected by the Wardha Court and all the protestors of Ashti village who were convicted by the special Wardha court. In this way, the Satyagrahis of Ashti refused clear by several serious allegations like murder, riot, arson, and looting. The agitators also denied that they participated or operated in any movement. But the statements and evidence of the witnesses clearly show that satyagrahis were resorting to lies to avoid the agitating punishment, which is an insult to the revolutionaries who are martyred for the country. To save his life, Satyagrahis of Ashti have told the movement and the revolution lie. With this kind of statement some people cheated the Ashti's martyrs in the name of revolution and movement.

### CONCLUSION

The movement is primarily a collective effort by the public to make changes in the system based on exploitation or to fulfill the purpose of changing the system or to make the people's policy wise. The movement is driven by collective effort, not personally operated. The organization is required to achieve the objectives and objectives related to the movement. A good leader is required to achieve the objectives and goals of the movement. There is no doubt that in the movement of 1942, the element of self-propaganda was much more than the earlier movements. Although in 1921-22, 1930-31 and 1931-32, the Congress leadership had given the scope of public initiative and self-propelled uplift. The form of Gandhian public movement was that to make a broad outline of the leadership program and to leave it in the hands of local level workers and the people. If we analyze the 'Quit India Movement' in a holistic way, then we find that the 'Quit India Movement' failed externally but it was successful internally and India's last national movement was successful in overthrowing the British rule.

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# DISTRIBUTED CLOUD COMPUTING: CONCEPTUALIZATION AND APPLICATION

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## ABSTRACT

*Distributed cloud computing could be a technique of cloud computing wherever statistics and application is lay to rest connected from distinctive geographic locations. It communicates in very high speed and more responsively communicate from some particular areas. Provider which provides cloud computing use distributed cloud computing to minimize the response time between the client and server and enhanced performance.*

**KEYWORDS :** *Distributed cloud computing, IaaS, PaaS, Abicloud.*

## INTRODUCTION

Conveyed computing is the modern external edging of guideline, learning and inquire about. About 50% of colleges report that their Learning Administration Frameworks (LMSs) are encouraged within the cloud, however around 8% utilize the cloud for inquire about or exceptionally great quality enrolling. These are the sorts of cloud computing:

- Software as a Benefit (SaaS)— Remotely encouraged and looked after programming (for case most Learning Administration Frameworks)
- Platform as a Benefit (PaaS)— Remotely encouraged organize for programming progression (for illustration Google App Motor)
- Infrastructure as a Benefit (IaaS)— Most major and adaptable, where client decides the working system, presents and keeps up all software.

### Benefits

Coming up next are a portion of the potential benefits for the individuals who offer distribute computing based administrations and applications:

**Cost Savings** — Companies can reduce their capital consumptions allowances and utilize equipped uses for expanding their processing capacities. This is a lower boundary to section and furthermore requires less in-house IT assets to give framework support.

**Versatility/Flexibility** — Companies can begin with a little sending and develop to a huge organization decently quickly, and afterward downsize if important. Additionally the adaptability of cloud figuring enables

organizations to utilize additional assets at top times, empowering them to fulfill customer requests.

**Dependability** — Services utilizing numerous excess destinations can bolster business progression and calamity recuperation.

**Support** — Cloud specialist co-ops do the framework upkeep, and access is through APIs that don't require application establishments onto PCs, therefore further decreasing support necessities.

**Portable Accessible** — Mobile specialists have expanded profitability because of frameworks open in a foundation accessible from anyplace.

## CHALLENGES

These are a number of the outstanding challenges associated with cloud computing, and although some of those may moreover motive a postpone when delivering greater services within the cloud, also can offer chance, if resolved with due care and concentration inside the planning stages.

**Security and Privacy** - perchance two of the extra "hot button" difficulty surrounding cloud computing relate to storing and securing data, and monitoring the use of the cloud by means of the service providers. These difficulties are normally recognized to slowing the use of cloud services. These challenges is addressed, as an instance, by using storing the data internal to the organization, but permitting it to be utilized in the cloud. For this to occur, though, the safety mechanisms between agency and the cloud need



to be robust and a Hybrid cloud should help such a deployment.

**Lack of Standards** — Clouds have typical interfaces; however, no requirements are interrelated to these, and as a result it's out of the question that the bulk clouds are interoperable.<sup>19</sup> The Open Grid Forum is growing an Open Cloud Computing Interface to persuade to the underneath of this complexity and also the Open Cloud Consortium is functioning on cloud computing values and practices.

**Continuously developing** — Interfaces, networking and storage requirements are constantly evolving for user .Cloud is especially for people. It is not static and it's continuously developing.

**Compliance Concerns** — The Sarbanes-Oxley Act (SOX) inside the US and Data Protection commands inside the EU are sincerely two among many compliance troubles affecting cloud computing, hold the sort of data and software application that the cloud is being is getting.

**Compliance Concerns** — The Sarbanes-Oxley Act (SOX) inside the US and Data Protection commands within the EU are surely two amongst many compliance problems affecting cloud computing, preserve the kind of records and software that the cloud is being is getting. The EU has a legislative backing for data safety throughout all member states, but in the US data protection is exclusive and can fluctuate from country to state. As with safety and privacy stated previously, these typically end result in Hybrid cloud deployment with one cloud storing the records interior to the organization.

## COMPARISION BETWEEN CLOUD AND GRID COMPUTING

A assessment may be summaries as follows:

- 1) Construction of the grid is to finish a distinctive project, including biology grid, Geography grid, country wide academic grid, even as Cloud computing is designed to meet general application and there aren't grid for a unique subject.
- 2) Grid emphasizes the “useful resource sharing” to form a virtual enterprise. Cloud is regularly owned with the aid of unmarried physical corporation (besides the community Cloud, in this case, it's far owned by the community), who allocates assets to special strolling times.
- 3) Grid objectives to provide the maximum computing ability for a massive task thru aid sharing. Cloud pursuits to be adequate as many small-to-medium tasks which probable based totally on users actual-time

requirements. Therefore, multi-tenancy is a entirely essential idea for Cloud computing.

- 4) Grid trades re-usability taken as a whole for performance of cloud computing. Cloud computing is immediately pulled by way of on the spot user necessities pressed by plentiful commercial venture provisions.
- 5) Grid strives to realize maximum computing . Cloud is after on-demand computing – Scale up and down, in and out at the equal time optimizing the overall computing capability.

## POPULAR CLOUD COMPUTING PLATFORMS

### A. AbiCloud

Abicloud could be a cloud computing platform, It is wont to construct, assimilate and manipulate public additionally to non-public cloud inside the homogeneous. Using Abicloud, person can without difficulty and automatically install and manipulate the server, garage machine, community, virtual devices and programs and soon. The foremost difference among Abicloud and different cloud computing platforms is its powerful internet-based control characteristic and its center encapsulation manner. Abicloud helps user to deploying a new provider with the aid of simply dragging a virtual machine with mouse. This is less difficult and flexible than other cloud computing platforms that deploy new offerings through command traces. Abicloud are often accustomed organize and put into effect private cloud likewise as hybrid cloud in line with the cloud vendors' request and configuration. It can also supervise EC2 as per the principles of protocol. moreover, this the Abicloud, whole cloud phase based absolutely on Abicloud is also packed and redeployed at the other Abicloud platform. This is much functional for the alteration of the working environment and could make the cloud deployment technique a great deal easier and flexible.

### B. Eucalyptus

Eucalyptus generally turned into used to build open-supply cloud platform. Eucalyptus is an elastic open source infrastructure the progression of clusters accomplishment of utility, cloud computing and a famous computing standard, based totally on a service grade protocol that allow customers lease network for computing capability. Currently, Eucalyptus is compatible with EC2 from Amazon, and can aid extra other styles of clients with minimal amendment and extension.

### C. Nimbus

It is an integrated set of two tools and additionally a cloud computing reply supplying IaaS. It



permits customers lease far off sources and construct the specified computing environment through the deployment of digital machines. Generally, some of these purposeful additives may be categorized as 3 kinds. One type is customer- supported modules that are used to help all varieties of cloud clients. Its supports these modules like context client, Cloud client, reference client, EC2clientmodules.

#### D. OpenNebula

It is an open supply cloud provider framework. It permits person set up and control virtual machines on bodily sources and it can set user's information centers or clusters to flexible digital infrastructure which could routinely adapt to the exchange of the provider load. The predominant distinction of Open Nebula and nimbus is that nimbus implements faraway interface based totally on EC2 through which user can system all safety associated problems, even as Open Nebula does now not. Open Nebula is likewise an open and bendy virtual infrastructure control tool, that may use to synchronize the garage, network and digital

Techniques and let customers dynamically install offerings at the allotted infrastructure in line with the allocation techniques for facts center and faraway cloud resources. Through the interior interfaces and Open Nebula records middle surroundings, customers can without difficulty set up any kinds of clouds.

#### APPLICATIONS

These are a few applications of cloud computing as follows:

- 1) Cloud computing affords dependable and cozy statistics garage middle.
- 2) Cloud computing can comprehend information sharing among extraordinary equipments.
- 3) The cloud provides almost infinite possibility for users to use the internet.
- 4) Cloud computing does now not want excessive excellent equipment for the person and it is easy to apply.

#### CONCLUSION

This paper is study of the structural design and well-known platforms of cloud computing. It also addressed challenges and troubles of cloud computing in element. We're exploring and studying the contrast between cloud and grid computing. In spite of the abundant obstacles and the want for better methodologies techniques, cloud computing is becoming a hugely attractive paradigm, in particular for big enterprises. It has some boundaries like security issues, high availability issues, etc.

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## TWO PHASE FLOW, GAS- SOLID SYSTEM

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### ABSTRACT

*This article presents a resume of the flow of fluids with two phases, gas and solid circulating in parallel current through the interior of horizontal pipes illustrated with several examples..*

**KEYWORDS:** *Two-phase flow, gas-solid, pressure drops, flow patterns, horizontal pipes.*

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### 1.- INTRODUCTION

Systems where gases and solids come into contact in particles, grains or dust, have been used in the industry for almost a century. In its early days in 1926, the design of these systems was an art, whose ignorance could ruin the team, at best, or claim lives in the worst-case scenario. For these reasons, chemical engineering was given the task of investigating the behavior of gas-solid systems in order to understand their operation and design equipment such as catalytic reactors, pneumatic transport lines of solids, silos, hoppers, press filters, cyclones, continuous and batch dryers, mixers, heaters and particle coolers, among others, and thus turn the art of handling dusts and solid particles into a science.

Particulate solids behave like a liquid when they are contained in a container, the shape of which they take, but do not occupy the entire volume. Another similarity to liquids is to maintain a horizontal but irregular level in the vessel, in addition to having a hydrostatic pressure gradient along a column of particles, which is proportional to the density of the same and the height of the column. Because of these similarities, it is claimed that solid particles can flow like a liquid if they are dragged by a stream of gas or liquid. In the design of gas-solid systems, the engineer is concerned not only about the calculation of the pressure drop, but also about determining the gas speed needed for the operability of a particular flow system. Industrial practice has recommended operating speed intervals for each type of system, which have been represented in graphs similar to flow pattern maps for gas-liquid systems. To obtain an optimal design of the equipment, it is not enough to determine the speed of the gas and the pressure drop, it is also necessary to characterize the type of solid to be handled, according to its behavior in the face of a gas current. In addition, the flammability and explosive margins of gas-solid mixtures are also needed, as in the industry very powerful fires and explosions are known when handling fine powders, such as sugar, flours, pharmaceuticals, metal particles, pulverized coal, among many more. The accumulation of electrical loads in the equipment due to the friction of its walls with the particles, can lead to accidents, or at least disturbances in the proper operation of the equipment. Numerous theoretical and experimental research has been carried out to predict pressure drop and flow pattern, the latter dependent on gas velocity and solid type. As a result of these works, various correlations have been developed. Today, a general model has not been reached for all flow systems, as those developed are used for certain flow types and for certain operating conditions. Various groups of researchers continue to study the flow mechanisms of solid particles, to at least fully understand the operation of the different gas-solid biphasic flow management operations.

#### 1.1.-Classification of solid particles

After observing the different flow patterns present in the particle beds, on which a gas flows, Geldart <sup>[1]</sup> classified the granular solids into four main groups, according to the particle diameter and the difference in densities between the solid and the gas. Geldart groups, in increasing order of particle size, are as follows:



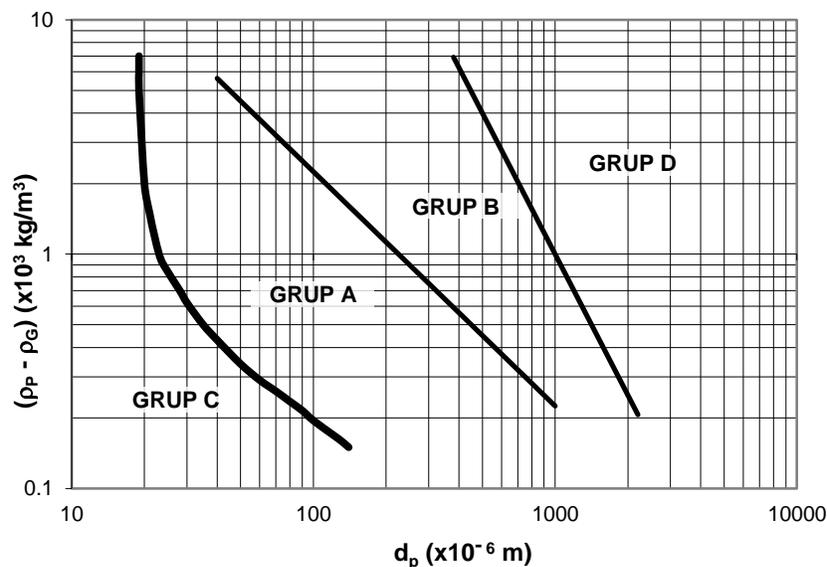
Group C: they are cohesive particles, whose fluidization is extremely difficult, as they result in the formation of channels through which the gas flows. In small diameter pipes, they form plugs that prevent the free flow of the gas phase. The difficulty in fluidization is due to the great attraction between the particles, the result of electrostatic charges, moisture or small particles joined by van der Waals forces. The particle diameter is generally less than 20  $\mu\text{m}$ , and examples include starch, sugar, flours and cement.

**Group A:** they are airborne particles, whose fluidization is free of bubbles, so, when the speed of the gas increases, the bed expands considerably before the appearance of the first bubble. Fine particles act as a lubricant, allowing better fluidization and avoiding the accumulation of gas in the form of bubbles. The typical range of particle diameters ranges from 30 to 100  $\mu\text{m}$ , and as a primary example you have the catalysts used for cracking.

**Group B:** they are sandy particles, whose fluidization is presented with continuous bubbling. These bubbles bind together (coalesce) as they ascend, increasing their size, and explode as they reach the surface of the bed. There is no maximum limit on the size of the bubbles, which is independent of the particle diameter. In shallow beds, the gas can be jet injected, as will be seen later, without the collapse of the gas-solid interface. The approximate range of particle diameters is 40 to 500  $\mu\text{m}$ , and typical examples are taken of sand and table salt.

**Group D:** they are large and dense particles, the fluidization of which is commonly carried out by the injection of a jet of gas. These solids allow greater stability of the gas-solid interface in the jet, due to their larger size, resulting in very deep fluidized jet beds. Its higher density and diameter makes it difficult to develop a fluidization pattern such as that present in groups A and B, therefore, if the distribution of the gas to the bed is done improperly, a pipeline may occur, as in group C, or a violent and erratic bubbling. In this way, the injection of a gas jet is the most suitable mechanism to fluidize them. Its particle diameter is greater than 1 mm, and as examples are the peas, coffee beans, rice, wheat, fragments of coal (mineral coal) and metallic minerals. These solids allow greater stability of the gas-solid interface in the jet, due to their larger size, resulting in very deep fluidized jet beds. Its higher density and diameter makes it difficult to develop a fluidization pattern such as that present in groups A and B, therefore, if the distribution of the gas to the bed is done improperly, a pipeline may occur, as in group C, or a violent and erratic bubbling. In this way, the injection of a gas jet is the most suitable mechanism to fluidize them. Its particle diameter is greater than 1 mm, and as examples are the peas, coffee beans, rice, wheat, fragments of coal (mineral coal) and metallic minerals.

Geldart proposed a diagram or map (Figure 1) where he graphed the transition boundaries between particle groups. This map is based on air fluidization data under atmospheric conditions. The ordering in Figure 1 is the difference in densities between solid particles and gas, and the abscissa is the average particle diameter.



1.- Figure.1.- Geldart particle classification map. (1973)

Geldart was the first to classify solid particles in a practical and objective way, as several authors had proposed arbitrary or based categories solely on the appearance of bubbles in fluidized beds. Geldart's criterion for classifying particles, on the other hand, is to group them according to their type of fluidization. He found four types of fluidization, while the other authors actually only distinguished two of them. Using fluidization data with air, nitrogen, carbon dioxide, helium, argon and freon 12, at different temperature and pressure conditions, Grace<sup>[2]</sup> generalized the Geldart map by using dimensional groups as coordinates (Figure 2).

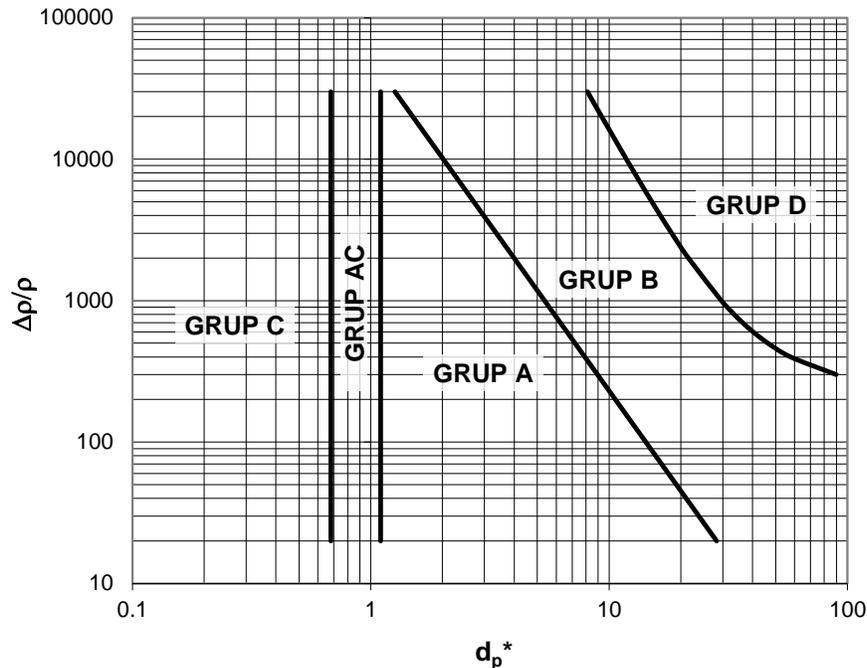


Figure 2.-Grace Particle Classification Map. (1986).

Where:

$\Delta\rho$  = difference in densities between the solid particle and the gas in kg/m<sup>3</sup>.

$\rho$  = gas density in kg/m<sup>3</sup>.

$d_p^*$  = particle dimensional diameter:

$$d_p^* = d_p \left[ \frac{\rho \Delta\rho g}{\mu^2} \right]^{1/3} \quad (1)$$

$d_p$  = particle diameter in m.

$g$  = gravity acceleration = 9.81 m/s<sup>2</sup>.

$\mu$  = gas viscosity kg/(m s).

Based on the Molerus<sup>[3]</sup> criterion, which only takes into account the effect of van der Waals' forces on the cohesiveness of fine particles, Grace proposed a transitional region between groups C and A, which is often referred to as the AC Group, as the fluidization of these particles is like that of Group A, and when the gas flow is interrupted they give rise to the formation of plugs as group C. For the reader interested in learning more about classification and characterization of solid particles, it is recommended to consult the works of Kunii and Levenspiel, Leva, Valiente Barderas<sup>[13]</sup>, and Fan and Zhu.

## 2.- FLOW PATTERNS IN HORIZONTAL PIPING.

There are seven general types of flow patterns in horizontal pipes (Figure 3). Fixed in decreasing order of gas speed, flow patterns are as follows:

**Homogeneous flow.**- In this flow pattern, solid particles are completely suspended in the gas and are evenly distributed in the cross section of the pipe. It occurs at very high gas surface speeds, and very low particle

flows. It is also known as diluted suspension flow, uniform suspended flow, or homogeneous transport in diluted phase (dilute phase homogeneous conveying).

**Heterogeneous flow.**- By decreasing the gas speed, larger and heavier solid particles are transported by the gas phase in the lower portion of the pipe. Particle sedimentation is not yet present, as the gas speed is higher than the rate of sedimentation (saltation velocity), there is only one vertical gradient of solids concentration. It is also often called heterogeneous suspension flow, non-uniform suspended flow, or heterogeneous transport in diluted phase (dilute phase heterogeneous conveying).

**Dune flow.**- By decreasing the surface velocity of the gas phase to values below the rate of sedimentation, the particles begin to precipitate resulting in the formation of dunes in the lower portion of the pipe. In this type of flow, particles move from one dune to another in a periodic acceleration and deceleration motion. Depending on the speed of the gas, two types of dune flow are presented, which are:

**Longitudinal dune flow:** Immediately below the sedimentation rate, the particles form elongated dunes, parallel to the pipe, which advance in the direction of the flow. The width of these dunes is approximately 0.1 times the diameter of the pipe, and its length is 1 to 3 times the diameter of the pipe. It is also known as sediment flow or ribbon flow.

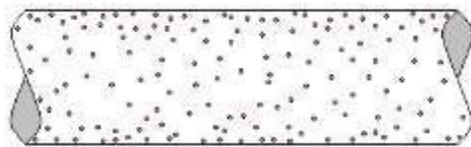
**Transverse dune flow:** At a lower gas speed, the particles form dunes perpendicular to the pipe, which advance in the direction of the flow. Its appearance is that of islands or clusters of well-defined particles. As the gas phase slows down, the length of the dunes decreases and their height increases. This flow pattern is the classic dune flow, also known as stratified flow.

**Plug flow** .- This flow pattern is characterized by excessive accumulation of particles on the dunes, resulting in the formation of solid plugs or pistons. The flow of both phases is intermittent, as it is in the form of alternating gas and solid plugs. It is presented only with particles of group C, which by their cohesiveness, form plugs with great ease. It is also often called plug flow.

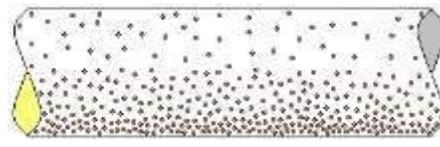
**Slug flow.**- By decreasing the speed of the gas, the particles accumulate in greater quantity in the dunes, increasing them in size to occupy the entire flow area of the pipe. This mechanism produces the formation of battering bodies, whose movement is in the flow direction, alternately with the flow of the gas phase. It is presented with particles from groups A, B and D.

**Ripple flow** .- At relatively lower gas surface speeds, particles occupy most of the pipe space, slowly advancing in the middle portion of the pipe and remaining stationary at the bottom of the pipe. At the top, the actual speed of the gas is higher due to the contraction of the flow area, so it drags particles, which form small waves or waves whose behavior is similar to that of the transverse dunes described above. It occurs only with particles in groups A and B.

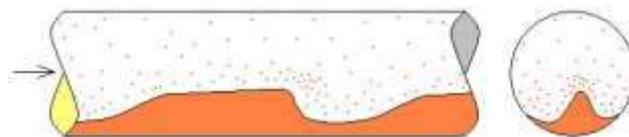
**Flow with movil bed.**- When the gas velocity decreases de particles that ocupied the tube flow slowly . They are present with particles of group A,B,and D. They are also know as flow in dense phase.



Homegeneus flow



Heterogeneous flow



Transverse dune flow

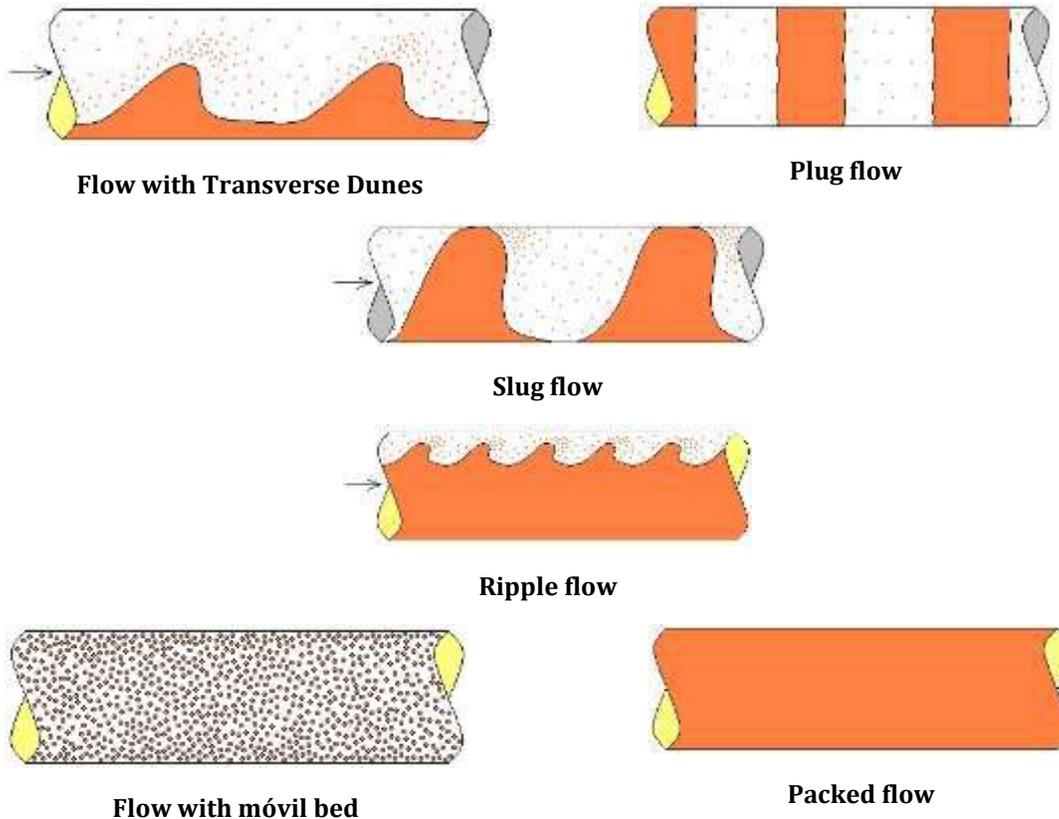


Figure 3.- Flow patterns to two phase gas-solid system in horizontal pipes.

### 3.- PREDICTION OF FLOW PATTERNS IN HORIZONTAL PIPES

To be able to size a solid particle transport line, and therefore design a gas-solid two-phase flow system, it is necessary to know first the flow pattern present in the line. Unlike the identification of horizontal flow patterns in gas-liquid systems, in gas-solid systems this identification does not depend on the technique used in experimentation, as the patterns are recognized according to the pressure drop profile in which they are presented. Although several researchers have conducted studies on the subject, only patterns of industrial interest have been well defined. There are many types of flow whose borders are unclear or unknown. Today, engineers and scientists continue to investigate the mechanisms by which different flow patterns develop, while new applications continue to be discovered for each of them. The first to develop a graph where horizontal flow patterns are recognized was Zenz<sup>[4]</sup>, who developed a qualitative scheme relating the pressure drop to the surface velocity of the gas phase. The Zenz graph is entirely experimental and is applicable only to a particular system, so it does not constitute a general map of flow patterns. Based on theoretical considerations and experimental data, Thomas<sup>[5]</sup> developed the only generalized map of horizontal flow patterns (Figure 4). The data used corresponds mainly to water-solid systems, but data from air-solid systems are also included. Based on theoretical considerations and experimental data, Thomas<sup>5</sup> developed the only generalized map of horizontal flow patterns (Figure 4). The data used corresponds mainly to water-solid systems, but data from air-solid systems are also included. This map was constructed for a quotient  $(\rho_P - \rho_G)/\rho_G$  of 100, frequent average value in gas-solid systems, and applied for particles in groups A, B and D. Its borders are presented with great precision considering frictional effects for the identification of different flow patterns. In the flow with transverse dunes are included the ram and wave flows, which are presented very close to the border with the flow with mobile bed, preferably located in the region of the intermediate law.



The coordinates in the Thomas' map are:

$$\text{Abcisa} = \frac{d_p v_{f0} \rho_G}{\mu_G} \quad (2)$$

$$\text{Ordenada} = \frac{v_t}{v_{f0}} \quad (3)$$

Where:

$d_p$  = diameter of the particle in m.

$v_{f0}$  = frictional velocity at infinite dilution in m/s:

$$v_{f0} = v_{SG} \sqrt{\frac{f_f}{2}} \quad (4)$$

$v_{SG}$  = gas superficial velocity in m/s.:

$$v_{SG} = \frac{Q_G}{3600 A} = \frac{W_G}{3600 \rho_G A} \quad (5)$$

$f_f$  = Fanning friction factor de fricción de Fanning, gas flow only:

$$f_f = \frac{f_D}{4} \quad (6)$$

$f_D$  = Darcy friction factor, from the Moody's diagram.

$\rho_G$  = gas density  $\text{kg/m}^3$ .

$\mu_G$  = gas viscosity  $\text{kg/(m s)}$ .

$v_t$  = Particle terminal velocity m/s.

Note the use of the surface velocity of the gas instead of its actual speed and the absence of any parameter dependent on the amount of particles present in the pipe. Because solids do not flow by themselves in a horizontal pipe, their transport depends exclusively on the amount of drag gas, expressed in the form of surface speed, which considers that the gas occupies the entire flow area of the pipe. In this way, Thomas' map indicates the surface velocity of gas needed to induce some particle behavior and thus develop a certain flow pattern.

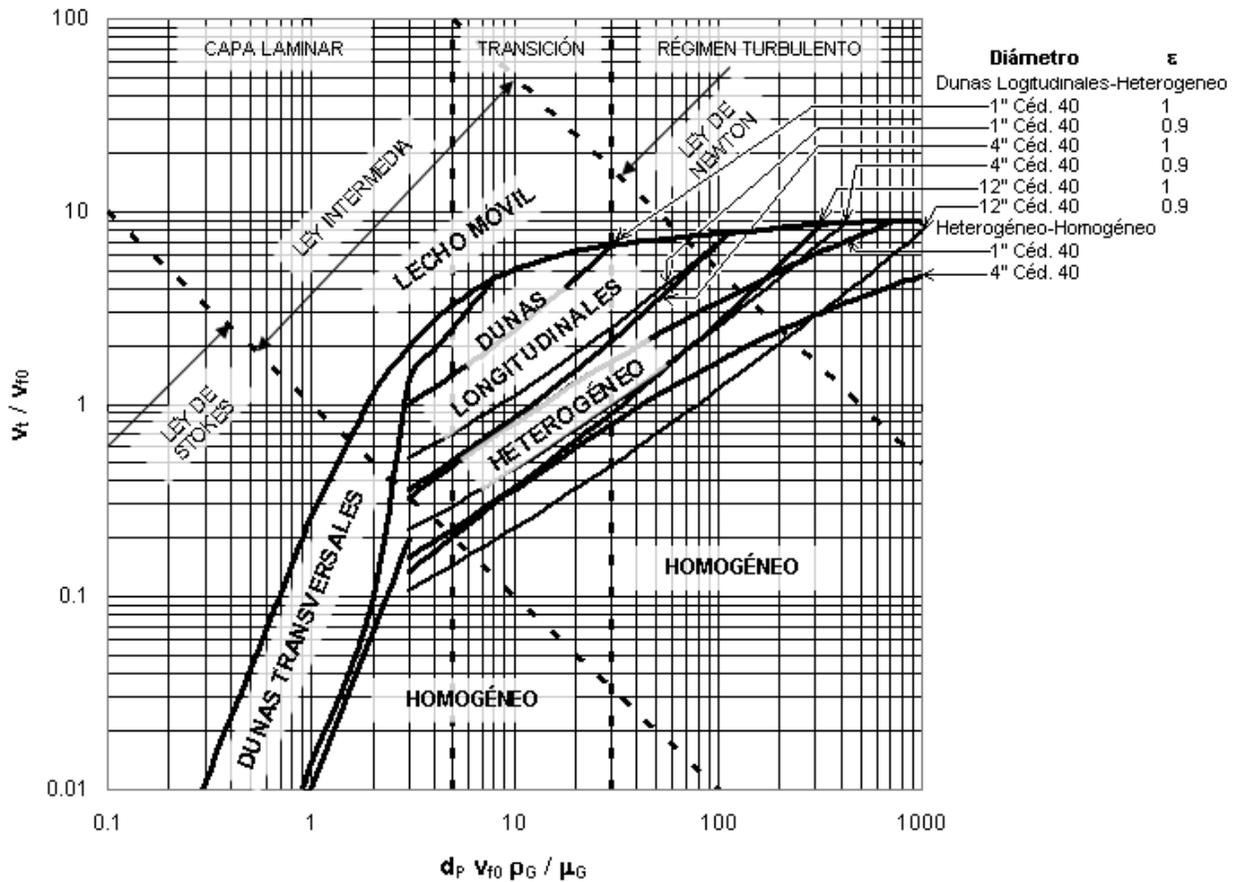


Figure 4.- Map of Thomas patterns for horizontal flow in gas-solid systems. (1964).

The transitional borders between mobile bed-transverse dunes, transverse dunes-longitudinal dunes and longitudinal-homogeneous dunes, are independent of the diameter of the pipe and the amount of particles, the latter expressed as a fraction of hollows. The position of the longitudinal-heterogeneous and heterogeneous-homogeneous dune borders varies from the diameter of the pipe, descending on the map as the diameter of the pipe increases. Also shown on the map is the dependence of the longitudinal-heterogeneous dunes border with respect to the fraction of hollows, which is given by the following equation:

$$\epsilon = \frac{Q_G}{Q_G + Q_P} = \frac{\frac{W_G}{\rho_G}}{\frac{W_G}{\rho_G} + \frac{W_P}{\rho_P}} \quad (7)$$

Where:  $Q_G$  and  $Q_P$  – are the volumetric flows of the gaseous and solid phases in m<sup>3</sup>/h. The terminal velocity depends on the sedimentation regime of the particles, which is determined by the number of particle terminal Reynolds:

$$(Re_P)_t = \frac{d_P v_t \rho_G}{\mu_G}$$

If  $(Re_P)_t < 1$ , Stokes' law is complied with:

$$v_t = \frac{g(\rho_P - \rho_G)d_P^2}{18\mu_G} \left[ \frac{m}{s} \right] \quad (9)$$



Where:  $g$  = acceleration of gravity  $\times 9.81 \text{ m/s}^2$ .  $\rho_P$  - intermediate law is enforced:  
 solid particle density in  $\text{kg/m}^3$ . If  $1 < (Re_p)t < 500$ , the

$$v_t = \frac{0.153 g^{0.71} d_p^{1.14} (\rho_P - \rho_G)^{0.71}}{\rho_G^{0.29} \mu_G^{0.43}} \left[ \frac{\text{m}}{\text{s}} \right] \quad (10)$$

If  $(Re_p)t > 500$ , Newton's law is followed:

$$v_t = 1.74 \sqrt{\frac{g d_p (\rho_P - \rho_G)}{\rho_G}} \left[ \frac{\text{m}}{\text{s}} \right] \quad (11)$$

A quick way to obtain this speed is found in appendix LVI of Valiente Barderas' book<sup>[9]</sup> and on page 81 of Kunii and Levenspiel's work, which uses the dimensional particle diameter and the graph in Figure 5, shown below, where their coordinates are given by:

$$d_p^* = d_p \left[ \frac{\rho \Delta \rho g}{\mu^2} \right]^{1/3} \quad (12)$$

$$u_t^* = v_t \left[ \frac{\rho^2}{\mu \Delta \rho g} \right]^{1/3} \quad (13)$$

Where:

$d_p^*$  - particle dimensional diameter ;  $u_t^*$  - dimensional terminal speed ;  $d_p$  - particle diameter in m.  $v_t$  - terminal velocity in  $\text{m/s}$ . ;  $\rho$  gas density in  $\text{kg/m}^3$ . ;  $\Delta \rho$  difference in densities between the two phases in  $\text{kg/m}^3$ . ;  $\mu$  gas viscosity in  $\text{kg/(m s)}$ . ;  $g$  - acceleration of gravity -  $9.81 \text{ m/s}^2$ .

Although the terminal velocity also depends on the sphericity of the particles, whether it is unknown it can be assumed that the particles are spherical. The terminal velocity obtained in this way is the highest possible for a particle falling into the sine of a fluid, whether liquid or gas.

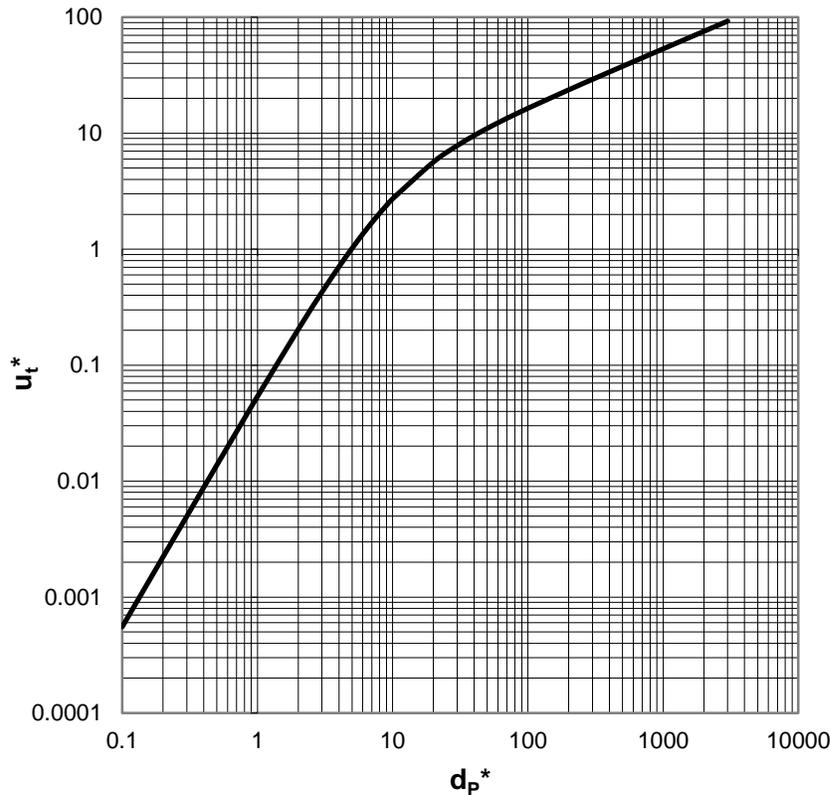


Figure 5.- Terminal speed of spherical particles in fluids.

**Thomas method for determining horizontal flow patterns:**

1.- Obtain the terminal velocity of the particles using the graph in Figure 5:

$$v_t = (u_t^*) \left[ \frac{\mu \Delta \rho g}{\rho^2} \right]^{1/3} \left[ \frac{m}{s} \right] \quad (14)$$

2.- Calculate the superficial Particle Reynolds.

$$Re_{SP} = \frac{d_p v_{SG} \rho_G}{\mu_G} \quad (15)$$

3.- Determine the friction factor of Fanning equation (6) , using the superficial particle Reynolds and Moody diagram, or, using the equations of Hagen-Poiseuille or Chen depending on the flow regimen (laminar or turbulent, respectively).

Laminar:  $f_D = \frac{64}{Re}$

Turbulent:

$$\frac{1}{\sqrt{f_D}} = -2 \log \left[ \frac{\epsilon}{3.7065 D} - \frac{5.0452}{Re} \log \left( \frac{1}{2.8257} \left( \frac{\epsilon}{D} \right)^{1.1098} + \frac{5.8506}{Re^{0.8981}} \right) \right]$$

4.- Calculate the frictional velocity at infinite dilution with equation 4.

5.- Obtain the coordinates of Thomas with equations 2 and 3, and determine the flow pattern present in the pipe with the map in Figure 4. The inclined dotted lines present in Figure 4 separate the different sedimentation regimes

from the particles, while the vertical lines indicate the limits on the diameter of the particles relative to the thickness of the film with laminar flow, defined by von Karman by the following parameter:

$$\delta = \frac{5\mu_G}{\rho_G v_{f0}} \quad (14)$$

Where:

$\delta$  = The thickness of the laminar film postulated by von Karman. If  $d_p < \delta$ , the particle flow rate is laminar. On Thomas' map, this regime corresponds to:

$$\frac{d_p v_{f0} \rho_G}{\mu_G} < 5 \quad (15)$$

If  $\delta < d_p < 6 \delta$ , the particle flow rate is transitional. On the map mentioned above, this regime is presented between:

$$5 < \frac{d_p v_{f0} \rho_G}{\mu_G} < 30 \quad (16)$$

If  $d_p > 6 \delta$ , the particle flow rate is turbulent. On Thomas' map, this regime corresponds to:

$$\frac{d_p v_{f0} \rho_G}{\mu_G} > 30 \quad (17)$$

### Example 1

What will be the expected flow pattern in a 4-inch horizontal pipe through which 20000 kg/h of air flows at a pressure of 1.5 atm and 25°C temperature? Hull particles (mineral coal) are transported through the tube, with a diameter of 200  $\mu\text{m}$ , with a density of 640  $\text{kg}/\text{m}^3$

1.-Traduction



2.-Discussion

To find the flow pattern, Thomas's parameters must be known and then use its flow pattern map (Figure 22).

2.1.-Thomas coordinates.

$$\text{Abscisa} = \frac{d_p v_{f0} \rho_G}{\mu_G} \quad \text{Ordenada} = \frac{v_t}{v_{f0}}$$

3.-Calculs.

3.1.-Terminal particle velocity

$\mu_G = 0.0183 \text{ cp} = 1.83 \times 10^{-5} \text{ kg}/(\text{m s}) @ 25^\circ\text{C}, 1.5 \text{ atm}$

$$\rho_G = \frac{1.5 \text{ atm} \left( 29 \frac{\text{kg}}{\text{kgmol}} \right)}{0.082 \frac{\text{m}^3 \text{ atm}}{\text{kgmol K}} (25 + 273.15) \text{K}} = 1.78 \frac{\text{kg}}{\text{m}^3}$$

$$d_p^* = \left( 200 \times 10^{-6} \text{ m} \right) \left[ \frac{\left( 1.78 \frac{\text{kg}}{\text{m}^3} \right) (640 - 1.78) \frac{\text{kg}}{\text{m}^3} \left( 9.81 \frac{\text{m}}{\text{s}^2} \right)}{\left( 1.83 \times 10^{-5} \frac{\text{kg}}{\text{ms}} \right)^2} \right]^{1/3} = 6.43$$



This adimensional diameter value is obtained from the terminal velocity plot of particles in fluids (Figure 5):

$$v_t = (1.5) \left[ \frac{\left( 1.83 \times 10^{-5} \frac{\text{kg}}{\text{ms}} \right) (640 - 1.78) \frac{\text{kg}}{\text{m}^3} \left( 9.81 \frac{\text{m}}{\text{s}^2} \right)}{\left( 1.78 \frac{\text{kg}}{\text{m}^3} \right)^2} \right]^{\frac{1}{3}} = 0.50 \frac{\text{m}}{\text{s}}$$

### 3.2.-Frictional speed to infinite dilution

For a pipe of 4" nominal diameter, ced. 40, its internal diameter is  
 $D = 4.026 \text{ in} = 0.1023 \text{ m}$

$$A = \frac{\pi}{4} D^2 = 0.008213 \text{ m}^2$$

$$v_{SG} = \frac{20000 \frac{\text{kg}}{\text{h}}}{3600 \frac{\text{s}}{\text{h}} \left( 1.78 \frac{\text{kg}}{\text{m}^3} \right) (0.008213 \text{ m}^2)} = 380.02 \frac{\text{m}}{\text{s}}$$

$$Re_{SP} = \frac{(200 \times 10^{-6} \text{ m}) \left( 380.02 \frac{\text{m}}{\text{s}} \right) \left( 1.78 \frac{\text{kg}}{\text{m}^3} \right)}{1.83 \times 10^{-5} \frac{\text{kg}}{\text{ms}}} = 7393 \quad \text{Turbulent}$$

$$e/D = 0.00045$$

$$f_D = 0.034$$

$$f_f = \frac{0.034}{4} = 0.0085$$

$$v_{f0} = 380.02 \frac{\text{m}}{\text{s}} \sqrt{\frac{0.0085}{2}} = 24.77 \frac{\text{m}}{\text{s}}$$

### 3.3.-Thomas' coordinates

$$\text{Abscisa} = \frac{(200 \times 10^{-6} \text{ m}) \left( 24.77 \frac{\text{m}}{\text{s}} \right) \left( 1.78 \frac{\text{kg}}{\text{m}^3} \right)}{1.83 \times 10^{-5} \frac{\text{kg}}{\text{ms}}} = 481.9$$

$$\text{Ordenada} = \frac{0.50 \frac{\text{m}}{\text{s}}}{24.77 \frac{\text{m}}{\text{s}}} = 0.020$$

With these coordinates, the flow pattern corresponding to the intersection of these values is located on the Thomas map in Figure 4, the latter being observed in the homogeneous flow region.

## 4.-RESULT

The flow obtained is homogeneous in diluted phase.

### 4.- PREDICTION OF PRESSURE DROP IN HORIZONTAL PIPES

To size pneumatic particle transport lines requires pressure drop calculation along the line. Engineering has developed correlations and methodologies applicable to each flow pattern. To date, there is no general theoretical model capable of correctly predicting pressure drop, so the semi-empirical correlations most used in the industry for



their simplicity and precision are set out below. Pneumatic transport in diluted phase In general, pressure drop in horizontal pipes receives contributions by acceleration and friction. For homogeneous and heterogeneous flows in diluted phase the following expression is given:

$$\Delta P_{2F} = \frac{\epsilon \rho_G v_G^2}{2g_C} + \frac{(1-\epsilon)\rho_P v_P^2}{2g_C} + F_{gw} L + F_{pw} L \quad \left[ \frac{\text{kgf}}{\text{m}^2} \right] \quad (18)$$

Where:

$\Delta P_{2F}$  = Two phase total pressure drop in  $\text{kgf/m}^2$ .

$\epsilon$  = Void fraction, gas phase, holdup.

$v_G$  = Real gas velocity m/s:

$$v_G = \frac{v_{SG}}{\epsilon} \quad \left[ \frac{\text{m}}{\text{s}} \right] \quad (19)$$

$v_P$  = real solid velocity in m/s:

$$v_P = \frac{G_P}{\rho_P(1-\epsilon)} \quad \left[ \frac{\text{m}}{\text{s}} \right] \quad (20)$$

$G_P$  = solid phase mass velocity in  $\text{kg/m}^2\text{s}$ :

$$G_P = \frac{W_P}{A} \quad \left[ \frac{\text{kg}}{\text{m}^2 \text{ s}} \right] \quad (21)$$

$W_P$  = particles mass flow  $\text{kg/s}$ .

$A$  = pipe flow area  $\text{m}^2$ .

$g_C = 9.81 \text{ m kg/(s}^2 \text{ kgf)}$

$F_{gw}$  = friction force between the gas and tube wall  $\text{kgf/m}^3$ .

$F_{pw}$  = friction force between the particles and the tube wall in  $\text{kgf/m}^3$ .

$L$  = tube long m.

The first term corresponds to the gas acceleration pressure drop, the second to the acceleration pressure drop of the particles, the third is the loss of frictional pressure between the gas and the pipe wall, and the fourth is the frictional pressure drop between the particles and the pipe wall. The term corresponding to the friction between the gas and the wall can be determined by the Fanning equation:

$$F_{gw} = \frac{2f_G \rho_G v_G^2}{Dg_C} \quad \left[ \frac{\text{kgf}}{\text{m}^2} \right] \quad (22)$$

Where:  $f_G$  is the gas Fanning friction factor;  $D$  - diameter of the pipe in m.

To determine the last term of the total pressure drop, Hinkle<sup>[6]</sup> proposed the following equation:

$$F_{pw} = \frac{2f_p(1-\epsilon)\rho_P v_P^2}{Dg_C} = \frac{2f_p G_P v_P}{Dg_C} \quad \left[ \frac{\text{kgf}}{\text{m}^2} \right] \quad (23)$$

Where:

$f_p$  = friction factor for the solid particles:

$$f_p = \frac{3}{8} C_D \left( \frac{\rho_G}{\rho_P} \right) \left( \frac{D}{d_p} \right) \left[ \frac{v_G - v_P}{v_P} \right]^2 \quad (24)$$

$C_D$  = drag coefficient for the particles.

The drag coefficient is a function of the Particle Reynolds of the particle between phases and the sphericity of the particles. To obtain this coefficient, the graph shown in Figure 6 is used, where

$$(Re_P)_{slip} = \frac{d_P (v_G - v_P) \rho_G}{\mu_G} \quad (25)$$

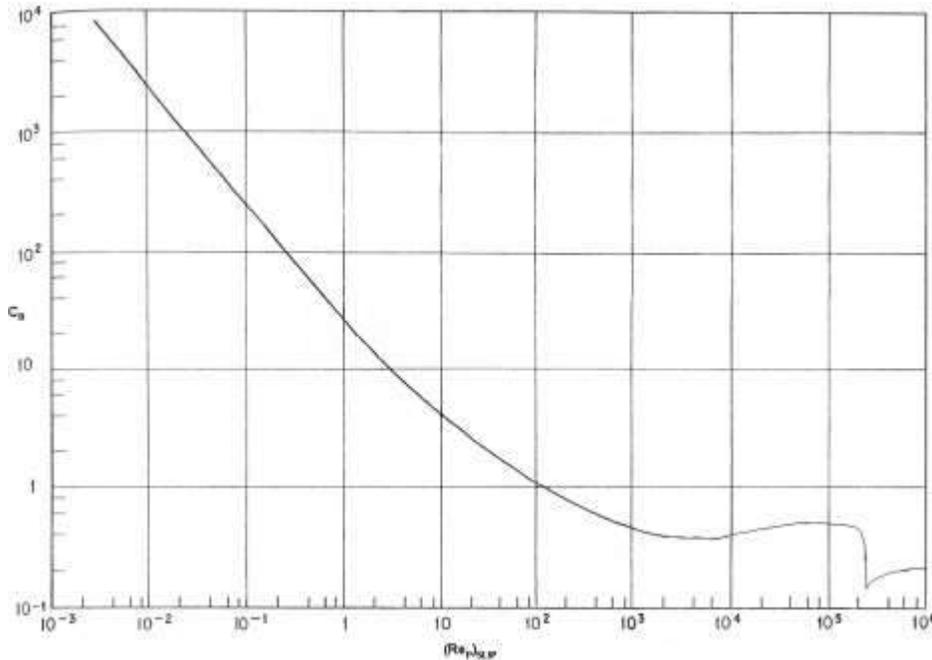


Figure 6.- Drag coefficient based on the sliding particle Reynolds.

From experimental data, Hinkle obtained a correlation to predict the actual speed of the particles, which is:

$$v_P = v_{SG} \left( 1 - 0.0638 d_P^{0.3} \rho_P^{0.5} \right) \left[ \frac{m}{s} \right] \quad (26)$$

Using Hinkle data, Yang7 modified the solids friction factor equation for greater accuracy in calculating total pressure drop for homogeneous flow. The friction factor is then given by:

$$f_P = 0.117 \frac{(1-\varepsilon)}{\varepsilon^3} \left[ (1-\varepsilon) \frac{(Re_P)_t}{(Re_P)_{slip}} \frac{v_G}{\sqrt{gD}} \right]^{-1.15} \quad (27)$$

Where:  $(Re_P)_t$  - Reynolds terminal particle given by equation 8.

$(Re_P)_{slip}$  - Reynolds of the sliding particle phase-between given by Equation 25 :  $(Re_P)_{slip} = \frac{d_P (v_G - v_P) \rho_G}{\mu_G}$  (25)

#### 4.1- Hinkle method:

1.- Determine the flow pattern using Thomas' map (Figure 4). If the flow is homogeneous or heterogeneous, this method should be continued.

2.- Calculate the actual speed of the particles with equation 26.

3.- Get the fraction of gaps or gas holdup with the following equation:

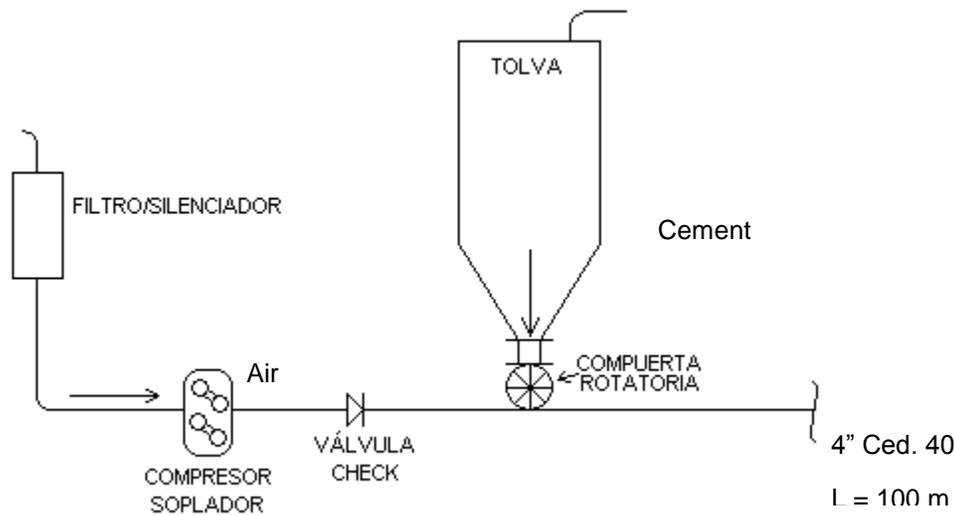
$$\varepsilon = 1 - \frac{G_P}{\rho_P v_P} \quad (28)$$

- 4.- Calculate the actual speed of the gas with equation 19, using it to obtain the friction factor of the gas.
- 5.- Determine the frictional pressure drop between the gas and the wall with equation 22.
- 6.- Calculate the friction factor of the solids with equations 24 or 27.
- 7.- Get friction pressure drop between particles and wall with equation 23.
- 8.- Determine the total pressure drop with equation 18.

### Example 2

What is the total pressure drop in a 4-inch horizontal line 40 through which 500 kg/h of air passes, at a pressure of 3 atm and a temperature of 15°C? This pipe transports cement in a diluted form, which is fed to the system by a hopper at a rate of 5700 kg/h, and whose particles have a diameter of 81 μm and a density of 1240 kg/m<sup>3</sup>. The length of the pipe is 100 m.

#### 1.- Translation



#### 2.- Planning

##### 2.1.- Discussion.

To determine the pressure drop, it is necessary to first identify the flow pattern using Thomas' map. Subsequently, pressure losses are calculated using the Hinkle method.

##### 3.- Calculations

##### 3.1.- Flow pattern.

The air properties at 3 atm and 15°C are:

$$\rho = 3.68 \text{ kg/m}^3 ; \mu = 0.0175 \text{ cp} = 1.75 \times 10^{-5} \text{ kg/(m s)} ; dp^* = 4.26$$

With the adimensional particle diameter the terminal velocity is obtained in figure. 5

$$u_t^* = 0.8$$

$$v_t = 0.20 \text{ m/s}$$

$$D = 4.026 \text{ in} = 0.1023 \text{ m}$$

$$A = 0.008213 \text{ m}^2$$

$$v_{SG} = 4.60 \text{ m/s}$$

$$Re_{SP} = 78 \quad \text{laminar flow}$$

$$f_D = \frac{64}{78} = 0.820$$

$$f_f = 0.205$$

$$v_{f0} = 1.47 \text{ m/s}$$

$$\text{Abscisa} = 25.0$$

$$\text{Ordenad} = 0.136$$

The flow pattern is homogeneous.

##### 3.2.- Void fraction.



$$v_p = 4.60 \frac{m}{s} \left[ 1 - 0.0638 (81 \times 10^{-6} m)^{0.3} \left( 1240 \frac{kg}{m^3} \right)^{0.5} \right] = 3.99 \frac{m}{s}$$

$$G_p = \frac{5700 \frac{kg}{h}}{3600 \frac{s}{h} (0.008213 m^2)} = 192.8 \frac{kg}{m^2 s}$$

$$\varepsilon = 1 - \frac{192.8 \frac{kg}{m^2 s}}{1240 \frac{kg}{m^3} \left( 3.99 \frac{m}{s} \right)} = 0.961$$

3.3.-Friction pressure drop between gas and Wall.

$$v_G = \frac{4.60 \frac{m}{s}}{0.961} = 4.79 \frac{m}{s}$$

$$Re_G = \frac{(0.1023 m) \left( 4.79 \frac{m}{s} \right) \left( 3.68 \frac{kg}{m^3} \right)}{1.75 \times 10^{-5} \frac{kg}{ms}} = 103044$$

Turbulent flow

From the Moody:

$$e/D = 0.00045$$

$$f_D = 0.020$$

$$f_G = f_f = 0.005$$

$$F_{gw} = \frac{2(0.005) \left( 3.68 \frac{kg}{m^3} \right) \left( 4.79 \frac{m}{s} \right)^2}{0.1023 m \left( 9.81 \frac{mkg}{s^2 kgf} \right)} = 0.841 \frac{kgf}{m^2}$$

3.4.-Friction pressure drop between particles and wall.

$$(Re_P)_t = \frac{(81 \times 10^{-6} m) \left( 0.20 \frac{m}{s} \right) \left( 3.68 \frac{kg}{m^3} \right)}{1.75 \times 10^{-5} \frac{kg}{ms}} = 3.41$$

$$(Re_P)_{slip} = \frac{(81 \times 10^{-6} m) (4.79 - 3.99) \frac{m}{s} \left( 3.68 \frac{kg}{m^3} \right)}{1.75 \times 10^{-5} \frac{kg}{ms}} = 13.6$$



$$f_p = 0.117 \frac{(1-0.961)}{(0.961)^3} \left[ (1-0.961) \frac{3.41}{13.6} \frac{4.79 \frac{m}{s}}{\sqrt{9.81 \frac{m}{s^2} (0.1023m)}} \right]^{-1.15} = 0.174$$

$$F_{pw} = \frac{2(0.174) \left( 192.8 \frac{kg}{m^2 s} \right) \left( 3.99 \frac{m}{s} \right)}{(0.1023m) \left( 9.81 \frac{mkg}{s^2 kgf} \right)} = 266.8 \frac{kgf}{m^2}$$

3.5.- Total drop pressure.

$$\Delta P_{2F} = \frac{0.961 \left( 3.68 \frac{kg}{m^3} \right) \left( 4.79 \frac{m}{s} \right)^2}{2 \left( 9.81 \frac{mkg}{s^2 kgf} \right)} + \frac{(1-0.961) \left( 1240 \frac{kg}{m^3} \right) \left( 3.99 \frac{m}{s} \right)^2}{2 \left( 9.81 \frac{mkg}{s^2 kgf} \right)} + \left( 0.841 \frac{kgf}{m^3} \right) (100m) + \left( 266.8 \frac{kgf}{m^3} \right) (100m) = 26807.5 \frac{kgf}{m^2}$$

#### 4.-RESULT

The total pressure drop on the pneumatic transport line is 26807.5 kgf/m<sup>2</sup>.

#### Pneumatic transport in dense phase

In the case of flow patterns with dunes (transverse and longitudinal), piston, battering ram, wave and with movable bed, Klinzing and Mathur<sup>[12]</sup> proposed two equations for total pressure drop, depending on the actual particle Reynolds:

$$Re_p = \frac{d_p v_G \rho_G}{\mu_G} \quad (29)$$

If  $Re_p < 1$ , the gaseous phase flows around the particles as in a porous medium, applying Darcy's law for this type of flow :

$$\frac{\Delta P_{2F}}{L} = \frac{\mu_G (v_G - v_P)}{K g_c} + \frac{f_P v_P^2 \rho_B}{D g_c} \left[ \frac{kgf}{m^2} \right] \quad (30)$$

Where:

K = permeability in m<sup>2</sup>:

$$K = 3.28 \times 10^{-14} \left( \frac{W_P}{W_G} \right)^{0.48} \frac{d_p^{0.43}}{D^{0.73}} \left[ m^2 \right] \quad (31)$$

$W_P$  y  $W_G$  = Massic flows of the solid and gas phases kg/s.

$\rho_B$  = particle bulk density kg/m<sup>3</sup>:

$$\rho_B = (1 - \varepsilon) \rho_P \left[ \frac{kg}{m^3} \right] \quad (32)$$

The first term corresponds to the pressure drop by flow in porous medium, and the second is the friction pressure drop. The recommended friction factor is that obtained by Yang<sup>[8]</sup> for dense phase flow:

$$f_p = 0.0410 \frac{(1-\epsilon)}{\epsilon^3} \left[ (1-\epsilon) \frac{(Re_p)_t}{(Re_p)_{slip}} \right]^{-1.021} \quad (33)$$

If  $Re_p > 1$ , Klinzing and Mathur developed a pressure drop equation for turbulent dense flow, which is:

$$\frac{\Delta P_{2F}}{L} = \frac{\alpha}{g_c} (v_G - v_p)^2 \left[ \frac{\text{kgf}/\text{m}^2}{\text{m}} \right] \quad (34)$$

Where:  $\alpha$  = Klinzing-Mathur parameter:

$$\alpha = 6.59 \times 10^{-4} \left( \frac{W_p}{W_g} \right)^{3.15} \frac{D^{0.36}}{d_p^{0.84}} \quad (35)$$

These researchers used the following expression for the actual speed of particles in this type of pneumatic transport:

$$v_p = v_{SG} \left( 1 - 0.68 d_p^{0.93} \rho_p^{0.5} \rho_g^{-0.2} D^{-0.54} \right) \left[ \frac{\text{m}}{\text{s}} \right] \quad (36)$$

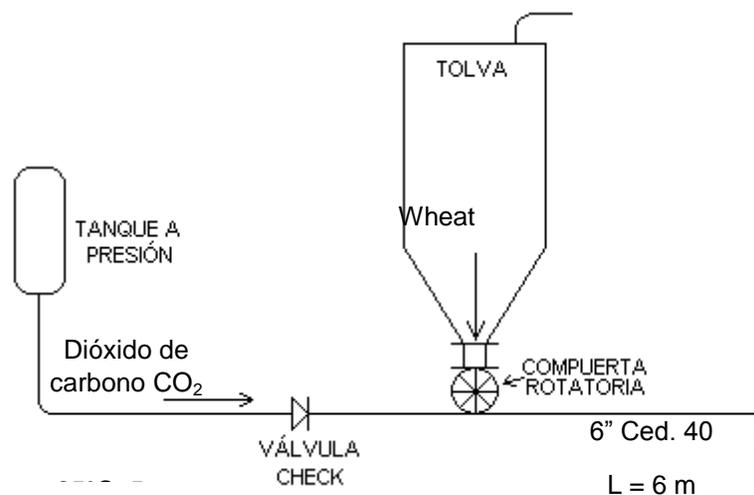
#### Klinzing-Mathur method:

- 1.- Determine the flow pattern using Thomas' map (Figure 4). If the flow is with longitudinal dunes, transverse dunes or moving bed, proceed with this method.
- 2.- Calculate the actual particle speed with equation 36.
- 3.- Get the fraction of gaps with equation 28.
- 4.- Calculate the actual speed of the gas with equation 19.
- 5.- Calculate the actual particle Reynolds with equation 29.
- 6.- Determine the total pressure drop with equations 30 or 34, depending on the actual particle Reynolds.

#### **Example 3**

Determine the total pressure drop in a 6-inch horizontal pipe 40 and 6 m in length, through which 1200 kg/h of carbon dioxide flows, at a temperature of 25°C and 5 atm pressure. 50000 kg/h of wheat are transported along the line. The grains have an average diameter of 4.8 mm and their density is 750 kg/m<sup>3</sup>.

#### 1.-TRANSLATION



#### 2.-Planning

##### 2.1.-Discussion

The flow pattern is determined with the Thomas map in Figure 4, and the pressure drop is calculated using the Klinzing-Mathur method.



3.-Calculations.

3.1.-Flow pattern

The properties of carbon dioxide at 5 atm and 25°C are:

$$\rho_G = 9.00 \text{ kg/m}^3; \mu_G = 0.0148 \text{ cp} = 1.48 \times 10^{-5} \text{ kg/(m s)}; d_p^* = 321$$

With the particle adimensional diameter in the terminal speed plot we get (Figure 5):

$$u_t^* = 30; v_t = 3.30 \text{ m/s}; D = 6.065 \text{ in} = 0.1541 \text{ m}; A = 0.018639 \text{ m}^2; v_{SG} = 1.99 \text{ m/s}$$

$$Re_{SP} = 5809 \quad \text{turbulent regime}$$

From the Moody's graphic:

$$e/D = 0.00030; f_D = 0.036; f_f = 0.009; v_{f0} = 0.13 \text{ m/s}$$

$$\text{Abscissa} = 379.5; \text{Ordenada} = 25.4$$

The pattern obtained is that of flow with mobile bed.

3.2.- Void fraction.

$$v_p = 1.99 \frac{\text{m}}{\text{s}} \left[ 1 - 0.68 \left( 4.8 \times 10^{-3} \text{ m} \right)^{0.93} \left( 750 \frac{\text{kg}}{\text{m}^3} \right)^{0.5} \left( 9.00 \frac{\text{kg}}{\text{m}^3} \right)^{-0.2} \left( 0.1541 \text{ m} \right)^{-0.54} \right] = 1.53 \frac{\text{m}}{\text{s}}$$

$$G_p = 745.15 \text{ kg/(m}^2 \text{ s)}$$

$$\varepsilon = 1 - \frac{745.15 \frac{\text{kg}}{\text{m}^2 \text{ s}}}{750 \frac{\text{kg}}{\text{m}^3} \left( 1.53 \frac{\text{m}}{\text{s}} \right)} = 0.35$$

3.3.- Total pressure drop.

$$v_G = \frac{1.99 \frac{\text{m}}{\text{s}}}{0.35} = 5.69 \frac{\text{m}}{\text{s}}$$

$$Re_p = \frac{\left( 4.8 \times 10^{-3} \text{ m} \right) \left( 5.69 \frac{\text{m}}{\text{s}} \right) \left( 9 \frac{\text{kg}}{\text{m}^3} \right)}{1.48 \times 10^{-5} \frac{\text{kg}}{\text{m s}}} = 16609 > 1$$

$$\alpha = 6.59 \times 10^{-4} \left( \frac{50000 \frac{\text{kg}}{\text{h}}}{1200 \frac{\text{kg}}{\text{h}}} \right)^{3.15} \frac{\left( 0.1541 \text{ m} \right)^{0.36}}{\left( 4.8 \times 10^{-3} \text{ m} \right)^{0.84}} = 3772.1$$

$$\Delta P_{2F} = \frac{3772.1}{9.81 \frac{\text{m kg}}{\text{s}^2 \text{ kgf}}} \left( 5.69 \frac{\text{m}}{\text{s}} - 1.53 \frac{\text{m}}{\text{s}} \right)^2 (6 \text{ m}) = 39925.7 \frac{\text{kgf}}{\text{m}^2}$$

4.-RESULT

The total pressure drop on the pneumatic transport line of wheat grains is 39925.7 kgf/m<sup>2</sup>.

The Hinkle and Klinzing - Mathur methods predict pressure drops to two gas-solid phases in horizontal pipes with an error of 20%. Both methods are very simple, compared to others whose procedure is iterative and doubtful response. There are other semi-empirical correlations to find pressure drops in horizontal flow to two gas-solid phases. The interested reader can consult the correlations of Mehta-Smith-Comings<sup>[8]</sup>, Vogt-White<sup>[9]</sup>, Rose-Duckworth<sup>[10]</sup>, Chari<sup>[11]</sup>, among others.

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# THE ROLE OF UZBEK LODGES IN DIPLOMATIC RELATIONS OF CENTRAL ASIAN KHANATES (Late 19th and early 20th centuries)

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## ABSTRACT

*In the early days, the lodges were a place of worship, religious ceremonies, and mystical upbringing, but later, as a result of the emergence of Islamic literature and art, it also became an important cultural place. By the 19th century, the lodges began to play an important role in history, not only religiously and culturally, but also socially and politically.*

*Uzbek lodges which was in Istanbul, hostel for uzbek pilgrims from Samarkand, Bukhara, Tashkent, Kokand, Namangan, Margilan. This article examines the active role of the Uzbek khonaqahs in diplomatic relations of Central Asian khanates with others in the late 19th and early 20th centuries.*

**KEY WORDS:** *Uzbek lodge, Istanbul, Bukhara Uzbek lodge, Central Asian khanates, Martin Smith, Sheikh Mehmed Efendi*

## DISCUSSION

The Lodges, also known as dargah and khanaqah, were mostly located on the pilgrimage routes and served as hotels, places of worship, and classrooms for foreigners. They were first built in the VIII century. By the 13th century, lodges had become the centers of activity of certain sufi ordens. While Shari'a sciences such as tafsir, fiqh, and hadith were taught in madrasahs, moral and spiritual education was taught in lodges<sup>1</sup>.

It is known that during the reign of the ninth Ottoman ruler Sultan Yovuz Salim (1470-1520), as the Ottoman state expanded to the south and east - to Anatolia, Damascus, Egypt and the Arabian Peninsula, important caravan routes came under Ottoman control. As the holy circulations of the Islamic world, Mecca, Medina and Jerusalem, became part of the Ottoman Empire, the routes of pilgrimage came under the control of the Sultanate.

From the late 18th century to the early 20th century, most pilgrims from Central Asia and the Caucasus traveled by ship from the Mediterranean to Egypt via Istanbul, then to the Red Sea and Jeddah, and to the holy circulations of Mecca and Medina. As a result, many lodges were built along the road from Istanbul to Mecca and Medina. These lodges provided an opportunity for passengers to relax both

spiritually and physically. Originally common lodges, in the XVII-XIII centuries began to become a place of residence for merchants, foreigners and dervishes from certain nations and regions. Among these lodges, along with Indian, Afghan, Kazan and Iranian lodges, Uzbek lodges can also be found.

These lodges which known as Uzbek lodges were mostly spent by foreigners from Central Asia. Here is a brief summary of the lodges that operated in Istanbul, one of the most important pilgrimage routes, until the beginning of the twentieth century.

1. Uzbek lodge in Sultantepe district of Uskudar, Istanbul
2. Uzbek lodge in Bulbuldara district of Uskudar
3. Uzbek lodge in Mehmetposho Yokushu mahalla in the Sultan Ahmad part of Istanbul
4. Uzbek lodge in Ayyub district of Istanbul
5. Uzbek lodge in Beylarbeyi district of Istanbul
6. An Uzbek taxi at the port of Kadirga in Istanbul

As mentioned above, these lodges have played an important role in history not only religiously, but also socially and politically. In particular, politically and diplomatically active lodges are mainly located in Istanbul.

By the end of the Ottoman Empire, there were about five hundred lodges in Istanbul.

<sup>1</sup> See: <https://islamansiklopedisi.org.tr/tekke>



Depending on the location of these lodges in the city, it is possible to find out their political and social influence. Among them Uzbek lodges are located in the center of the capital, Istanbul. This is due to its proximity to the state arch and its importance in the Ottoman relations with the Central Asian khanates [1: 239].

Also, delegations and ambassadors from the Central Asian khanates, who visited from time to time, stayed in these lodges [2: 205].

Among these lodges, we will focus on the active relations of two politically and diplomatically active lodges in Istanbul:

### 1. Uzbek lodge located in Sultantepe district

The Uzbek lodge, located in the Sultantepe district of Istanbul's Uskudar district, was one of the most important lodges of its time. In fact, this lodge served as a more politically important place than a socio-religious one.

Martin Smith, a western researcher, explains why the lodge was built: Until the 18th century, pilgrims from Turkestan stayed in Istanbul for a few days and pitched their unique silk tents at Sultantepe in the Uskudar district of Istanbul. One day, one of the Ottoman sultans (the sultan's name is not mentioned) as he travels through Istanbul as an ordinary citizen attracts the attention of embroidered silk tents and talks to Uzbek pilgrims. Satisfied with the conversation, the sultan promised Sheikh Naqshbandi, the leader of the pilgrims, to build a lodge for Uzbeks in the future. [3: 131]. According to Martin Smith, at the entrance to the Uzbek lodge mosque in Sultantepe, a complex of lodge and mosque was built in 1757 during the reign of the Ottoman Sultan Mustafa III (1757-1774) [3: 132].

Uzbek lodges were led by sheikhs from Central Asia. In particular, the sheikh of the Uzbek lodge in Sultantepe was ruled by Sayyid Abdullah Al-Akbar (d. 1776), a native of Samarkand. Lodge was ruled by his descendants after the death of Sheikh Sayyid Abdullah. Also, in other lodges of Istanbul, lodge was administered in the same way, that is, after the death of the lodge sheikh, by his descendants. This Uzbek lodge in Uskudar served mainly as a place of residence for Naqshbandi dervishes and foreigners [4: 425].

This lodge has also served as a destination for pilgrims from Turkestan. Guests visiting Lodge have always been recorded. For the records, there were two notebooks called "Kunya Notebook" and "Official Guest Book" which contain the names, places of birth and dates of visits of the visiting guests. In addition to the names of the guests, Kunya's notebooks also contained brief information about their shape and appearance [3: 135].

Most of the registered visitors were from Tashkent, Kokand, Samarkand, Bukhara, Margilan, Andijan, Namangan, Karakul and Osh [3: 136].

### 2. Bukhara Uzbek lodge.

The Sultan Ahmad section of Istanbul is one of the crowded spots in the city. It is known that Istanbul was the capital of the Ottoman state, the part where the Sultan Ahmad Mosque is located is the central part of the city and the area closest to the palace. From this central region there were important institutions of the Ottoman sultanate, one of which is the Uzbek lodge in Mehmet Pasha Yokushu mahalla. Lodge was once known as Bukhara Uzbek Lodge, Uzbek Dargah. Lodge was built in 1692-1693 by Ismailbey, the bookkeeper of Istanbul. In addition to serving as a destination for pilgrims from Central Asia, Lodge had contributed to the development of socio-cultural and scientific life with dormitories, classrooms and libraries for students. The lodge also provided various assistance to foreigners, students and businessmen from Turkestan [3:137].

In the early years, the Bukhara Uzbek lodge, like other lodges, served as an ordinary guest house, but later, during the reign of Sheikh Mehmed Efendi (d. 1861) of Bukhara origin (50s of the XIX century), it began to play an important role in the cultural and political life of the Ottoman Sultanate.

All the wishes of Sheikh Mehmed Efendi were met with special attention by the Ottoman Sultans. In particular, Sheikh Mehmed Efendi appealed to the Ottomans Sadria'zam<sup>2</sup> to create conditions for his aunt Sharifa Fatimah to stay in Madinah on the occasion of her pilgrimage. The sheikh's appeal was approved and Sadria'zam sent an order to the sheikh of Haram and the head of the city of Madinah to make the necessary preparations [5: 188.48].

After Sheikh Mehmed Efendi, the lodge was led by the following sheikhs: Sheikh Abdullah Efendi, Sheikh Yahya Efendi, Sheikh Mehmet Said Efendi, Sheikh Abdullah Efendi, Sheikh Suleiman Efendi, Sheikh Mirza Alim Muhammad, Sheikh Buyuk Abdulmajid Efendi, Sheikh Abdurrahman Efendi.

The Uzbek lodge under Sultan Ahmad, ruled by Uzbek-born Naqshbandi sheikhs, served as a diplomatic mission regulating political and cultural relations between the Central Asian khanates and the Ottoman Sultanate. In turn, the sheikhs, who were the rulers of the lodge, acted as representatives of the diplomatic mission of the Central Asian khanates in Istanbul [6: 35].

During the reign of Sheikh Suleiman Afandi, the sphere of influence of the Bukhara Uzbek lodge expanded again. Sheikh Suleiman Efendi was also born in 1821 in the city of Karakul near Bukhara. The sheikh, who is fluent in Turkish, Persian and Arabic, went to Hijaz in 1844 with the intention of performing the Hajj and lived there for three years. In

<sup>2</sup> In the Ottoman Sultanate, the sadri'azam was the prime minister (Author's note).



1847, by order of the Emir of Bukhara, he came to Istanbul and Bukhara became the sheikh of the Uzbek lodge [7: 248].

During the reign of Abdulhamid II (1876-1909), one of the Ottoman sultans, special attention was paid to the development of lodge activity. Sources say that Sheikh Sulayman Efendi of Lodge and Sultan Abdulhamid II also had close friendships. In addition to his cordial relations with the Sultan, Sheikh Suleyman Efendi also had close contacts with the ambassadors of European countries in Istanbul. In particular, he held talks with the British ambassador in Istanbul on the Russian march to Central Asia [2: 205]. Sheikh Suleiman Efendi also headed a delegation to the Turan Congress in Budapest, Hungary in 1877 and returned on behalf of Sultan Abdulhamid II [8: 225].

It is clear from similar examples that Sheikh Suleiman Efendi played an important role not only as a lodge sheikh but also as a high-ranking diplomat between the Ottomans and the Central Asian khanates.

It is known that the second half of the XIX century was the first stages of the invasion of Central Asia by Char Russia. By this time, the Central Asian khanates were sending various ambassadors to the Ottomans to hold various negotiations. In particular, a group of ambassadors from Turkestan, accompanied by Sheikh Suleiman Efendi, held talks with representatives of the Ottoman Empire and the British government in Bukhara [5: 517.37].

Sultan Abdulhamid II also responded positively to Sheikh Suleiman Efendi's proposal that a lodge should be built in Jeddah for Muslims coming from Turkestan for Hajj, and an Uzbek lodge was built in Jeddah between 1876 and 1877.

It is known that after the disintegration of the Ottoman Sultanate, its territory was reduced and the Republic of Turkey was founded by Mustafa Kemal on the Asia Minor Peninsula. After the establishment of the republic, religious institutions were sharply reduced. In particular, most of the lodges were closed and the waqf property was transferred to the state, but this Bukhara Uzbek lodge continued its activirelations until 1980 by a special order of Mustafa Kemal. The Lodge building has been used as a Design Center by the Istanbul Emino District Administration since 2008 [9: 144].

In general, these lodges played an important role in strengthening relations between countries and peoples, and in due time also served as a kind of consulate in solving various problems of pilgrims. For example, a representative of a nation from a distant land was accompanied by his compatriots and compatriots who understood their customs, traditions and language, and continued their travels without difficulty in foreign lands.

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## A STUDY ON EMPLOYEE RETENTION STRATEGIES WITH REFERENCE TO COMPANY FACTORS IN SME IT SECTOR

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### ABSTRACT

*The introduction of globalization, there's stiff competition in the market. Employee retention is a life-threatening issue as companies strive for talent in a close-fitting economy. The costs of employee turnover are progressively high — as much as 2.5 times (TOI)<sup>1</sup> an employee's salary as depending on the role and there are other “soft costs” lowered efficiency, decreased commitment, training costs and racial impact. The payoff for organizations that focus on employee retention is well worth the time and outlay, according to the Society for Human Resource Management (SHRM). Augmented performance, better efficiency, higher employee morale and improved quality of work, not to mention a lessening in turnover, are all organizational benefits. The bottom line is that by converging on employee retention, organizations will retain talented and motivated employees who justly want to be a part of the company and who are focused on contributing to the organization's overall success, according to SHRM. The research paper examines the employee retention strategies to be considered from the Company factors.*

**KEYWORDS:** Human Resources, Employee Retention, Key Employees, Career Development.

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<sup>1</sup> Times of India



## INTRODUCTION

Employee retention is an determination by a commercial outlet to maintain a occupied and employed environment which supports current staff in enduring and lingering with the company. Many employee retention and maintenance policies are aimed at addressing the various requirements of employees to enrich their job contentment and reduce the considerable costs involved in contracting and training new staff. It is a development process in which the employees are encouraged to continue with the organization for the maximum period of time or until the accomplishment of the project. Retention Strategies helps organizations provide effective employee communication to improve obligation and augment workforce support for key commercial initiatives

Employee Retention is not prejudiced by a solitary factor, but there are congregations of factors which are responsible for retaining employees in an organization. Organisation need to pay attention to factors such as compensation & rewards, job security, training & developments, superior subordinate culture, work environment and organization justice. The intellectual dimension of retention consist of work characteristics, employees always prefer flexible work tasks where they can use their acquaintance and see the upshots of their efforts which, in turn, helps in retaining the valuable and treasured resources. The social dimension consists of the contacts that the employees have with other people, both internal and external. The physical dimension consists of working conditions and pay

## OBJECTIVES OF THE STUDY

1. To examine the employees retention strategies with reference to company factors
2. To evaluate the importance of different strategies in reducing Attrition

## RESEARCH METHODOLOGY

**Primary Data:** the key source information for the research collected through structured questionnaire. The questionnaire is personally given to the respondents and the data was collected during the field work.

**Secondary data** is collected from reference books, Research Articles, Research Journals, and Websites etc.

## REVIEW OF LITERATURE

Workplaces everywhere are obsessed with employee engagement. Engaged workers are more productive, perform better, motivate others and, perhaps most importantly – stay. So, it is also no surprise that in a labor market such as India where attrition rates of 20-30 % are normal and 50 % in industries such as IT not unheard of, serious questions about engagement are being asked (Smith, 2012). A recent Mercer survey highlights that no fewer than 54 % of Indian workers are seriously considering leaving their jobs, and that figure spikes to 66 % in the 16-24 year age bracket. It is interesting to note that approximately 75 % of the IT personnel are younger than age 45. Many managers in the IT industries are in their 20's and 30's therefore making it more difficult to manage and retain them (Shayo, 2004). According to LBW Consulting (Leadership in Business Worldwide), the cost of replacing an employee ranges from 29 % (non-management) to 46 % (management) of the person's annual salary. Expenses are also incurred when someone else does the person's job in the interim, leading to a domino effect on employee cost. (Singh, 2012) Good employees want to develop new knowledge and skills in order to improve their value in the marketplace and enhance their own self-esteem. (Irwin, 2011) Therefore, it is wise to plan the first initial days of his work and train him for the work he is going to perform in the office, rather than leaving him on his own. Leading employers see this not as a cost but an opportunity to both harness worker potential as well as a talent attraction and retention lever (Smith, 2012)

## HYPOTHESIS

1. Alternative hypothesis: Higher the net worth of the company Higher is the percentage of employee retention
2. Null hypothesis: Net worth of the company does not lead to increase in the percentage of employee retention.
3. 2 Alternative hypotheses: If the company has good competitive strategies the company will have high employee retention.
4. Null hypothesis Good competitive strategies will not increase the employee retention.
5. Alternative hypothesis: If the degree of reputation of the organisation is high then there will be higher degree of employee retention.

Null hypothesis: degree of reputation of the organisation is not related to employee retention.



**Table 1.1 Table showing the mean and standard deviation relating to the hypothesis on company factors**

	company provides opportunity to learn new things	company contributes to the national income	company has created larger employment opportunity	company pays better salary compared to other similar companies	company takes up many corporate social responsibility	our company is pioneering in creating research oriented new technology	proud of the net worth of the company	my company has good solvency position	I have a strong bonding with the company
N Valid	395	395	395	395	395	395	395	395	395
Missing	0	0	0	0	0	0	0	0	0
Mean	3.98	3.98	4.03	3.90	4.02	4.05	4.06	4.18	4.16
Std. Deviation	.655	.655	.612	.772	.769	.749	.736	.632	.566

**Inference:** from table number 1.1 it is clear that there is a positive relationship between the variables that contribute towards the proving of hypothesis 2 such as net worth of the organisation, provision to learn new things, company contributing towards national income, company creates larger employment opportunity, company pays better salary, company

takes up corporate social responsibility, company is research oriented, solvency position of the company with the bondage of the company.

**Table 1.2 showing the respondents opinion in response to the questionnaire regarding the question the Employee is proud of the net worth of the company.**

Employee is proud of the net worth of the company	Number of Respondents	Percent	I have a strong bonding with the company	Number of Respondents	Percent
disagree	8	2.0	disagree	4	1.0
can't say	79	20.0	can't say	25	6.3
agree	192	48.6	agree	271	68.6
strongly agree	116	29.4	strongly agree	95	24.1
Total	395	100.0	Total	395	100

**Inference:** from table number 1.2 it is interpreted that the respondents are happy about the net worth of the company which has a positive influence on the respondents bonding towards the company. Very small percentage of about 2% have a negative opinion on the company net worth which is negligible and may be a result of their ignorance about the companies investments and net worth and a major cumulative of 78% of the respondents have a

strong opinion and satisfaction about the companies research activities policies which also has a positive relationship with the bonding of the company which has a cumulative of 88% of the respondents have a positive opinion towards having a strong bonding with the company for which the net worth of the organisation is also an influencing factor.



### Analysis of each variable of hypothesis 2 with the bondage with the company

**Table 1.3: Table showing the respondents opinion in response to the questionnaire regarding the question the company provides opportunity to learn new things**

Company provides opportunity to learn new things	Number of Respondents	Percent	I have a strong bonding with the company	Number of Respondents	Percent
Opinion of the Respondents					
Disagree	4	1.0	disagree	4	1.0
can't say	77	19.5	can't say	25	6.3
Agree	238	60.3	agree	271	68.6
strongly agree	76	19.2	strongly agree	95	24.1
Total	395	100.0	Total	395	100

**Inference:** from table number 1.3 it is inferred that the respondents have a positive opinion on towards the company providing them opportunity to learn new things which has a positive influence on the respondents bonding towards the company. Very small percentage of 1% have a negative opinion on the opportunity to learn new things which is

negligible and a major cumulative of 80% of the respondents have a strong opinion towards the opportunity to learn new things which also has a positive relationship with the bonding of the company which has a cumulative of 88% of the respondents have a positive opinion towards having a strong bonding with the company.

**Table 1.4 Table showing the respondents opinion in response to the questionnaire regarding the question the company contributes to the national income**

company contributes to the national income	Number of Respondents	Percent	I have a strong bonding with the company	Number of Respondents	Percent
Disagree	4	1.0	disagree	4	1.0
Can't say	77	19.5	can't say	25	6.3
Agree	238	60.3	agree	271	68.6
Strongly agree	76	19.2	strongly agree	95	24.1
Total	395	100.0	Total	395	100

**Inference:** from table number 1.4 it is inferred that the respondents have a positive opinion towards the company contributing towards the national income which has a positive influence on the respondents bonding towards the company. Very small percentage of 1% have a negative opinion contribution of the company towards the national income which is negligible and a major cumulative of

80% of the respondents have a strong opinion towards the company's contribution towards the national income which also has a positive relationship with the bonding of the company which has a cumulative of 88% of the respondents have a positive opinion towards having a strong bonding with the company.



**Table number 1.5. Table showing the respondents opinion in response to the questionnaire regarding the question the company has created larger employment opportunity**

company has created larger employment opportunity	Number of Respondents	Percent	I have a strong bonding with the company	Number of Respondents	Percent
Disagree	8	2.6	disagree	4	1.0
can't say	50	12.6	can't say	25	6.3
Agree	259	65.6	agree	271	68.6
strongly agree	76	19.2	strongly agree	95	24.1
Total	395	100.0	Total	395	100

**Inference:** from table number 1.5 it is inferred that the respondents have a positive opinion towards the company providing employment opportunity which has a positive influence on the respondents bonding towards the company. Very small percentage of about 3% have a negative opinion on the opportunity to learn new things which is negligible and a major

cumulative of 80% of the respondents have a strong opinion towards the opportunity to learn new things which also has a positive relationship with the bonding of the company which has a cumulative of 88% of the respondents have a positive opinion towards having a strong bonding with the company

**Table number 1.6 Table showing the respondents opinion in response to the questionnaire regarding the question the company pays better salary compared to other similar companies**

company pays better salary compared to other similar companies	Number of Respondents	Percent	I have a strong bonding with the company	Number of Respondents	Percent
Disagree	23	5.8	disagree	4	1.0
can't say	71	18.0	can't say	25	6.3
Agree	225	57.0	agree	271	68.6
strongly agree	76	19.2	strongly agree	95	24.1
Total	395	100.0	Total	395	100

**Inference:** from table number 1.6 it is understood that the respondents have a positive opinion towards the company paying salary to its employees which is similar to the salary paid in other similar companies which has a positive influence on the respondents bonding towards the company. Very small percentage of about 6% have a negative opinion on the opportunity to salary paid to other similar organisations and a major cumulative of 76% of the respondents have a strong opinion and satisfaction about the salary paid by the company which also has a positive relationship with the bonding of the company which has a cumulative of 88% of the respondents have a positive opinion towards having a strong bonding with the company

**MAJOR FINDINGS OF THE STUDY**

- 88% of the respondents have a positive opinion towards having a strong bonding with the company.
- 80% of the respondents have a strong opinion towards the opportunity to learn new things which also has a positive relationship with the bonding of the company
- 80% of the respondents have a strong opinion towards the company's contribution towards the national income.
- 76% of the respondents have a strong and positive opinion and satisfaction about the salary paid by the company



## CONCLUSION

The learning from this research paper with a sample of 50 accounts to the verification of retention in IT sector as one of the most mounting issues. Employee Retention has become the most multifaceted and perplexed task for HR managers. The privatization of IT sector has lead to various reasons for erosion of key employees as mentioned in the . For employees now have to be retained by providing the stress busters, merited appreciation, just treatment and growth prospects. Remunerations are no more a retention tool and employees would love to work at a place that keeps up their interest and growth in balance with the work and organisational goals

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# FACTORS THAT INFLUENCE THE INTENSITY OF THE USE OF DIGITAL PAYMENT (CASE STUDY IN OVO USERS)

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## ABSTRACT

*The purpose of this study is to analyze the factors that influence the intensity of the use of digital payments, especially users of OVO applications. Factors that are suspected to have an influence on the intensity of the use of digital payments in OVO applications are perceived ease of use, perceived risk of use, perceived usefulness of use and trust.*

*The population in this study were all students of the Faculty of Economics, University of Mercu Buana and students of the Faculty of Economics, University of Prof. Dr. Moestopo (Beragama). Sampling was carried out by random sampling method totaling 115 respondents, 60 respondents from the Faculty of Economics, University of Mercu Buana and 55 respondents from the Faculty of Economics, University of Prof. Dr. Moestopo (Beragama). The primary data collection method used is the questionnaire method. Data analysis technique used in this study is multiple regression analysis techniques with test equipment using PLS 3.0.*

**KEYWORDS:** *Usefulness, Risk, Ease of Use, Trust, Intensity Use of digital payment*

## INTRODUCTION

The digital industry in Indonesia continues to show its development. The impact of fintech advancements is presenting digital payment innovation or better known as Digital Payment. Digital payments that are developing in kind are as varied as e-money, e-wallet, and so on.

Urban communities in Indonesia are getting very used to using non-cash payment facilities. Non-cash payments are currently enforced specifically in the field of transportation such as toll, busway and train ticket payments. Digital payment in Indonesia makes it easy in the midst of busy daily activities. Various payment needs have now been made through

debit card, credit card, m-bankrupt, e-banking, paypal, prepaid cards, and so on. However, variations in digital payments continue to develop from time to time. All the needs of the Indonesian people will undoubtedly continue to grow and vary in variety. In terms of mini transactions, the witness was on a massive scale to meet all needs for the welfare of life.

E-money or Electronic money may not be something that sounds familiar to us. As referred to in Bank Indonesia Regulation Number: 11/12 / PBI / 2009 concerning Electronic Money which has now been updated to PBI Number: 18/17 / PBI / 2016, E-money is issued on the basis of the value of money deposited in advance by holders to the issuer and the

value of the money is stored electronically in a medium such as a server or chip. E-money is not only a substitute for physical cash in the form of coins and paper money with equivalent electronic money, but also as a system that allows a person to pay for goods or services by sending numbers from one computer to a computer. The digital industry in Indonesia continues to show its development. The impact of advancing fintech presents digital payment innovation or better known as Digital Payment. Digital payments that are developing in kind are as varied as e-money, e-wallet, and so on. Urban communities in Indonesia are getting very used to using non-cash payment facilities. Non-cash payments are currently enforced specifically in the field of transportation such as toll, busway and train ticket payments.

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The emergence of e-money in society which aims to reduce the growth rate of cash usage. Specifically for micro and retail payments.

Bank Indonesia (BI) ensures the smooth payment system is maintained both in terms of cash and non-cash in February 2019. Especially for non-cash payments, BI revealed a sharp increase. But BI has not released the exact numbers. "The use of electronic money has grown to 66.6 percent (compared to February 2019)." said Executive Director of the BI Communication Department Onny Widjanarko in a press release, Jakarta, Thursday (3/21/2019). (Kompas, 2019).

While the latest data from Bank Indonesia (BI) shows, the value of digital money transactions during July 2019 then totaled Rp 12.93 trillion. This figure jumped 262.67% compared to the same month in 2018 which was only Rp 3.58 trillion. The electronic money transaction in July was at once the highest monthly value of all time, with a transaction volume of 476,037,115 times. The highest electronic money transaction value previously occurred in May 2019 amounting to Rp 12.81 trillion. Transaction volume reached 422,602,216 times.

An increase in terms of information technology services and infrastructure creates various lifestyle changes in society. Changes occur in various sectors, ranging from the number of new business models to changes in demand for the ability of the workforce. These changes require some adjustments. One of them is an effort to improve people's digital literacy. The low understanding of security and the unclear rules regarding privacy in cyberspace increase the risks that arise, so that there are still many people who do not fully trust to shop online.

According to Anistasya Kristina, Vice President of Corporate Communications at PT Nusa Satu Inti Artha (Doku), there are two biggest challenges in developing payment services. First, cyber security is still a common challenge for all tech players in the e-commerce ecosystem anywhere in Indonesia. Second, education about the benefits of payment service products and technologies requires time and synergy between industry players and regulators in order to achieve common goals. Indonesia must prepare itself from the onslaught of foreign players

who want to seize the domestic market. For this reason, much improvement must be done, especially solving a number of issues that could make the development of e-commerce in Indonesia stagnant. Therefore, trust & security is still a big challenge that must be resolved together.

In some of the problems that have been mentioned, it clearly illustrates that the use of a technology cannot be separated from user needs. Jogiyanto (2007: 29) defines intention (intention) as the desire to conduct behavior. Behavior is an action that is carried out significantly, in other words behavior here is behavior in using the media to meet their needs. If the use of information technology can meet their needs, then the attitude of users tends to accept the technology and can cause interest in using information technology. This is where the role of users in the use of information technology is very important, so to know the level of user acceptance (user) of an information technology it is necessary to know about the factors that influence individual acceptance of the use of information technology. To find out and measure how much perception of the benefits and usefulness of information systems, how simple and easy the information system is practiced and how much performance improvement can be achieved thanks to the existence of the information system, can use the Technology Acceptance Model (TAM) model.

The Technology Acceptance Model (TAM) is a model that offers an explanation for the acceptance of the use of technology (e-commerce) and the behavior of its users (Davis, 1989). The Technology Acceptance Model in Davis (1993), is defined as one of the models built to analyze and understand the factors that influence the acceptance of the use of information technology. Many factors affect the interest in using digital payment by individuals, including factors ease, usability, value received, social influence, risk, and trust. Based on research conducted by Pavlou (2003), by taking constructs in the exogenous latent variables used, namely ease of use and usefulness as the main constructs in TAM theory and trust as additional constructs.

Based on the background above, the researcher wants to examine what individual perceptions affect the intensity of using digital payment. In this case the researchers took research sources from the research of Dwi Marcelina (2014), Mustofa Abdul Karim (2018), Ana Fitriana (2017), Adinda Cahaya Mentari (2018) and Anjelina (2018). Anjelina (2018) conducted a study on consumer perceptions of e-money usage which showed that risk and price had a negative effect on consumer intentions / to reuse digital payment. Dwi Marcelina (2014), Mustofa Abdul Karim (2018), Ana Fitriana (2017), Adinda Cahaya Mentari (2018) showed that the Technology Acceptance Model factors had a positive and significant effect on the use of electronic money.



By using the Technology Acceptance Model approach, the researcher wants to realize the research in the form of a thesis with the title "FACTORS THAT INFLUENCE THE INTENSITY OF THE USE OF DIGITAL PAYMENT (Case Study on OVO Application Users)"

## LITERATURE REVIEW

### Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) which is also called the Technology Acceptance Model is one of the theories about the use of information technology systems that are considered very influential and are generally used to explain individual acceptance of the use of information technology systems (Jogiyanto, 2007: 111). TAM (Technology Acceptance Model) was first introduced by Davis in 1989. The Technology Acceptance Model in Davis (1993), is defined as one of the models built to analyze and understand the factors that influence the acceptance of the use of information technology.

#### a. Behavioral Intentions to Use (Interest in Behavior Using Technology)

Intentions / Intentions are behavioral tendencies that are carried out with ease and not without purpose. Fishbein and Ajzen (1969) explain intention / intention as cognitive and conative representations of an individual's readiness to display a behavior. Intention is a determinant and disposition of behavior, until the individual has the opportunity and time to display the behavior clearly (Ratna. C.S, 2018: 294). Behavioral Intention to Use is the tendency of behavior to keep using a technology. The level of use of a computer technology on someone can be predicted attitudes of attention to the technology, for example, the desire to add supporting peripherals, motivation to keep using, and the desire to motivate other users (Davis, 1989: 321).

#### b. Perceived Ease of Use

In Davis (1989), perceived ease of use of a technology is defined as a measure by which a person believes that technology can be easily understood and used. Trust is needed by users of information technology in order to improve the performance of individuals in carrying out organizational or corporate activities.

#### c. Perceived Usefulness

Perceived usefulness is defined as the extent to which a person believes that using a technology will improve the performance of his work ("as the extent to which a person believes that using a technology will enhance her or his performance.") That is, if someone feels confident that the information system is useful then he will use it. Conversely, if you believe that the information system is less useful he will not use it. In other words, this construct is a belief (belief) about the decision making process (Jogiyanto, 2007: 114).

#### d. Perceived Risk of Use

According to Faiz Zamzami (2018: 235) the more sophisticated the development of internet technology, the more threats and risks that may arise. Therefore, security of information and transactions, becomes the main thing that must be considered by companies that implement e-commerce.

#### e. Trust

Trust is needed by users of information technology in order to improve the performance of individuals in carrying out organizational or corporate activities. Trust is a tool for leveraging the sustainability of a business, especially those implementing e-commerce, therefore, it is important for companies to prevent and control the threats and risks of electronic transactions (Faiz, et al, 2018: 236). Trust is also very much needed in online purchasing decisions by consumers, as expressed by Febrina Mahliza (2020).

### Non-Cash Payment Systems (Digital Payment)

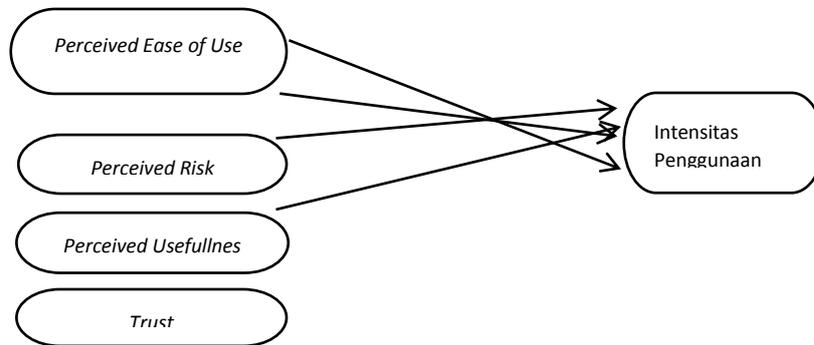
The government in 2017 is increasingly aggressively promoting non-cash transactions including the use of electronic money. Evidenced by the government issued regulations regarding electronic money. The regulation is "Bank Indonesia Regulation Number 18/17 / Pbi / 2016 concerning the Second Amendment to Bank Indonesia Regulation Number 11/12 / Pbi / 2009 concerning Electronic Money". the regulation was made to increase the use of electronic money and support financial inclusion.

The types of e-payment are:

- a. Electronic Cash (Electronic - cash): transactions are completed through electronic currency exchanges.
- b. Prepaid Cards: customers use prepaid cards for a certain amount by making entries from a unique card number on the merchant's site. The value of the card decreases with the amount paid to the merchant.
- c. Credit Card: the server authenticates the consumer and verifies with the bank whether sufficient funds are available before purchase; payment is posted on the customer's account and the customer is billed later for this payment and pays the account balance to the bank.
- d. Debit Card: the customer maintains a positive account balance, and money is deducted from the account when the debit transaction is made.
- e. Electronic Check: An institution electronically completes a transaction between the buyer's bank and the seller's bank in the form of an electronic check.

E-payment offers a variety of benefits such as speeding up the transaction process and being able to sell products at lower prices. The parties involved in the transaction process can transfer and receive money from other parties anytime, anywhere. In

addition, e-payment can also support the movement of green technology where paper usage can be reduced.



**Gambar 2.1**  
Kerangka Konseptual Penelitian

### HYPOTHESIS

Based on the problem formulation that has been described above, the hypothesis of this study is as follows:

1. Perceived Ease of Use affects the intensity of Digital Payment Usage
2. Perceived Risk influences the intensity of Digital Payment Usage
3. Perceived Usefulness affects the intensity of Digital Payment Usage
4. Trust has an influence on the use of Digital Payment Intensity

### METHODOLOGY

In the framework of this study researchers used the Causal research method. Causal research is used to prove the relationship between cause and effect of several variables. Causal research usually uses the experimental method by controlling the independent variables that will affect the dependent variable. In this study, designed to determine and describe the relationship between perceived ease of use, perceived usefulness of use, perceived risk of use and trust in the intensity of digital payment use.



**Tabel 4.1**  
**Definisi Operasional Variabel Penelitian**

No	Nama Variabel	Indikator	Skala Pengukuran
1	Intensitas penggunaan (Y)	<ul style="list-style-type: none"> <li>- - Frequency of OVO usage in one day</li> <li>- - Frequency of OVO usage in one month</li> <li>- - Frequency of OVO use for transportation</li> <li>- - Frequency of use of OVO for food purchases</li> <li>- - Frequency of use of OVO for purchases of personal needs</li> </ul>	Interval
2	Perceived Ease of Use ( X1 )	<ul style="list-style-type: none"> <li>- It's easy to learn how to use a non-cash payment system</li> <li>- Do not use a large effort to make non-cash payments</li> <li>- Very easy to use to make ends meet</li> <li>- Easily operate the system according to what individuals want to do</li> <li>- Overall the online payment system is very easy to do</li> </ul>	Interval
3	Perceived Risk of Use ( X2 )	<ul style="list-style-type: none"> <li>- Security level of non-cash payment systems</li> <li>- Guaranteed risk</li> <li>- Feel you have a small risk to buy products at a large price using non-cash payments</li> </ul>	Interval
4	Perceived Usefulness of Use ( X3 )	<ul style="list-style-type: none"> <li>- The use of systems can improve individual work</li> <li>- The use of the system is able to save energy</li> <li>- The use of the system is very beneficial for individuals</li> <li>- The use of the system can reduce the time to transact</li> <li>- Overall the online payment system is very useful</li> </ul>	Interval
5	Trust ( X4 )	<ul style="list-style-type: none"> <li>- Trust that the provider of a non-cash payment system is honest</li> <li>- Trust that the provider of a non-cash payment system provides secure services</li> <li>- Trust that the system provider is able to limit unauthorized people to access the payment system</li> <li>- Trust that personal data is safe when using a non-cash payment service</li> <li>- Overall trust in online payment systems</li> </ul>	Interval

## POPULATION AND RESEARCH SAMPLES

The population in this study were students of FEB Mercu Buana University and FEB Prof. University DR. Moestopo (Beragama). The method used in sampling is included in non-probability sampling, namely convenience sampling. Due to the absence of a definite number in the population of all OVO users, the determination of the sample of researchers is based on the opinion of Sekaran (2017: 87) where the sample size is more than 30 and less than 500 is appropriate for most studies. Researchers took a sample of 115 respondents consisting of FEB Mercu Buana University students and Prof. FEB University DR. Moestopo (Beragama).

## Data Analysis Methods

Data analysis is a procedure or process of activities within summarize data collected from research results so that the data can be processed into a form that is more

understood by the reader. In this study the questionnaire analysis used the Likert scale 1-5, using the SmartPLS3 (Partial Least Square version 3) software.

## RESULTS

### Hypothesis Test

#### 1. Evaluation of the Outer Model

##### a. Convergent Validity Test

Convergent validity measurement aims to determine the validity of each relationship between the indicator and its latent variable. Convergent validity of the measurement model with reflexive indicators can be seen from the correlation between item / indicator scores and construct scores. Individual indicators are considered reliable if they have a correlation value above 0.70. However, at the scale development research stage, loading 0.50 to 0.60 is still acceptable. (Ghozali, 2014).

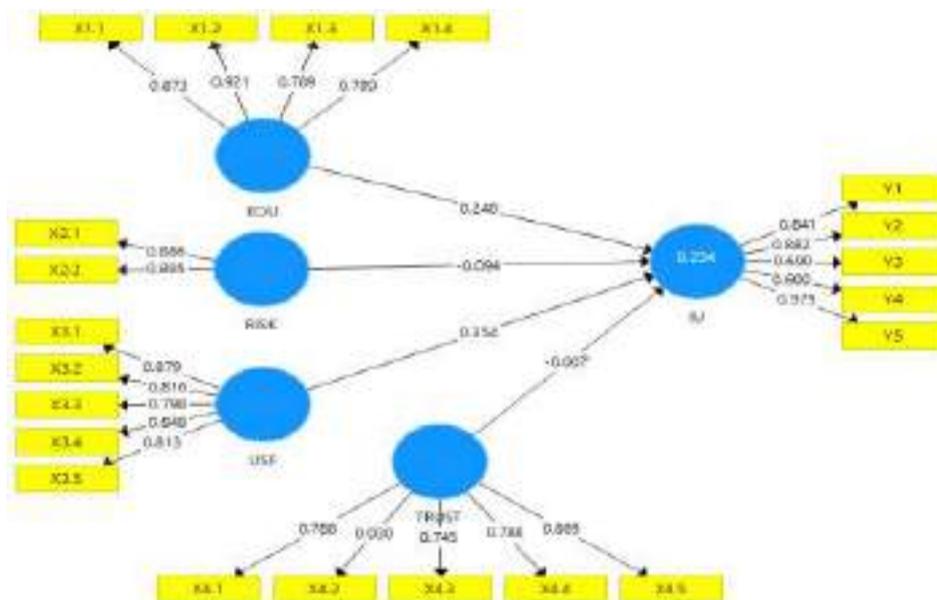


Figure 5.1  
PLS-Algorithm Model after Convergent Validity Test 1

Source: PLS Data Processing 3.0 (2020)

##### b. Cross Loading (Discriminant Validity)

Discriminant Validity of the measurement model with reflex indicators is assessed based on cross loading measurements with constructs. If the correlation constructs with measurement items are greater than other constructs, then this shows that latent constructs predict the size of their block better than the size of the other blocks (Ghozali, 2014).

From the discriminant validity test above, Cross Loading has shown that latent constructs predict indicators in their blocks better than

indicators in other blocks. In other words, it can be seen that the cross loading Correlation Value with the latent variable is appropriate, which is greater than the correlation with other latent variables.

Another method for assessing discriminant validity is by comparing the square root of the average variance extracted (AVE) for each construct and the correlation between the construct and the other constructs in the model. The model has sufficient discriminant validity if the root of AVE for

each construct is greater than the correlation between constructs and other constructs.

**Table 5.1**  
**Descriminant Validity Test Results (Fornell Lacker Criterion)**

Variabel	EOU	IU	RISK	TRUST	USF
Perceived Ease Of Use (EOU)	0,845				
Intensitas Penggunaan (IU)	0,397	0,728			
Resiko (Risk)	0,455	0,178	0,890		
Kepercayaan (Trust)	0,510	0,290	0,262	0,827	
Perceived Usefulness (USF)	0,576	0,444	0,465	0,563	0,831

Source: PLS Data Processing 3.0 (2020)

From table 5.1 it can be concluded that the average variance extracted square root (AVE) is 0.831, 0.827, 0.890, 0.728 and 0.845. These values are greater than the correlation of each construct. So there is no problem Discriminant Validity in the model that has been tested.

### c. Average Variance Extraced (AVE)

Another test is to assess the validity of the construct by looking at the value of AVE, a good model is required if at AVE each of the other constructs is greater than 0.5 (Ghozali, 2014).

**Table 5.2 - Test Results for Average Variance Extraced (AVE)**

Variabel	AVE
Perceived Ease Of Use (EOU)	<b>0,713</b>
Intensitas Penggunaan (IU)	<b>0,530</b>
Resiko (Risk)	<b>0,792</b>
Kepercayaan (Trust)	<b>0,684</b>
Perceived Usefulness (USF)	<b>0,691</b>

Source: PLS Data Processing 3.0 (2020)

Meanwhile, Cronbach alpha is said to be good if  $\alpha \geq 0.5$  and said to be sufficient if  $\alpha \geq 0.3$ . (Latan and Ghozali, 2015)

The reliability test results using Composite Reliability and Chronbach Alpha in this study using the SPLS Algorithm and the report results are as follows:

AVE output results show that the AVE value is good for the construct of Perceived Ease of Use (EOU), Intensity of Use (IU), Risk (Risk), Trust (Trust), Perceived Usefulness (USF), has a value of AVE greater than 0.50. So the AVE value for all constructs is good.

### d. Reliability Test using Composite Reliability and Chronbach Alpha

Besides the construct validity test, a construct reliability test is also measured by two criteria, namely composite reliability and Cronbach alpha of the indicator block that measures the construct. To determine the composite reliability, if the composite reliability value  $\rho_c > 0.7$  can be said that the construct has a high reliability or reliable (Ghozali, 2014).

**Table 5.3**  
**Reliability Test uses Composite Reliability and Chronbach Alpha**

	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>
<b>EOU</b>	<b>0,864</b>	<b>0,908</b>
<b>IU</b>	<b>0,768</b>	<b>0,846</b>
<b>RISK</b>	<b>0,738</b>	<b>0,884</b>
<b>TRUST</b>	<b>0,885</b>	<b>0,915</b>
<b>USF</b>	<b>0,888</b>	<b>0,918</b>

Source: PLS Data Processing 3.0 (2020)

The results of the Reliability Test output using Composite Reliability and Chronbach Alpha are good for constructs AVE output results show that AVE values are good for constructs of Perceived Ease of Use (EOU), Intensity of Use (IU), Risk (Risk), Trust, Trust and Usefulness (USF), is very good because Composite Reliability is above 0.70 and Chronbach Alpha is above 0.6 so that it can be concluded that all construct indicators are reliable or meet the reliability test.

## 2. Inner Model Evaluation (Structural Model)

### a. R Square Test

In assessing structural models with PLS, it starts by looking at the R-Square value for each endogenous latent variable as the predictive power of the structural model. The inner model is the specification of the relationship between latent variables (structural models), also called inner relations, showing the relationship between latent variables based on substantive theory from research. R2 results of 0.67; 0.33; and 0.19; indicate that the models "Good", "Moderate", "Weak" (Ghozali, 2014)

**Tabel 5.4**  
**Hasil Uji R Square**

	<b>R Square</b>
<b>IU</b>	0,234

Source: PLS Data Processing 3.0 (2020)

Based on the coefficient of determination in the table above, it shows the R2 value of the Usage Intensity variable (IU), amounting to 0.234 which means that this value can indicate that the endogenous variable Intensity of Use (IU), can be explained by an exogenous variable namely Perceived Ease of Use (EOU), Risk (EOU), Risk Risk), Trust (Trust), Perceived Usefulness (USF). In this study R2 was 23.4% while the remaining 76.6% was influenced by other variables not contained in the research model. Evaluation of the inner model R2 is included in the Weak category in explaining the Intensity of Use (IU) variable.

### b. Hypothesis test

The next test is the Path Coefficient test to see the significance of Perceived Ease of Use (EOU), Risk (Risk), Trust (Trust), Perceived Usefulness (USF) on Intensity of Use (IU). To test the hypothesis in this study, partial t values were used in each direct influence path partially.

The results of this test will show significant results seen from the results of the Original Samples, tilapia probability and t-statistics. For the probability value, the p-value is 5% alpha. Testing is done with the limit according to table t. The t-table value for alpha 5% is 1.96. to accept the proposed hypothesis is more than 1.96, which if t table of 5% significance is in the range of values -1.96 and 1.96 then the hypothesis will be rejected. The t-statistic estimation results can be seen in the path coefficients.

**Table 5.5**  
**Path Coefficient Test Results (Inner Model)**

	<b>Original Sample (O)</b>	<b>T Statistics ( O/STDEV )</b>	<b>P Values</b>
<b>EOU -&gt; IU</b>	0,240	2,108	<b>0,036</b>
<b>RISK -&gt; IU</b>	-0,094	0,893	<b>0,372</b>
<b>TRUST -&gt; IU</b>	-0,007	0,066	<b>0,947</b>
<b>USF -&gt; IU</b>	0,354	3,023	<b>0,003</b>

Source: PLS Data Processing 3.0 (2020)

In the table above, the effect of Ease of Use (EOU) on Intensity of Use (IU) with P values of 0.036 is smaller than the significance level  $\alpha = 0.05$  (5%). These results show that there is a significant positive effect between Ease of Use (EOU) on Intensity of Use (IU). Thus the first hypothesis (H1) which states that Ease of Use (EOU) has a positive effect on Intensity of Use (IU) can be accepted.

For the relationship between risk variables (RISK) and Intensity of Use (IU), the results in the table above show the p values of 0.372 greater than the significance level  $\alpha = 0.05$  (5%). Thus the second hypothesis (H2) which states that the Risk (RISK) has a positive effect on Intensity of Use (IU) is rejected.

For the relationship between the variable Usefulness (USF) on Intensity of Use (IU) with p values of 0.003 (smaller than the significance level  $\alpha = 0.05$ ). These results show that there is a significant positive effect between Usefulness (USF) on Intensity of Use (IU). Thus the third hypothesis (H3) which states Usefulness (USF) has a positive effect on Intensity of Use (IU) can be accepted.

For the relationship between the Trust variable and the Intensity of Use (IU), the p value of 0.947 is greater than the significance level  $\alpha = 0.05$  (5%). Thus the second hypothesis (H4) which states that Trust has a positive effect on Intensity of Use (IU) is rejected.

## DISCUSSION

Ease of Use (EOU) has a positive effect on Intensity of Use (IU), this can be seen from the number of respondents who answered agreed and strongly agreed on all items of the variable ease of use question. Where respondents feel that the ovo application is easy to learn, easy to understand, does not require a large effort and in general the respondents state the use of ovo is easy to do. This is in line with research conducted by Ana Fitriana (2017) where her research proved that partially the Perceived Ease of Use factor was proven to influence the interests of Indomaret consumers using e-money.

Risk (RISK) does not have a positive effect on Intensity of Use (IU), this is because there are still

many respondents who do not understand the risks of use and fully trust the OVO application both in terms of security and guarantee if there is a transaction risk. This is not in line with research conducted by Wahyuni Nur Syahril (2019) where her research supports the effect of risk perception on the use of non-cash payments in e-commerce applications.

Usefulness (USF) has a positive effect on Intensity of Use (IU), this can be seen from the number of respondents who answered agree and strongly agree with all the Usefulness variable question items, where respondents feel using ovo can increase payment effectiveness, save time and effort, and almost all respondents stated that the use of ovo was very beneficial. This is in line with research conducted by Anastasia and Febrian Kwarto (2018) where the results of the study stated that the benefits significantly influence the intensity of the use of e-filling. As well as research conducted by Andika Bayu Pratama (2019) which states that perceived usefulness has a significant effect on interest in using electronic money.

Trust does not have a positive effect on Intensity of Use (IU), this is because there are still many respondents who do not yet believe in honesty and security both personal data on the security of OVO applications and security guarantees if there is a transaction risk. This is not in line with research conducted by Zlatko Bezhovski (2016) which states that trust has a positive effect on electronic payment systems.

## CONCLUSION

From the discussion above it can be concluded that the Perceived Ease of Use and Perceived Usefulness have a positive effect on the intensity of use. Where respondents feel that the ovo application is easy to learn, easy to understand, does not require a lot of effort and in general the respondents state the use of ovo is easy to do and provides benefits including respondents being able to save time and energy and be effective in making payments. Risk and Trust do not affect the intensity of use. Where many respondents do not understand the risk of using and fully trust the OVO application both in terms of



security and collateral if there is a transaction risk and lack of trust in the OVO application.

## SUGGESTIONS

Researcher suggestions for future researchers:

1. Increase the number of samples studied and expand the research location so that it is expected that the level of generalization from the analysis will be more accurate and good.
2. Further research can also use other data collection methods such as direct interviews so that respondents can honestly answer questions.

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# PROBLEMS OF MODERNIZATION OF PHYSICAL CULTURE EDUCATION IN INNOVATIVE ACTIVITY OF STUDENTS

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## ANNOTATION

*The article reveals the issues of the results of sociological research devoted to analyses of the conditions of physical culture and children's sports specialists' innovative activities and the ways of improvement of innovative technologies in the department of physical culture.*

**KEY WORDS:** *innovation, pedagogical technology, index of satisfactions, adaptation, competence.*

# ПРОБЛЕМЫ МОДЕРНИЗАЦИИ ФИЗКУЛЬТУРНОГО ОБРАЗОВАНИЯ В ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ СТУДЕНТОВ

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## Аннотация

*В статье представлены результаты социологических исследований направленных на анализ состояния инновационной деятельности специалистов физической культуры и детского спорта и пути совершенствования инновационных технологий при подготовке специалистов на факультете физической культуры.*

**Ключевые слова и фразы:** *инновация, педагогическая технология, индекс удовлетворенности, адаптация, компетентность.*

Социально-экономические перемены в обществе повлекли за собой перестройку всей системы образования. Глобальные инновационные процессы, происходящие в современном обществе, сопровождаются глубокими изменениями всех сторон общественной жизни, в том числе и системы образования. В этой связи особую актуальность приобретают проблемы внедрения в образовательную практику инновационных технологий обучения и обеспечения

соответствующего уровня готовности учителей к инновационной деятельности. [1]

Цель профессиональной подготовки будущих учителей физической культуры состоит в создании системы развития профессиональной подготовки, соответствующей запросам общества и государства и позволяющей существенно повысить качество физкультурного образования. Важным методологическим подходом, позволяющим наметить пути модернизации



физкультурного образования, является инновационная деятельность.

В области физической культуры накоплен определённый багаж современных инновационных технологий, вносящих новые знания в практическую деятельность педагога, от которых существенно зависит успех модернизации физкультурного образования в целом. Обучение инновационным процессам на основе единения науки и практики позволяет сделать образовательный процесс поистине профессиональной подготовкой будущих специалистов в области физической культуры.

Современная система образования постоянно находится в процессе обновления, сопровождаемая включением отдельных специалистов по физической культуре в

инновационную деятельность. Массовым это движение назвать нельзя, так как многие педагоги, в силу различных обстоятельств, не хотят или не могут работать по-новому. [2]

На базе Ферганского государственного университета проводилось исследование, имеющее своей целью определение степени информированности учителей об инновационной деятельности в области физической культуры. Первой реакцией на предложение пройти собеседование по проблеме инновационной деятельности студентов, выпускников факультета физической культуры были даны неудовлетворительные ответы.

Результаты социологических исследований представлены в таблице 1.

Основные источники ознакомления студентов с инновационными технологиями, %

№	Источники	%
1	Курсы повышения квалификации	53,5
2	Консультации с более опытными коллегами	31,4
3	Консультации с преподавателями вузов	7,5
4	Научно-методическая литература	4,4
5	Другое	3,2

Только после наводящего вопроса «Что нового произошло в системе образования в последние годы?» студенты понимали предмет беседы и наиболее типичные ответы сводились к перечислению типов инновационных технологий. [3,4].

Основная масса выпускников в ходе беседы оценивали необходимость инновации в сфере образования положительно, отмечая потребность в целенаправленном и систематическом их изучении. Однако мотивы включения инноваций в собственную деятельность указывались различные. На вопрос «Какую цель преследуют учителя физической культуры, внедряя новые инновационные технологии обучения в свою профессиональную деятельность?» самым распространённым оказались ответы «разнообразить и улучшить свою работу» - 49%, «повысить результативность работы» - 27%.

Определённая часть студентов указывали мотивы материальной заинтересованности и построения карьеры. Исходя из опыта общения с выпускниками, выяснилось, что подавляющее большинство осознаёт повседневную необходимость

применения инновационных технологий в учебном процессе.

Для проверки гипотезы о необходимости внедрения инновационных технологий в процессе проведения тренировочных занятий были заданы следующие вопросы: «Считаете ли Вы необходимым введение в учебно-тренировочный процесс инновационных педагогических технологий?» и «Считаете ли Вы себя подготовленными к практической инновационной деятельности?».

Результаты исследований выявили, что большинство будущих специалистов (63,7%) однозначно считают необходимым введение инновационных технологий в процесс преподавания физической культуры, так в тренировочной деятельности ДЮСШ.

Анализ полученных экспериментальных данных выявил, что будущие специалисты не удовлетворены своей теоретической подготовкой к внедрению инновационных технологий. Табл. 2.



Результаты социологических исследований по внедрению инновационных технологий в учебно-тренировочный процесс, %

Ответы Вопросы	Да	Скорее да, чем нет	Скорее нет, чем да	Нет	Затруд. ответить
Считаете ли вы необходимым введения в учебно-тренировочный процесс современных инновационных педагогических технологий?	63,7	17,9	4,3	8,5	5,6
Считаете ли вы себя подготовленными к практической инновационной деятельности?	16,5	29,7	32,4	14,9	6,5

Чтобы проверить вышеуказанное предположение, мы обратились к анализу индекса удовлетворенности уровня подготовленности к практической инновационной деятельности на основе самоанализа, выдвигая гипотезу, что желание внедрять инновационные технологии в собственную практику прямо пропорционально

зависит от уровня профессиональной подготовленности. [3]. Результаты исследований методом анкетирования, по выдвигаемой проблеме проведенных на учителях физической культуры и имеющих большой стаж работы в системе народного образования выявили следующие показатели. Табл.3.

Показатели индекса удовлетворенности вузовской подготовкой к инновационной педагогической деятельности.

Стаж работы	Менее 1 года	До 5 лет	От 5 до 10 лет	Более 10 лет	X±Σ
U	0,36	0,68	0,54	0,72	0,58±0,21

Расчет индекса удовлетворенности показал наличие тенденции к его возрастанию в зависимости от стажа работы. Самый низкий показатель индекса удовлетворенности выявлен у специалистов со стажем работы менее одного года, объясняющих недостаточной, слабой направленностью вузовской подготовки на внедрение инновационных технологий и отсутствием собственного опыта педагогической деятельности.

У специалистов со стажем педагогической работы до 5 лет зафиксировано значительное повышение индекса удовлетворенности (до 0,68), что связано с завершением периода профессиональной адаптации выпускников вуза. Обнаружено, что у учителей имеющих стаж педагогической работы от 5 до 10 лет наблюдается локальный спад показателя индекса удовлетворенности (до 0,54) и требует плановой аттестации специалистов физической культуры и спорта с направлением их на курсы повышения квалификации. [3]

Индекс удовлетворенности 0,72 выявлен у учителей со стажем педагогической работы более 10 лет, что объясняется накопленным методическим опытом работы.

Выявлено, что основная масса исследуемых специалистов физической культуры и детского спорта испытывает необходимость во внедрении инновационных

педагогических технологий, но при этом указывают, что не обладают соответствующим уровнем теоретической и методической подготовленностью. Педагогическому коллективу высших специализированных учебных заведений, призванных готовить высококвалифицированных специалистов следует совершенствовать систему подготовки специалистов к инновационной деятельности.

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## CHALLENGES IN THE LIVES OF HIV POSITIVE WOMEN

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### ABSTRACT

*Background: The HIV/AIDS epidemic has gained impetus during the last one and the half decade, expanding to all regions of the world and remains to be major global challenge. Recent research has indicated that HIV infection is moving from high-risk populations into the general population. Married, monogamous, heterosexual women belonging to lower strata are highly vulnerable. Women constitute nearly half of world's AIDS population*

*Aim: The present study attempts to highlight the challenges faced by HIV positive women.*

*Material and Method: Since HIV/AIDS is a sensitive topic it was decided to undertake a qualitative study so that subterranean aspect of HIV positive women and their circumstances can be analyzed appropriately. Present study was conducted in Ludhiana district, Punjab. A purposive sample of 67 HIV positive woman visiting ART Centre for the treatment was taken. Information was obtained by Interviewing.*

*Results: The study revealed that stigma and discrimination is the biggest challenge for WLHA as it prevents them from disclosing their HIV status to others and seeking their support. Lack of awareness about HIV also emerged an important challenge for some. There were others who felt that living with HIV has made them physically weak and it affects their working capabilities. Economic instability and dependency of HIV positive women is a big challenge for their survival. HIV positive women do not receive social, emotional and financial support from their parents and in laws. Family members try to maintain distance from these women and hardly come forward to help them. As a result of HIV/AIDS, more women become dependent on fewer income generating family members, thus increasing the already heavy economic burden experienced by families.*

*Conclusion: The study implicates that WLHA face more challenges than men with HIV because of their lower position in society. Due to their lack of awareness they contract HIV infection unknowingly. This lifelong infection affects their physical and psychological health. WLHA are stigmatized and labeled for their immorality due to their illness and they face discrimination from family members, health care workers, colleagues, clients and their own community members.*

**KEYWORDS:** *Stigma, Support, Challenges, HIV positive women*

### INTRODUCTION

Women now make up nearly half of all people living with HIV worldwide. In 2005 women represented 26 percent of HIV/AIDS diagnoses, compared with 8 percent in 1985 (UNAIDS, 2005). The major source of infection is through heterosexual transmission and women are at a biological disadvantage in contracting HIV. In every society, there are individuals and population groups who are

more vulnerable than others are. In all cultures, certain categories of girls and women face strong social pressures that can render them more vulnerable to HIV. Brettell and Lean (1991) and Fletcher (1990) reported that women are highly vulnerable to HIV socially and physiologically. UNAIDS (2009) stated that 90 percent of 1.7 million women infected with HIV are in Asia who gets infection from their husbands with whom they have been in relationship for long time. Lee et al.



(2009) examined the dynamics of HIV transmission in heterosexual couples and found that a majority of these HIV positive women got the infection from their partners. Santhya and Jejeebhoy (2007) reported that married young women fall in high risk because of their exposure to regular unsafe sex within marriage. High risk behaviour of husbands before and within marriage behavior makes wives vulnerable. According to Morrison (2006) housewives form a larger pool of individuals who are at greater risk of HIV primarily through their husbands. He reported that sex workers are no doubt at risk of HIV/AIDS but it is the non-sex worker i.e. housewives who are at greater risk of HIV primarily through their husbands. According to Raj et al. (2013) 90 percent of new infections in Indian women do not involve sex-work. Instead these new infections result from matrimonially sanctioned sexual relations (Vlassoff et al. 2013). Additionally, low knowledge and awareness about HIV make these women vulnerable. According to Dube (2000) woman is thought to be indecent if she seeks information about sexuality and sexually transmitted infection. She cannot ask her partner to use condom even if she fears of getting infection with AIDS or STDs. The economic dependency on men is also one of the factors contributing to spread of HIV among women. Gender inequalities and the low status of women limit their access to resources. Women feel powerless and unable to protect themselves as they are in no position to negotiate safe sex within or outside of marriage.

Researchers have pointed out that women tend to experience greater stigma and discrimination than men, are more likely to experience its harshest and most damaging forms, and have fewer resources for coping with it (Liamputtong et al. 2009; Paxton et al. 2005). Women living with HIV/AIDS are very frequently referred to as 'vectors', 'diseased' and 'prostitutes', but these terms are seldom used with infected men (Dixit, 2005; Ndinda et al. 2007; UNICEF, 2005; Stein and Kuhn, 1996).

HIV/AIDS is among the diseases which not only affects the physical aspects, but also the social and psychological conditions of the patients. In addition to the physiological effects of the disease, WLHA may encounter numerous problems such as discrimination, losing social status and role, changes in the patterns of relationships (intimacy), losing jobs and financial resources etc. Discrimination in the form of neglect, isolation, verbal abuse is reported by a large number of women in both urban and rural areas. HIV-positive widows face double burden of stigma. They face discrimination from the family and the society. They not only have to bear the grief of the death of their husbands, and economic repercussions, but also have to

face the stigma attached to HIV, take care of their own health and the health of children who may be positive. Many of these problems are also common among other people who suffer from other chronic diseases, but the stress associated with social and family problems arising from the diseases such as social stigma and exclusion affect WLHA to a large extent. Family members are frightened to take care of HIV/AIDS patients, especially if she is a woman.

Researchers indicate that people experience various short and long-term emotional and behavioural reactions immediately after being diagnosed with HIV such as shock (Amuyunzu-Nyamongo et al., 2007); surprise and disbelief (Hult et al., 2009); anger (Reeves et al. 1999); denial (Pittiglio & Hough, 2009); fear (Medley et al., 2009; Reeves et al., 1999); guilt and bereavement (Holt et al., 1998) etc. According to Joseph and Bhatti (2004), HIV-positive wives of positive men mostly adopt escape-avoidance coping strategies. According to Ajibade et al. (2016) religion plays a vital role in the care of HIV infected persons and their families. In the light of these facts perception of WLHA about the challenges faced by them and coping mechanisms used by them have been explored.

The present study focuses on the following two objectives:

1. To explore different types of challenges faced by women living with HIV/AIDS;
2. To identify the coping mechanisms used by these women living to deal effectively with these challenges.

## METHOD AND TECHNIQUE

For the present study, research design is partially exploratory and partially descriptive in nature. A sample of 67 WLHA visiting ART Centre in Lord Mahavir Civil Hospital, Field Ganj Road, Ludhiana district of Punjab was collected. HIV positive women in the age group of 15-60 years constituted unit of analysis. Theoretical sampling method was used. In theoretical sampling, the factor that determines the size of the sample is often 'saturation': information becomes repetitive and confirmatory, and no new information is derived from fresh interviews. WLHA visiting ART Centre were interviewed at length using Interview guide.

## RESULTS

The study sample consisted of 67 WLHA, 29 respondents were in the middle age group i.e. 35-45 years. There were 18 respondents whose age was between 25-35 years. There were nine respondents in the age group of 15-25 years. There were seven



respondents in the age group of 45-55 years and four respondents who were above the age of 55 years.

With regard to marital status it was found that only five respondents were unmarried, remaining 62 had once married. There was one respondent who became widow at the age of 19 years; there were 17 respondents who got widowed when they were in the age group of 20-30 years. There were 16 respondents who became widows in age group of 30-40 years and remaining four respondents became widows in age group of 40-50 years. There were 14 married respondents living with their husbands. There were 43 respondents who belonged to Sikh religion. The present study is based in Ludhiana district of Punjab which is a Sikh dominated state. The second highest number was of Hindu respondents i.e. 22. There was one respondent who was a Christian and one was from a Muslim community who were detected HIV positive. With regard to caste background, out of 67 respondents, there were 39 respondents who belonged to General category and remaining 28 belonged to reserved category.

16 respondents were illiterate and seven respondents were educated up to primary level. There were 17 respondents who had education up to middle level only. Some of them didn't pass the 8th standard due to lack of encouragement from parents. There were 13 respondents who were matriculate and 11 respondents had education up to plus 2 level. There were only three respondents who were graduates. 35 respondents were not doing any type of paid job, 12 of them were married and totally dependent on their husbands. There were nine respondents who were widows, five of them were living with their parents and two were living with their in laws, two of these were living with their sons (both in rural area) after the death of their husbands. These 35 respondents also include four students and one respondent who were in prison. There were 15 respondents who were in service and six

of these respondents were working in health care centers on contract basis. There were two respondents who were graduates and working as school teachers. One respondent was a staff nurse in a Government hospital. There was one respondent who was working as a housekeeper in a mall. Two respondents were workers in factories and one respondent worked as a machine operator. Nine respondents were housemaids. Five respondents were self-employed, four of them had their own boutique and one was running a beauty parlour from her residence. Three respondents were included in others category, one was an orchestra dancer and two were female sex workers.

Findings with regard to income of the respondents show that there were 36 respondents in the low income group. A large number of respondents in the present study were poor, either they had no source of livelihood or were earning very minimal amount. Out of 67, 26 respondents admitted that they had no income, it included 12 married housewives who were dependent on their husbands, nine widows - five of them were dependent on their parents, two were dependent on their in laws, and two were dependent on their sons. This category also included four students and one prisoner. Nine housewives had agriculture income. Five factory workers, one Asha workers, one Anganwari worker, four paramedical staff, two school teachers, three self-employed, one Orchestra dancer and two female sex workers were earning up to Rs 15,000/- per month. There were three respondents, a widow of an army jawan who was getting pension along with her salary and another widow of an army jawan was getting pension along with income from agricultural land. Another respondent was earning more than Rs. 15000/- per month from her parlour. In high salary group, there were includes only two respondents, one of them was a staff nurse and another had a large agricultural land.

**Table no 1 Distribution showing Challenges for Women living with HIV/AIDS**

Response	No. of Respondents
Lack of Awareness	41
Health Issues	31
Issues of disclosure of HIV/AIDS	28
Stigma and Discrimination	42
Lack of Support	37
Economic Challenges	32
Increased Vulnerability of Children	21
Lack of Awareness & Health Issues	31
Stigma and Discrimination & Lack of Support	37
Economic Challenges & Increased Vulnerability of Children	21



HIV positive women mentioned different challenges faced by them. Out of 67 respondents 42 respondents felt that stigma and discrimination is the biggest challenge for them as it prevents them from disclosing their HIV status to others and seeking their support. There were 41 respondents who admitted that lack of awareness about HIV as important challenge. For 37 respondents lack of support is the big challenge for women living with HIV. Eight respondents whose children were tested HIV positive blamed their lack of awareness for infecting children from the disease. For 31 respondents health issues is major challenge faced by WLHA. For 28 respondents the disclosure of HIV status to others is the major challenge. For 21 respondents vulnerability of children for WLHA is a big challenge. There were 31 respondents who felt lack of awareness and health issues both were major challenges for WLHA. For 37 respondents both stigma-discrimination and lack of support were important challenges that WLHA face. For 21 respondent's stigma and discrimination, economic challenges and increased vulnerability of children were the challenges for WLHA. Such findings indicate that stigma and discrimination as well as lack of support were the major challenges faced by women suffering from HIV/AIDS.

There were 41 respondents who admitted that lack of awareness about HIV is the biggest challenge faced by HIV positive persons. It also included 23 respondents who were not aware of HIV/AIDS and its mode of transmission. These 23 respondents were illiterate, it included 15 widows, five married respondents, one remarried respondent, one unmarried respondent and one divorced respondent. There were 18 respondents who admitted that they had knowledge about HIV but on further probing they gave wrong responses. It included ten widow, six married respondents and two remarried respondents. Respondents reported that they would have safeguarded themselves if they had knowledge about HIV. Respondents who had contracted HIV through infected syringes and blood admitted that it was their lack of awareness about modes of transmission that they became HIV infected. It included two respondents who were infected through blood transfusion i.e. one married respondent and one divorced respondent whose husbands were tested HIV negative; two were infected through HIV infected syringe during treatment. According to them proper awareness about mode of transmission could have saved them.

Results show that there were 11 respondents who felt that HIV infection affects the physical health of a person and lessens her capability of doing any work. It included seven widows, three married respondents and

one deserted respondent. These respondents reported that they themselves feel physical deterioration of health as they were not able work efficiently after getting HIV as they used to do earlier. They feel tired and weak due to their illness. In spite of poor health these women have to do all household chores and take care of other family members. In addition to physical health, some respondents reported deterioration in mental health.

Out of 32 respondents who reported economic challenge as one of the biggest challenge, 27 respondents were economically dependent on their husbands, their parents, in laws and relatives and seven of them had HIV positive children. There were two married FSWs, three housemaids one divorced and two widows who were working. Such findings clearly indicate economic dependency faced by WLHA forces them to indulge in high risk behaviour. Lack of skill to be actively engage in productive work, their HIV status and those of their children makes them vulnerable to poverty and abuse. The respondents who were living with their in laws after the death of their husbands and could not go to their natal family because they had no support from them. They compromised with the situation and finally decided to live with their in laws to get financial help for children and for themselves. Although most of them were blamed for killing their husbands and their integrity was questioned but they kept mum because of their economic dependency on their in laws. Family members try to maintain distance from these women and hardly come forward to help them. The death of husbands who were the sole earner in the family makes these women economically weak. These single mothers face financial difficulties in meeting even the day to day expenses of running a home.

Stigma and discrimination faced by WLHA emerged as one of the biggest challenges. There were 41 respondents who faced discrimination and stigma by their own families. Their life changed after they were found to be HIV positive, the behaviour of their family members changed towards them. It included 27 widows who were stigmatized and discriminated for their illness by their in laws, seven married and two remarried respondents were discriminated by their husbands, two unmarried respondents were ill-treated by their father, one divorced and two widow respondents were discriminated by their parents and siblings. The lack of necessary HIV-related knowledge and skills in communicating about sensitive topics (e.g., sexual behaviours and HIV transmission) can be also a barrier in acceptance of HIV positive woman in our society. There were 24 respondents who faced physically discrimination from their family members.



Most of these were physically discriminated by their in laws. It included seven respondents who were thrown out of husband's house by in laws, two unmarried respondents whose father ill-treated them, five widows who were not allowed to enter the kitchen, four widows who were given separate utensils by in laws, three married respondents who were physically abused by their husbands, three married respondents were asked to live in a separate house with their husbands. Violence is a particularly harsh form of discrimination faced by women. Women and girls report increased violence for requesting condom use, accessing voluntary testing and counselling, refusing sex within or outside marriage, or for testing HIV positive. There were 41 respondents who were psychologically discriminated by their family members. It included 26 respondents who were living with their in laws i.e. 18 widows and eight married respondents. They were blamed as being woman of loose character by their in laws. It also included seven respondents i.e. five widows and two divorced respondents who were living in parental family. They were sometimes psychologically discriminated by their sisters in law. It included four widows, three married and one remarried respondent who faced psychological discrimination from their in laws. Moreover, women were often blamed by their in-laws for infecting their husbands by

not controlling their husbands" urges to have sex with other women. There were 39 respondents who faced economic discrimination from their family members. Most of these respondents were widows and not engaged in any paid work, they had no money for their basic needs. Seven women were asked to leave the house of their in-laws after their husbands died and denied their inheritance. There were two respondents who faced sexual discrimination by the close relatives in husband's family. There were 34 respondents who faced social discrimination; they were socially ostracized by their family and relatives. These respondents were not invited in family functions by their relatives fearing they would also get stigmatized if they interacted with them.

### **COPING MECHANISMS USED BY WOMEN LIVING WITH HIV/AIDS**

HIV is a lifelong condition and it needs various physical as well as emotional readjustments to make life easy and less stressful. Coping with HIV becomes a challenge in these women's lives. An attempt has been made to procure information about coping mechanisms used by these women to cope with their illness.

**Table no 2 Distribution showing Coping mechanisms used by Women living with HIV/AIDS**

Coping Mechanisms	No. of respondents
Keeping busy in household chores	35
Meditation and Prayers	25
Avoiding	23
Denial and Rejection	12
Non-disclosure	37

Results show that there were 35 respondents who kept themselves busy in household chores so that they don't get time to think about their disease all time. It included 23 widow respondents and ten married respondents and two unmarried respondents. There were 25 respondents who keep themselves busy in meditation and prayers to get strength and peace. It included 14 widows, eight married respondents, two divorced respondents and one deserted respondent. There were 23 respondents who adopted the avoidance method to minimize stigmatized comments from family and community which included 12 widows and six married respondents who were living with their in laws and five widow respondents who were living with their parents. There were 12 respondents who used denial and rejection as a coping mechanism as they don't want disease to overpower their lives and become an obstacle to live their lives normally.

### **DISCUSSION**

HIV affects the physical, psychological, economic and social life of WLHA. In society WLHA are not accepted but discriminated, blamed and humiliated due to their illness. This is the reason people are reluctant to disclose about this disease. WLHA were shocked, hurt, cried and denied when they were tested positive for HIV positive report and people's perception about them restrict them to live their normal life. People's judgmental attitude toward PLWHA makes them aware about the reason behind it. The care for children and family members encourages them to repress the stress and all negative thoughts come to their mind. There WLHA try to cope with the problem and they opt for different coping mechanism as per their needs and circumstances. Women whether married or single, divorced or widowed, sex workers or migrants are most susceptible to the negative impacts of HIV and AIDS due to both biological and cultural



reasons. Research has proven that women are biologically more prone to HIV infections than men. Further, cultural factors place them in lower position and they are not able to safe guard themselves against infection whether she is a sex worker or housewife. WLHA along with illness carry the stigma of HIV/AIDS as these women are considered to be carrier of infection. There is a common perception in society that WLHA deserve their HIV positive status because they have done something „wrong“. Stigma and discrimination does not only make it difficult for these women to cope with their illness on a personal level, but it also interferes with attempts to fight the AIDS epidemic as a whole. WLHV face stigma and discrimination in the family, in health care system, and work place. Parents and in-laws are not ready to keep them; left with no alternative they live a life of misery and agony. HIV positive women keep themselves busy in household chores or meditation so that they don't get time to think about their disease and problems associated with it. For majority of women it is their survival which important rather than the stigma attached to PLWHA.

WLHA try to cope with the problem and they opt for different coping mechanism as per their needs and circumstances. Results corroborate the findings of Neves & Gir (2006) and Lazarus & Folk man (1984) that coping helps WLHA to live their life positively with the disease and reduces stress. Results also support the findings of Faria & Seidl (2006) and Temoshok & Chandra (2000).

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# IMPACT OF COVID-19 ON CHILD LABOUR PROBLEM IN INDIA

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## ABSTRACT

*Child labour is defined as the practice that deprives the childhood, potential and dignity of children. It refers to the work that is mentally, physically, socially and morally dangerous to the children. "The Child is Father of the man" this famous line quoted by William Wordsworth refers to the importance of the child for the development of society as well as for the all-round development of the human race. Childhood is the time to garner the best physical, intellectual and emotional capacity to fulfil this duty towards the nation and to one's own self. However, this simple rule of nature has been crippled by the ever-growing menace of child labour. Child labour is a complex problem that is basically rooted in poverty.*

*Today it is a lesson to man to be become the part of environment, extreme industrialization, urbanization, globalization and avoidances and negligence of sustainable development etc are responsible to have a ill effects on environment and society. Therefore it is a need of time to be conscious, serious and plan for not disturbing the nature, caring to flora and fauna, plantation for further generation. Otherwise excess use of these things will be directly impact on society and environmental issues.*

*Therefore for today and tomorrow plan accordingly and to be maintain the strategy of sustainable document of human life.*

*Society is a group of people and all people bind with specific relationship, culture is directly assimilated in the society. Due to covid-19 pandemic, overall social and structural set up has been disturbed and it has directly affect on various ways with specific social and economic problems raised in the society.*

**KEYWORDS**-Poverty, administration, effects, impact, globalization, elimination, environment

## INTRODUCTION

Today all are confused and trying the best to maintain track of society. Indian society also suffering in very bad situation most of the religions and cultural places has been locked and no furnace transition taking place is there. Charity and related activation also shut down. Hence it is prove that man such religion activities covid-19 i.e. corona virus is also impact on such activity and form to change the track of society and culture.

Due to the effect of covid-19 environment and society get affected thoroughly.

## GENERAL EFFECT ON SOCIETY AND ENVIRONMENT OF CORONA VIRUS

1. Decrease in the pollution level and drastically it comedown.
2. Completely social structure and construction get affected and related on human appearance.
3. New social, commercial, religion and economical problems have been arised with the old existing problems.
4. Unemployment, poverty, begger and complication in society become the current issues in India.

5. Man get learn from the effect of corona virus and under start his helpless infront of the corona virus.

It can take many forms including domestic servitude, work in agriculture sector, manufacturing industries, trafficking of children and many more. India in fact is the hot bed of child labour. India accounts for the second highest number of child labourers after Africa. Nearly 85% of child labourers in India are hard to reach, disguised as they work largely in unorganised sector, both rural and urban. Child labour coupled with child abuse has today become one of the greatest maladies that have spread across the world. Each year statistics show increasing numbers of child abuse, more so in the case of the girl child.

## CHARACTERISTICS

It violates a Nation's minimum wage laws. Threatens children's physical, mental or emotional well being. Involves intolerable abuse, such as child slaves and forced labour. Prevents children from going to school. Uses children to undermine labour standards. After achieving Independence Indian constitution passed number of Laws, Rights and Acts on child labour.



### Some of the laws are:

- 1.The Factories act of 1948: The employment of children below the age of 14 is prohibited in any factory.
- 2.The Mines act of 1952: The employment of children below the age of 18 is prohibited in mining.
- 3.The Child Labour(prohibition and regulation) act of 1986:The employment of children below the age of 14 in hazardous occupations identified in a list by the law is prohibited.
- 4.The Juvenile Justice(care and protection) of children act of 2000:Child labour is a crime, punishable with prison or employing a child in any hazardous employment or in bondage.
- 5.The right of children to free and compulsory education act of 2009: According to this act children aged 6-14 should be provided with free education and also 25% of seats in private schools be provided to children from disadvantaged groups and physically challenged.

### RIGHTS OF CHILDREN

- 1.Right to survival- Each and every child has the right to live healthy and nutritious life.
- 2.Right to development: Each and every child has the right to get educated, cared, leisure life and recreation.
- 3.Right to protection: Each and every child has the right to be protected from exploitation and any kind of abuse.
- 4.Right to participation: Each and every child has the right to participate in any religious activities.

### CAUSES

Over population, poverty, parental ignorance, illiteracy, lack of proper education, urbanisation, availability of cheap labour, the ineffectiveness of child labour laws in terms of implementation, non availability and non accessibility to schools are some of the factors which encourages the phenomenon of child labour .It is also very difficult to immature minds and undeveloped bodies to understand and organize themselves against exploitation in the absence of adult guidance. Moreover illiterate and ignorant parents do not understand the need for wholesome physical, emotional development of their child.

They are themselves uneducated and unexposed. So they do not understand the importance of education for their children .The industrial revolution has also had a negative effect by giving rise to circumstances which encourages child labour. Sometimes Multi National Industries prefer to employ child labourers because they can be recruited for less pay and more work can be extracted from them .Children born with no parents and relatives , often do not find anyone to support which forces them to work for their own survival. Moreover, willingness to exploit children is the most responsible

cause for child labour. This is the root problem of trafficking of children often involves both labour and migration. The objective of child trafficking is often child labour. Trafficked children may be sexually exploited, used in armed forces and drug trades and in child begging.

### EFFECTS

Consequences and problems due to child labour are blooming up like mushrooms in the rain. Child labour causes stunted growth of future generation. It acts as a bottleneck in the Development of the Country. The prevalence of child labour is a slap on the conscience of society. As children can be employed at low wages child labour increases the adult unemployment. Mainly it became the reason for perpetuation of poverty and economic inequality. Having a formal education is the birth right of every child in this world. But child labor has stolen this right from nearly 44 million children. Children are like wet cement, whatever falls on them makes an impression.

### HEALTH EFFECTS ON CHILDREN

Long hours of work on a regular basis not only harms children's physical health but also their mental health. According to a survey conducted in 26 countries by International Labour Organisation (ILO) it was found that about ¾ children suffer injuries and illness while working . Child labour has traumatic effects on child's health which includes rapid skeletal growth development of organs and tissues , greater risk of hearing loss and many more .Healthy years of life are lost due to child labour .Children who are working in agriculture sector , industries and factories are effected more due to long terms exposure to pesticide and working with sharp tools, machinery etc.

### CONCLUSION

The problem of child labor has done enough damage to the lives and health of many innocent children by stealing away their childhood and many rights. Children are like wet cement, whatever falls on them makes an impression. It is now evident that child labour negatively affects the mental, emotional and psychological capabilities of children. Child labour should be brought to an end now. It is high time that the Indian government starts taking this issue seriously and starts enforcing stringent laws. Children should have pens in their hands not tools. Labour policies have to be designed and implemented in such way that the employment of children in hazardous jobs and their exploitation by the employers are checked and such practices are positively discouraged. Child labour is economically unsound, psychologically disastrous and ethically wrong. It should be strictly banned. The general



improvement in socio-economic conditions of people will result in gradual elimination of child labour. Considering the magnitude and extent of the problem, concerted efforts from all sections of the society is needed to make a dent. Measures need to be taken not only to stop this crime against children, but also to slowly, steadily and surely provide every child a well-deserved healthy and normal childhood .Pandit Jawaharlal Nehru quoted that “Today's children are tomorrows citizens” . It means that children constitute the backbone of tomorrow's society. Hence, it is the obligation of every generation to bring up children, who will be citizens of tomorrow, in a proper way, In current scenario, there is a need to save children from corona virus and save them from this pandemic.

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## GYMNASTICS IN THE SYSTEM OF PHYSICAL EDUCATION OF UZBEKISTAN

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### ABSTRACT

*Among a huge number of means of physical development and education of the younger generation, gymnastics takes a leading place. In any sport, you can not achieve good results without a preliminary warm-up, based on gymnastic exercises. The article deals with the development of gymnastics in Uzbekistan.*

**KEYWORDS:** *Gymnastics, exercises, exercises, posture, flexibility, coordination.*

## ГИМНАСТИКА В СИСТЕМЕ ФИЗИЧЕСКОГО ВОСПИТАНИЯ УЗБЕКИСТАНА

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### Аннотация

*Среди огромного количества средств физического развития и воспитания молодого поколения гимнастика занимает ведущее место. Ни в одном виде спорта нельзя добиться хороших результатов без предварительной разминки, основу которой составляют гимнастические упражнения.*

*В статье идет речь о развитии гимнастики в Узбекистане.*

**Ключевые слова:** *гимнастика, упражнения, занятия, осанка, координация.*

### DISCUSSION

Any state has traditions unique to it in the development of physical culture. Gymnastics, like other sports, was based on a whole complex of traditional and non-traditional means of physical education in different historical periods.

Gymnastics on the territory of Central Asia and in particular in Uzbekistan was "imported" already in the established falcon form, which had the beginnings of a sporty style, while elements and

entire areas of medical, health-improving, applied physical culture in Uzbekistan already had deep and often scientifically based roots. We find evidence of this in the epic Alpomysh, in the writings of Ibn Sino, in the era of Amir Timur.

There are many significant dates and events in the history of gymnastics, many of which date back to the 20th century.

In 1904, the "Society of Gymnastics and Exercise Fans" was established. It should be noted that at that time the concept of "gymnastics" included



such exercises as running, jumping, throwing, etc. But this was the first gymnastic society, and it played a big role in the further development of this sport. It was organized at the initiative of groups of athletes and totaled only 15-20 people.

The charter of the "Society of Gymnastics and Exercise Fans" noted that students of educational institutions cannot be members of the society, since gymnastic classes were present at them. So in 1880, a special commission developed a program for four-year parish schools of the Turkestan region, which provided for gymnastics classes, in addition to the main lessons.

When the gymnastics and fencing school was opened in Tashkent, it gained even greater popularity, and the number of members of this society increased significantly, but as before, it included a number of exercises that did not meet the requirements of gymnastics. Competitions, as such, were not held.

In 1912, in order to recruit the Russian national team for the Olympic Games in Stockholm, official gymnastics competitions were held in Turkestan, the winner of which was Lieutenant Volchansky. This date of the first official competitions was considered the birthday of gymnastics in Turkestan. Following this event, gymnastic societies begin to form in Kokand, Ferghana, and Samarkand.

In 1915, the first gymnastic courses at the female gymnasium opened in Tashkent. These courses were completed by Polina Vladimirovna Garfung, who later did a lot for the development of gymnastics in Uzbekistan. Gymnastics, like other sports, has become the property of the masses. Improving the population through physical education and sports has become a state affair. Thus, gymnastics took a strong place in the general system of physical education of workers in Uzbekistan. It should be noted that for some time the falcon and Swedish gymnastics system that remained from tsarist Russia still existed, but they were soon replaced by a new gymnastics system corresponding to the tasks of the socialist state. Gymnastics begins to penetrate into Bukhara, Kattakurgan, Namangan, Urgench. The greatest development during these years she receives in military units and military schools.

In 1918, the Children's Sports Club was opened, where classes were held in games and gymnastics. The year 1919 is characterized by the fact that, starting from this year, various competitions are held among students, which are called the "Olympic Games".

On October 10, 1920, the First Central Asian Olympiad opened, which was a great event for athletes and a review of their achievements. In the same year, the Ferghana regional military registration and enlistment office published the "Brief program of

teaching physical education". It provided for gymnastics, running, jumping, games. The introduction stated: "Gymnastics has a goal: to give the correct physical development, to correct the body's deficiencies, to develop the ability to coordinate movements, develop discipline and strengthen the nervous system - balancing".

The big event of 1921 was the creation of the Central Council of Physical Culture under the administration of the All-Education Turkfront. His goal was to unite various physical education organizations and to systematically manage the physical education of workers in Turkestan.

In 1928, at the second All-Uzbek Spartakiad, the Tashkent gymnast Mechislav Murashko won the title of absolute champion of the USSR.

In 1933, at the first official gymnastics championship in Tashkent, and then in subsequent years, E. Dakhin, B. Yastrebov, E. Yeletskaia, B. Bogatova, V. Nazarov, N. Kotin, A. Petukhov and others achieved great results. others.

A significant role in the development of gymnastics in Uzbekistan was played by the physical education college opened in 1935 in Tashkent, where Yan Halilovich Murtazin, a graduate of the Moscow Institute of Physical Education, as well as teachers Rashid Khamidov and Umar Asadov, worked as a gymnastics teacher.

In 1936, for the first time in Uzbekistan, a children's gymnastics championship was held. V. Lebedev, and R. Tomilina became champions of the republic. Young gymnasts G. Kust and O. Sokolovskaya achieve excellent results. At the same time, one of the strongest gymnasts of the republic Chervichenko from Samarkand successfully performs.

In 1949, a brilliant gymnast Galina Shamray appeared in Uzbekistan - the champion of the republic, then the honored master of sports, the Olympic champion in the team competition, the first absolute world champion in 1954.

Elvira Saadi - Honored Master of Sports of the USSR, awarded the Order of Friendship of Peoples (1976) and the medal "For Labor Distinction" (1972). Olympic champion in 1972. In the team championship, the absolute champion of the USSR in 1973, the champion of the USSR in 1972 in the free exercise and on the log, 1973 in the exercise on the log.

In 1955, the Uzbek State Institute of Physical Culture was opened, the gymnastics department participated in the preparation and conduct of mass gymnastic performances at all holidays of the republic at the Spartak, Pakhtakor stadiums, in the festivities square.

In 1962, the department of gymnastics and the gymnastic community celebrated the 50th anniversary of gymnastics in Uzbekistan.



Commemorative badges were issued, which awarded coaches, athletes and social activists.

In 1994, Irina Vainer-Usmanova became the head coach of the gymnastics team of Uzbekistan, and under her leadership, many spot-athletes became champions of Asian and international championships. Now she is the head coach of the national team of the Russian Federation. Thanks to her, many Russian athletes have become champions of Europe and the world in gymnastics.

Now our government pays great attention to the development of sports in Uzbekistan. In 2020, on January 24, a decree of the President of Uzbekistan "on measures to further improve and popularize physical education and sports in the Republic of Uzbekistan" was issued. This decree contributes to the development of sports, including gymnastics in Uzbekistan.

In Uzbekistan, all conditions have been created for the development of sports, including gymnastics. Each educational institution has gyms, stadiums and other sports facilities.

Now many athletes who do gymnastics are the champions of Asia and the world. With which our people are proud.

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# AUTOBIOGRAPHY: AN ANSWER TO “WHO AM I?” A STUDY OF HITLER’S *MEIN KAMPF* AND MUSSOLINI’S *MY AUTOBIOGRAPHY*

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## ABSTRACT

*Ideas, incidents and beliefs are the building blocks of one’s identity; it’s in relation to these that we define ourselves. An autobiography not only gives an account of the author’s life but also simultaneously provides an insight into the mind and character of the writer. It helps the writers to craft their identities in the way they perceive themselves and want others to see them as. The word “autobiography” was first used as a hybrid in the 1797 by William Taylor but it had been used as a form by writers long before that. Autobiographies have dramatically evolved over the period of hundreds of years. In the classical period, they were full of self-justification and confessions and were entitled Apologia. With the advent of 18<sup>th</sup> and 19<sup>th</sup> centuries, autobiographies became more romantic in nature where they explored the role and emotions of the writer. The 20<sup>th</sup> and 21<sup>st</sup> centuries saw autobiographies not only from the academic and artistic spheres but also from the world of politics, sports and media, where the individuals had help from ghost writers. This paper explores two autobiographies from the 20<sup>th</sup> century by two of the most hated people in the history of mankind and how through their works they defined their identities and explored their emotions on paper. The autobiographies under study are Adolf Hitler’s *Mein Kampf* or *My Struggle* and Benito Mussolini’s *My Autobiography*. The paper would attempt to explore the early lives of these dictators, the justifications they used for their heinous crimes, the psychological cognitions that shaped their identities and the emotional landscape they present in their respective works.*

**KEYWORDS:** *Autobiography, Fascism, Nazism, Hitler, Mussolini, Political Propaganda*

## PAPER

Two of the most devastating products of the Great War, Adolf Hitler and Benito Mussolini, brought the world to its knees and their countries to another war. The post-World War I period was a time of tumult and exasperation for Germany because of its being on the losing side and the humiliating terms of the Treaty of Versailles. Even though Italy emerged on the winning side of the war there was still a lot of upheaval and dissatisfaction in the country because of the inequitable treatment Italy received at the hands of the Allies in exchange for all the sacrifices it incurred during the war. Italians had lost confidence in their government after the war and the political, economic, and social circumstances were such that the people turned to Fascism resulting in Mussolini’s rise to power as the Prime Minister of Italy in 1922. It was only in 1925 that Mussolini gave up the act of a democratic leader and declared himself *Il Duce*, the dictator of Italy. Hitler put on no such show of democracy although he was appointed as the Chancellor of Germany in 1933; he had long ago become disillusioned with the parliamentary procedure. In 1934, Hitler became the *Führer*, leader, of Nazi Germany vowing to make the country a

world power. Both of these dictators have written their autobiographies revealing their lives, the hardships they suffered and how they shaped their personality, their political ideologies and aspirations and the future plans they had for their respective homelands.

## AUTOBIOGRAPHY

Autobiography as a literary genre emerged from the European enlightenment in the eighteenth century and was considered as one of the highest forms of literary art. Philippe Lejeune, a specialist in autobiography, defines an autobiography as, “a retrospective prose narrative produced by a real person concerning his own existence, focusing on his individual life, in particular on the development of his personality”(14). An autobiography not only gives an account of the author’s life but also simultaneously provides an insight into the mind and character of the writer. It helps the writers to craft their identities in the way they perceive themselves and want others to see them as. Sarojini Jain in her essay “Autobiography: A Literary Genre” explains the need people feel to write their autobiographies,



“The auto-biographer may not realize what his real motivation is. His desire to write his life may arise from a need to clear certain misunderstandings, and justify his past actions, he may wish to confess his misdeeds and seek to communicate the essential nature and truth of his “self.” (203-204)

“Autobiography” as a word was first used by William Taylor in 1797, but as a form it dates back to antiquity. Such works then were entitled *Apologia* and they served the purpose of self-justification. The first autobiography was written by St. Augustine titled *Confessions* between 397- 400 A.D. Later in the eighteenth century Jean-Jacques Rousseau also titled his autobiography *Confessions* and laid the pattern for the modern autobiography. With the advent of eighteenth century, writers started using autobiographies as a means of exploring their emotions on paper. In the twentieth and twenty first century the popularity of the genre encouraged politicians, journalists, philosophers, celebrities and other famous people to write their own life stories and thus came forward works like Nelson Mandela’s *Long Walk to Freedom*, Jean-Paul Satre’s *The Words*, Jessica Savitch’s *Anchorwoman*, Paramahansa Yogananda’s *Autobiography of a Yogi* and many more. People no longer used autobiographies just as confessions but also as an emotional outlet, for self-justification and glorification, and as propaganda for their ideologies: personal and political. Hitler and Mussolini have done the same in their autobiographies.

### **Mein Kampf (1925)**

Adolf Hitler (1889-1945) was a German politician who rose to be one of the cruellest and abhorrent dictators of all times. He was the Chancellor of Germany from 1933 to 1945 and declared himself the *Führer* in 1934. His aim was to make Germany a world power and rid the country of the parasitic Jews; who he blamed for Germany’s defeat in World War I. He was responsible for the implementation and execution of Holocaust causing the death of six million European Jews.

Adolf Hitler’s autobiography *Mein Kampf* or *My Struggles* is divided into two volumes, the first one of which was written during his imprisonment after his failed coup in Munich and the second was written after his release from prison. The first volume, *A Reckoning*, was published in the summer of 1925. It consists of twelve chapters giving an autobiographical account of Hitler’s childhood, his relationship with his parents, his youth, his stay in Vienna, his time in army and the development of his political ideologies. The second volume, titled *The National Socialist Movement* was published in the winter of 1926, is divided into fifteen chapters where Hitler writes about the objectives of the National Socialist Party and his future plans for Germany. It was written in an attempt to make his party favourable. Hitler even went to the length of making

*Mein Kampf* the new bible of Nazi Germany. Throughout the book there is a strong hatred displayed for Judaism and Marxism which he considers are the two biggest threats to Germany as is evident in these sentences:

It was during this period that my eyes were opened to two perils, the names of which I scarcely knew hitherto and had no notion whatsoever of their terrible significance for the existence of the German people. These two perils were Marxism and Judaism. (32)

Hitler begins his autobiography by writing about his background. He was born on April 20, 1889 in Braunau am Inn, a town in Austria-Hungary. He wrote about his father, Alois Hitler, who was a civil servant and his mother, Klara Hitler, whom he loved dearly. Of this relationship he writes, “I respected my father, but I loved my mother.” (29). Hitler described his teen years on a farm in Lam Bach as the “period that I first began to have ideals of my own.” (18) during which he became interested in military and war by reading about them, he mentioned, “I became more and more enthusiastic about everything that was in any way connected with war or military affairs.” (19). He penned about having “more or less strenuous arguments” (19) with his classmates, nowhere does he mention any close friendship during his early years. There was a constant struggle between him and his father because of their difference in opinion regarding Hitler’s career. Hitler’s father wanted him to be a civil servant like him but Hitler wanted to be an artist and he was rather obstinate about it, “No amount of persuasion and no amount of ‘grave’ warning could breakdown that opposition. I would not become a State Official, not on any account.” (20). Hitler had always been headstrong, a personality trait he developed at an early age. His father died when Hitler was thirteen leaving behind his mother to urge him to fulfil his father’s wishes. Hitler described his mother’s death “as a terrible blow” (29) which happened when he was only fifteen years old. Orphaned, he moved to Vienna to study art but was rejected admission on the grounds of being more suited to study architecture for which he lacked the required qualification to be eligible. Hitler then moved to Vienna for several years where he experienced acute poverty and made his living by drawing post cards for tourists. About that period of his life Hitler wrote, “During those years a view of life and definite outlook on the world took shape in my mind.” (32), so it was during this period that he developed most of his world view and came to know about Marxism and Judaism. He became increasingly repulsed by Jews under the influence of the anti-Semitic pamphlets and newspaper articles and this was further fuelled when he noticed that most prosperous folks in Vienna were Jews. His dislike for Jews was further strengthened when the Zionist



movement gained popularity in Vienna. When Germany adopted the British form of parliament, he supported parliamentary democracy and opposed dictatorship but later became disillusioned with the parliamentary procedure because he noticed that the government was a group of corrupt politicians and no single person could be held responsible. In 1913-1914 he joined the National Socialist Movement and started believing that Marxism had to be destroyed to save Germany. When the World War I broke out he applied to the Bavarian regiment. It was this period of serving in the war that had a lasting impact on his life about which he wrote, "I am not ashamed to acknowledge today that I was carried away by enthusiasm of the moment and sank down upon my knees and thanked Heaven out of the fullness of my heart for the favour of having been permitted to live in such a time." (155). Here is a man who instead of weeping for the ruin and destruction that war brings along with it, is thanking for the opportunity to be a part of such massacre. A vital insight into the mind of a crazed person possessed with the thoughts of violence. The turning point in Hitler's life came when he decided to enter politics which was instigated by Germany's thought of capitulating in WWI. He began his political career by working as an army spy in German Worker's Party. Towards the end of the first volume Hitler has discussed racial purity in great detail where he pointed out the superiority of the Aryan race as nation builders and calls Jews an inferior "parasitic" race:

It was not by mere chance that the first forms of civilisation arose there where the Aryans came into contact with inferior races subjugated them and forced them to obey his command. The members of the inferior race became the first mechanical tools in the service of a growing civilization. (267)

He further wrote about how racial mixing is harmful for the Germans as it lowers their pedigree by coming in contact with the weaker races. Only by keeping their blood lines pure can they achieve true greatness that they are destined for, the words fanaticism thinly veiled as necessity for greatness.

What we have to fight for is the necessary for the existence and increase of our race and people, the subsistence of its children and the maintenance of our racial stock unmixed, the freedom and independence of the Fatherland; so that our people may be enabled to fulfil the mission assigned to it by the Creator. (198)

In the second volume of the book Hitler while discussing the problems of post-war Germany blamed the Jews for their downfall. He claimed that German speaking Jews were accepted as Germans by people of other countries but these sly people belong to no country, he reduces them down only to a race of "cunning" and "parasitic" people who can never look

beyond their own selfish motives. He suggested racial purity of the borders and championed the concept of only highest breed being allowed to have children. But it is largely devoted to National Socialist German Worker's Party, the principles of the party and its aspirations. Hitler in detail discussed his own political views and motivations and plans he had in store for Germany, "Germany will either be a world power or there will be no Germany." (601). The greatest political influence on Hitler was that of Mussolini, about whom he wrote:

...I conceived the profoundest admiration for the great man south of the Alps, who full of ardent love for his people, made no pacts with the enemies of Italy, but strove for their ambition by all ways and means. What will rank Mussolini amongst the great men of this earth is his determination not to share Italy with the Marxists, but to destroy internationalism and save the fatherland from it. (607)

#### **My Autobiography (1928)**

Benito Mussolini (1883-1945) played a great role in establishing and developing Fascism in Italy. He was a politician, journalist and leader of the National Fascist Party. He was Italy's Prime Minister from 1922 to 1943 during which he declared himself *Il Duce*, the dictator of the country.

Mussolini's *My Autobiography* was published in 1928 with a foreword by Richard Washburn Child. It is divided into thirteen chapters exploring the author's childhood, the beginning of his political views, his time serving in the war, his struggle to form the National Fascist Party and his rise to power. Child while praising Mussolini writes, "He has not merely ruled a house; he has built a new house." (viii). Mussolini described his childhood home where he was born on July 29, 1883 at Varano Di Costa. He wrote about his connection to the land he was born stating, "Such was the land dear to me because it was my soil. Race and soil are strong influences upon us all." (2). His father, Alessandro Mussolini, was a blacksmith by profession but he was also closely associated with the social causes in Italy, "(His) Heart and mind were always filled and pulsating with socialistic theories." (3). His father's attraction to "International movement" (3) and socialistic beliefs greatly influenced Mussolini's political ideologies in his early years. His mother, Rosa Mussolini, was a primary school teacher, "She was so quiet, so tender and yet so strong." (5). His deep affection for his mother is evident in the sentence, "My greatest love was for my mother." (5). He learnt the value of discipline at school and later studied to become a teacher. There was a desire in him to escape his familiar surroundings and set foot somewhere new therefore after teaching a year at a school, Mussolini went to Switzerland which he described as, "It was in this wander-life, now full of



difficulties, toil, hardships and restlessness that developed something in me. It was the milestone which marked my maturity. I entered into this new era as a man and politician.” (12). He further wrote about his views on how politicians should act, “I detest those who live like parasites, sucking away the edges of social struggles. I hate men who grow rich in politics.” (13). He eventually came back to serve his compulsory military service and was placed in Bersaglieri regiment at Verona but his service was cut short when his mother passed away, an occurrence he described as the “greatest sorrow of my life” (16). He then turned to journalism and became the editor of the socialist newspaper, *Avanti*. His father passed away soon after at the age of fifty seven. Mussolini was forced to resign from his editorial post because of his strong views. He became a member of the Italian Socialist Party but was later expelled from there because of his support of Italy’s intervention in the World War I which he thought was a revolution Italy deserved to experience. He then founded the newspaper *Il Popolo d’Italia* through which he tried to convince Italy to join the war. He wrote about the time he served in the war, “I underwent the hardest trials of my life in mountain trenches” (43) but nothing could break his determination to be the best soldier. He quickly rose through ranks in the army. When the war ended the unfair treatment of Italy made him realise the weakness of the existing political rulers and in 1919 he founded his National Fascist Party. He penned his rise to power as the leader of Italy and his future plans for it, “I want to make Italy great, respected, and feared; I want to render my nation worthy of her noble and ancient traditions. I want to accelerate her evolution toward the highest forms of national co-operation; I want to make a greater prosperity forever possible for the whole people.” (309).

## CONCLUSION

Both Hitler and Mussolini presented an emotional landscape of their childhood and their relationship with their parents. Both of them shared a loving bond with their mothers but the bond they shared with their fathers were different, Mussolini was greatly influenced by his father’s political views whereas Hitler had a strenuous relationship with his. Hitler’s years of struggle in Vienna and Mussolini’s in Switzerland shaped a great part of their personality, ideology and psychology. They supported their country’s participation in war. Through both their autobiographies we learn that they truly found themselves while serving in the World War I and it was after it ended that their political careers took shape. It is evident from their books that they believed in fanatic nationalism which drove them and compelled them to try to restore their countries to their ancient glory. Hitler justified his crimes against the Jews in this book by blaming them for the loss

Germany incurred in the Great War because they controlled the press, economy and by inculcating feelings of anti-nationalism. Mussolini justified his coup on Rome for power and his dictatorship by making it seem that it was the need of the time that demanded a strong leader who would come forward and take charge of Italy and drive it out of the clutches of unemployment, corruption, inflation and communism. They both had a knack for violence from the very start as is evident through the sentence, “...I became more and more enthusiastic about everything that was in any way connected with war or military affairs.” (*Mein Kampf* 19), Hitler had always been fascinated with the idea of war and this grew into his urge to start one when he became the dictator of Germany while Mussolini enjoyed violence from a young age, “I was often beaten but I enjoyed it...” (*My Autobiography* 6).

Their id and super-ego overlapped in such a way that that they both truly believed that they were the chosen ones who had to save their people and lead their nations to glory. Since Hitler wrote his autobiography before he became a dictator there are a lot of unanswered questions about his violent actions leading to the World War II but Mussolini had already been a dictator for six years when he wrote his autobiography and still did not mention the violence he had caused in Europe. In both the books the autobiographical element is limited to the time Hitler and Mussolini develop their political ideologies after that they have simply used their autobiographies as a propaganda to preach their party’s philosophies and justify their heinous crimes.

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# TO THE MATTER OF THE DEVELOPMENT OF THE COMPLEX OF EXERCISES FOR INCREASING SPEECH SKILLS OF STUDENTS

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## ANNOTATION

*This article considers the issue of the effectiveness of communication, verbal communication, as well as communicative competence, which can reflect the professional and personal quality of a medical specialist who masters Russian language standards.*

**KEY WORDS:** *speech communication, competence, professional communication, teaching methods and techniques.*

## INTRODUCTION

The problem of effective verbal communication at a new stage in socio-economic development is especially relevant and significant in the medical field. The educational policy of the state is aimed at improving the quality of training highly qualified medical specialists who are capable of professional growth and professional mobility in the conditions of informatization of society, competitive in the labor market, competent, responsible, fluent in their profession and oriented in related fields of activity, capable of efficient work in specialties at the level of world standards.

## DISCUSSION

Successful interaction of subjects of communication is possible under conditions of effective harmonious speech communication, since the content and form of interaction are realized in communication. [1, p. 345-347]. Speech communication is associated with the linguistic concepts of "language", "speech" on the one hand, and on the other hand with concepts such as "purpose of communication", "subject of communication", "participants in communication". Communicative competence may reflect the professional and personal quality of a medical specialist who knows the norms of the Russian language and professionally oriented speech.

Due to the fact that one of the main components of medical activity is the communicative component, in our opinion the training of medical specialists should be aimed at developing the skills of public speaking, interpersonal and group communication. This includes the ability to be an

"effective" listener, to recognize, analyze and apply both verbal and non-verbal aspects of communication, etc. In medical activities, communicative competence becomes a powerful additional professional resource of a specialist.

One of the factors affecting the level of formation of students' communicative competence is the choice of the right learning strategy. A communicatively oriented strategy of the Russian language course, taking into account the whole complex of sociocultural influences, communicative needs in the educational and professional field, the professional significance of the educational material, the individual characteristics of the group and each student, provides a relatively high level of formation of knowledge, skills and abilities that are significant from the point of view of further education and future professional medical activities. [2, p. 29-32].

An indicator of the development of educational material is an understanding of the content of the text, the ability of medical students to find the necessary information, solve communicative problems: search for special information of interest, selection and extraction of the main information of interest, its generalization and interpretation and memorization.

Systematic work on the development of speech skills increases the level of oral speech, the dialogic communicative culture of students. [3, p. 9-10].

When teaching Russian as second language, it is also necessary to teach students listening to learn to extract information from oral texts and videos.

The communicative needs of students in the development of written language are specific. This dictates the formulation of highly specialized tasks



depending on the needs associated with the conversion of information: verbatim recording, with partial conversion, with a complete conversion of the recorded material, etc.

Communicative-speech competencies, as we see it, occupies a special place in the system of competencies of a future specialist. They are, in a certain sense, are “cross-cutting”, drill in the aspect of professional and general cultural training of a specialist [4, p. 8-12].

Specific relevance of the practice of teaching Russian as second language is the issue of choosing methods for the formation of communicative-speech competencies.

Depending on the level of preparedness and learning objectives the teacher chooses:

- 1) didactic language material;
- 2) teaching methods and techniques;
- 3) the organization of training [5, p. 27-30].

In our opinion, the formation of the competence of professional communication in Russian in the process of medical education will be carried out more effectively if:

- language training is combined with the training of a profession, becoming a component of professional medical training;
- language proficiency is considered as a professional property, as a component of professional - medical communicative competence;
- if integrated training is implemented;
- if the procedural side of training is organized in such a way as to simulate the “natural situations” of professional communication, in accordance with socially communicative role-playing realizations [6, p. 76-80].

We will clearly demonstrate this by the example of a set of exercises we developed for the development of speech skills in medical students.

The grammatical material. Instrumental case. In the Russian language, the following endings of words (various parts of speech, changing by cases) correspond to the instrumental case: -ой (-ою) / -ей (-ёю) / -ей (ею) (мышца / мышцей / мышцею, больной / больною, мной / мною, челюсть, челюстью, верхней / верхнею), -ом / -ём / -ем (черепом / конём / ребром, санаторием), -ым / -им (больным / рабочим), -ыми / -ими (больными, позывными / вашими, синими), -ми (детьми, всеми), -ами / -ями (ножницами, двумястами / гусями, стульями), [-jy] (рожью, пятью), -а (сорокá), -мя (двумя), -у (полтора), Ø (кофе, хаки).

The semantic roles expressed by instrumental case are as follows:

Tool: резать хирургическим ножом кожу (cut the skin with a surgical knife);

The object that undergoes the greatest changes in the course of action and the object of possession: руководить телом (lead the body);

Agent: операция проводится хирургами (the operation is performed by surgeons);

Reason: страдать бессонницей (to suffer from insomnia);

Trajectory: идти обходным путём (follow a detour);

Time: воскресным утром (Sunday morning);

Measure: вливать банками (pour in cans);

Aspect: отличаться умом (to be different in mind);

The use of the case with the primitive prepositions for, above, before, under, s, between expresses mainly the role of the place.

Pretext Tasks

1) *Phonetic tasks*

Say the following words: *иммунитет, чужеродный, гомеостаз, обезвреживание, защитные системы, воспалительная реакция, естественный и искусственный иммунитет (immunity, alien, homeostasis, neutralization, defense systems, inflammatory response, natural and artificial immunity).*

2) *Lexical tasks*

Explain the meaning of the words: *иммунитет (защитные системы организма, работающие против всего чужеродного, объединяемого под общим названием “антигена”, гомеостаз (саморегуляция, способность открытой системы сохранять постоянство своего внутреннего состояния посредством скоординированных реакций, направленных на поддержание динамического равновесия) и др. (immunity (protective systems of the body that work against everything alien, united under the general name of “antigen”, homeostasis (self-regulation, the ability of an open system to maintain the constancy of its internal state through coordinated reactions aimed at maintaining dynamic balance), etc.)*

3) Work on the video "How the human immune system works."

*Movie Tasks*

*Tasks 1*

Watch the video.

*Tasks 2*

Explain the meaning of the following expressions: the immune system, innate immunity, acquired immunity, white blood cells, phagocytes, lymphocytes, bacteria.

*Tasks 3*

Answer questions about the content of the video.

1. What does the text “Immunity” say?
2. By immunity is understood ...?
3. The role of antigen may be ...?
4. Who led the proponents of the theory of cellular immunity?
5. Who led the proponents of the theory of humoral immunity?
6. How many types of immunity exist?
7. What are the types of immunity?
8. What immunity is called specific?

*Tasks 4:*



Using the studied logical-grammatical constructions, make models of speech to the material according to the content of the video.

For instance:

LGK: What is what?

MR: The immune system is a formidable army of cells, tissues, and organs that work to protect your body.

LGK: What performs which function?

Estimated MR: (The immune system performs the protective function of the body).

LGK: What consists of what?

Estimated MR: (The immune system consists of many components, but the main ones are white blood cells).

Tasks 5: Grammar Tasks

1. Write down the medical nouns in Instrumental Case

2. Make sentences with several expressions.

3. Indicate the extra row:

1) на меня, с вами, до тебя, без меня (on me, with you, before you, without me) (with you - Instrumental Case);

2) сказал ему, ко мне, к нему, надо мной (told him, to me, to him, above me) (above me - Instrumental Case);

3) на бумажке, на ногах, с намерением, в бреду (on a piece of paper, on his feet, with intent, delirious) (with intent - Instrumental Case);

4) одну статью, на похороны, сознает ошибку, карандашом (one article, for a funeral, recognizes a mistake, in pencil (in pencil, etc.).

4. Select a medical term in Instrumental Case

5. Select a medical term ending in Instrumental Case

6. Put the expressions in the correct case:

Самым деловым вид (видом - Т.п.); с чуть приметным оттенком (оттенком - Т.п.); с нахально-вызывающею усмешками (усмешкой - Т.п.); с повеселевшим лицом (лицом - Т.п.); с уж слишком серьезным вниманий (вниманием - Т.п.); с выделанным раздражениями (раздражением - Т.п.). 7. 7. What medical terms do you most often use nouns in your work or when writing documents (using instrumental). Translate them into Russian.

## CONCLUSION

Thus, we can conclude that when teaching Russian as a second language, it is necessary to develop students 'communicative-speech competencies, which in turn requires the development of a set of exercises for developing students' speech skills. Without communicative-speech competencies, a complete process of assimilation and transfer of knowledge is impossible.

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## THE ROLE AND APPLICATION OF INFORMATION TECHNOLOGY IN THE LEARNING PROCESS

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### ABSTRACT

*This article deals with the role of modern information technologies in the learning process. The use of information technologies makes the learning process interesting and productive, provides a differentiated approach to learning, makes it possible to objectively and timely monitor and summarize results. Also, modern information technologies allow teachers to change the content, methods and organizational forms of training.*

**KEYWORDS:** *information technologies, learning process, electronics, computerization, Informatization, distance learning, virtual learning, telecommunications, computers.*

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### DISCUSSION

The development of the information society is inextricably linked with the growing need for each person to constantly improve their skills, update their knowledge, and develop new types of activities. This trend has led to the question of changing the very paradigm and model of education. There was a need to ensure that education is adequate to the dynamic changes taking place in nature and society, the entire human environment, the increased volume of information, and the rapid development of information technologies.

The entry of humanity into the era of the information society has caused the change of the established motto "education for life" to the new motto — "education for life". Qualitatively new characteristics of an innovative educational paradigm, is to focus on developing personality, the transition from the reproductive model of education to a productive, humanistic, culturally oriented; diversity and variability, activity-based character education. The most important component of the new paradigm of education is the idea of continuous education, covering all forms, types and levels of education.

The implementation of the idea of continuing education is aimed at overcoming the main contradiction of the modern education system—the contradiction between the rapid growth of knowledge in the modern world and the limited opportunities for a person to acquire knowledge in the learning process. This contradiction forces educational institutions, first of all, to form the ability to learn, to extract information, to extract the necessary knowledge from it. However, to do this, the teacher must not only own the basics of information knowledge and skills, but also be professionally ready to broadcast them [1, 2005].

The current stage of development of society poses a number of fundamentally new problems for the education system due to political, socio-economic, ideological and other factors, among which we should highlight the need to improve the quality and accessibility of education. Increasing academic mobility, integration into the world scientific and educational space, creating optimal educational systems in economic terms, increasing the level of University corporate identity and strengthening ties between different levels of education.

One of the most effective ways to solve these problems is to develop modern educational



technologies. A huge number of pedagogical technologies have been developed: problem-based learning technology (V. F. Shatalov), integrated technology (V. V. Guzeev), human-personal technology (sh. a. Amonashvili), technology of personality-oriented education (E. V. Bondarevskaya), etc. New educational technologies are not born as a fashion statement, but as the result of scientific research, due to scientific discoveries.

Currently, the concept of pedagogical technology is firmly embedded in the pedagogical lexicon. But there are great discrepancies in its understanding and use. Pedagogical technology is often defined as an ordered set of actions, operations, procedures that instrumentally provide a predictable and diagnosable result in changing conditions of the educational process (the state standard of higher professional education). In UNESCO documents, learning technology is considered as a systematic method of creating, applying and defining the entire educational process of teaching and learning, taking into account technical, human resources and their interaction. The technological nature of the educational process is to make the educational process fully manageable.

The formation of new technologies should be carried out in the following sequence: determining opportunities through basic research; determining effectiveness through applied research; analyzing the needs and demand among teachers and students; developing documentation, software and methodological tools; training teachers; replication and distribution of software tools.

The emergence of new information technologies associated with the development of computer tools and telecommunications networks has made it possible to create a qualitatively new information and educational environment as a basis for the development and improvement of the education system. The task of technology as a science is to identify a set of patterns in order to determine and use in practice the most effective, consistent educational actions that require less time, material and intellectual resources to achieve any result.

Taking into account the transition to a global informative society and the formation of knowledge, the adequacy of education to the socio - economic needs of the present and future can only be said if its modernization is based not only and not so much on organizational innovations, but on changes in substance - in the content and technologies of training personnel and the preparation of scientific research. As a social institution that reproduces the intellectual potential of the country, education should have the ability to advance development, meet the interests of society, a particular individual and a potential employer.

Information technologies in a broad sense should be understood as a set of tools and methods for collecting, processing and transmitting data (primary information) to obtain information of a new quality about the state of an object, process or phenomenon (information product) [1, 2005].

A retrospective analysis of the process of introduction and use of computer equipment and computer technologies in the educational process allowed us to identify three stages of Informatization of education (electronics, computerization, Informatization of the educational process) [2, 2001].

**The first stage of Informatization of education** (electronics) was characterized by the widespread introduction of electronic tools and computer technology in the process of training students first in technical specialties (late 50s-early 60s), and then in Humanities (late 60s-early 70s) and involved training in the basics of algorithmization and programming, elements of logic algebra, mathematical modeling on a computer.

This approach provided for the formation of students' algorithmic thinking style, mastering some programming languages, and mastering computer skills using computational and logical algorithms. There latively low performance of computers at that time, the lack of user-friendly, intuitive of ware tools for the average user (not a programmer) and having a friendly interface did not contribute to the wide spread use of computer technology in the field of Humanities education.

**The second stage of Informatization of education (computerization)** (from the mid-70s to the 90s) is associated with the emergence of more powerful computers, software that has a friendly interface, and is characterized primarily by the use of human-computer dialog interaction. Students as subjects of the educational process for the first time got the opportunity to work on a computer, interact with models - "substitutes" for real objects and, most importantly, manage the objects of study. Computer-based educational technologies allowed us to study various (chemical, physical, social, pedagogical, etc.) processes and phenomena based on modeling. Computer technology began to act as a powerful means of learning as part of automated systems of various degrees of intelligence. In the field of education, automated systems of training, know ledge control and educational process management have become increasingly used.

**The third, modern stage of Informatization of education** is characterized by the use of powerful personal computers, high-speed high-capacity storage devices, new information and telecommunications technologies, multimedia technologies and virtual reality, as well as a philosophical understanding of the ongoing process



of Informatization and its social consequences [3, 2004].

Information technologies, in contrast to other technologies, are constantly undergoing changes caused by the rapid development of computer technology and modern communications. Therefore, today we should not just talk about information technologies, but about modern information technologies. They are based on such scientific achievements as: the emergence of a new medium of information storage on computer-readable media; development of communication means, providing delivery of information to almost any point of the globe without significant restrictions in time and distance, wide coverage of the population means of communication; dynamic development of microprocessor technology, providing the ability digital information processing; the possibility of automated processing of information using a computer according to specified algorithms; the emergence and rapid development of the Internet [4, 1999].

The use of information technologies makes it possible to significantly speed up the process of searching and transmitting information, transform the nature of mental activity, and automate human labor. It is proved that the level of development and implementation of information technologies in education determines its success. The basis of information technologies is information and telecommunications systems based on computer tools that represent information resources and hardware and software that provide storage, processing and transmission of information over a distance.

Information technologies turn learning into an exciting process with game elements, and contribute to the development of students' research skills. The technology of conducting classes using modern technical means and new information technologies trains and activates memory, observation, intelligence, concentrates the attention of students, makes them evaluate the information offered in a different way. The computer in the classroom significantly expands the possibilities of presenting educational information. The use of color, graphics, sound, and modern video equipment allows you to simulate various situations and environments. This helps to increase students' motivation to study.

The use of information technologies makes the learning process interesting and productive, provides a differentiated approach to learning, makes it possible to objectively and timely monitor and summarize results. The penetration of modern information technologies also allows teachers to qualitatively change the content, methods and organizational forms of training. An example of the use of information technologies in universities is the widespread use of software for educational purposes. These include: training programs, electronic textbooks,

etc. Training programs are designed for independent work of students. They contribute to the maximum activation of students, individualizing their work and giving them the opportunity to manage their own cognitive activity. And electronic textbooks include didactic, methodological and informational reference materials on the academic discipline, as well as software that allows you to use them in a comprehensive manner for self-learning and control of knowledge.

With the development of information technologies, a system of distance education appeared, which supplemented full-time and part-time forms of education and provided an equal opportunity to receive education for all categories of citizens. This opportunity is valuable for people who are physically unable to get to their place of study. This category includes people who have movement restrictions due to health reasons; people who live in remote localities, or who are receiving a second higher education.

Modern information technologies also play an extremely important role in Russian as a foreign language classes. The use of information technologies in teaching Russian to students increases the effectiveness of teaching, develops motivation, cognitive activity of students, stimulates their independence, reduces the loss of working time to a minimum, and also makes the learning process bright and exciting.

Working in a computer class using modern information technologies in Russian language lessons in national groups allows you to:

- find the meaning of unfamiliar words using a variety of dictionaries, reference books, and encyclopedias;
- get the necessary information about the country of the language being studied;
- get acquainted with the biography and work of Russian writers and poets;
  - read excerpts from literary works;
  - select additional material on the topic under study;
- create a multimedia presentation on the topic;
- find a review of a literary work, the work of a poet or writer of a certain literary direction;
- write a report or essay on the topic under study;
- check your level of knowledge by completing test tasks.

Thus, active and effective implementation of information technologies in education is an important factor in creating an education system that meets the requirements of the information society and the process of its reform, improves the quality of training and education, allowing students to successfully and quickly adapt to the environment and on going social



changes, accumulate and realize the innovative potential of the educational process participant.

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## SOCIAL FACTORS INFLUENCING THE DEVELOPMENT OF VIRTUAL-PEDAGOGICAL CULTURE OF PARENTS

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### ABSTRACT

*This article analyzes that the development of the virtual pedagogical culture of parents in the information society is today one of the most pressing problems. Concepts such as virtual culture, media culture, virtual literacy, media literacy are also highlighted, and they are likened to a protective shell against information and mass violence. The culture of information selection and accurate evaluation (virtual culture) is one of the most pressing issues in the world media today, and the search for a solution to this problem shows that every parent in the family has a virtual pedagogical culture.*

**KEYWORDS:** *Virtual, media, information, computer, internet, facebook, television, parent, teacher, upbringing, culture, literacy, virtual control, children, national pride, family, school, makhalla (neighborhood).*

### INTRODUCTION

In order to ensure the implementation of the Decree of the President of the Republic of Uzbekistan dated May 3, 2019 No. PP-4307 "On additional measures to increase the effectiveness of spiritual and educational work," as well as to educate young people in independent life as broad-minded, active citizens, the Resolution of the Cabinet of Ministers "On measures to implement and approve the concept of continuous spiritual education" was approved on December 31, 2019. This Concept is aimed at increasing the knowledge of parents on upbringing, pedagogical culture, special attention is paid to the formation of a healthy worldview against the background of biased information disseminated through the world media, including the Internet, moral depravity, destructive ideas that mislead youth. In addition, in order to constantly expand the knowledge of parents about methods of raising children in the family, the following will be established: the effective use of domestic teaching methods and the advanced achievements of modern teachers in raising children; conducting trainings for parents on the development of age-related social competencies in children at "Parent Universities" in the makhallas (neighborhood); under the heading "School of Education" the creation of television

programs for parents and teachers, a series of didactic materials, for children and youth, such as bright, colorful manuals, multimedia products decorated with drawings; creation and distribution of a series of multimedia presentations based on the "Book of Young Parents" and other teaching aids in order to popularize the positive experience gained in the practice of continuing spiritual education. Targeted advocacy events and trainings will be held aimed at improving the socio-spiritual environment in society, organizing preventive measures aimed at creating ideological immunity against various spiritual threats contrary to our family values, creating a healthy educational environment in families in different regions and training parents upbringing methods. [1].

On February 12, 2020, a video conference chaired by the President of the Republic of Uzbekistan Shavkat Mirziyoyev was held on the issues of improving the mahalla system, strengthening peace and order in mahallas, crime prevention. In this video conference, President Sh.M. Mirziyev noted that, unfortunately, a system to prevent situations that negatively affect the socio-emotional environment in the family was not created, as a result, the number of dysfunctional families, crime in some makhallas increased, and suicide was also widespread among women and nonages. At the



meeting, problems related to family divorce, youth health, premature birth, and spiritual and moral education were noted [2].

### THE CONTENT OF THE ISSUE

In the modern information society, the problem of education is one of the most complex and widespread problems, and it is an axiom that it is important to fulfill this enormous responsibility in cooperation with family, society, school and the general public.

Doctor of Pedagogical Sciences, Professor M. Kuronov in his book "Want the child to be happy ..." said: "Ignoring the positive qualities of upbringing, such as national pride, good faith, decency, ideological consciousness, patriotism, communication culture, as well as a number of other shortcomings, leaves serious complications in the human destiny that have developed in our eyes, leading to vices such as indifference, carelessness, lightheartedness, selfishness", which correspond to actual problems. (4.261Б)

The word "virtual" from the Russian-Uzbek dictionary, we can know such meanings as it can probably exist in certain conditions, or as virtual being, reality (creating conditions similar to real conditions using computer devices), which is reflected by computer means. The word culture, in Arabic, means a city, a place, a center of development, and represents a specific form of human activity that is reflected in nature and relationships. Culture reflects the way of life of an individual, a social group or a society. Hence, virtual culture is understood as human activity in interactions reflected through computers, media. Phrases like virtual culture are virtual literacy, media culture, media literacy, which is like a protective shell against information and mass violence. We can also think of it as digital literacy in media promotion.

Media literacy - "the ability to master, analyze and create media texts".

Media literacy is the ability to use, analyze, evaluate and transmit messages in various forms.

Media literacy - coded and representative systems used in the media, the process of training a media literate person in the modern world with the ability to understand media from a sociocultural and political point of view, understand, create, analyze and evaluate media texts; the life of such a person is associated with a full understanding of civil liability.

Some researchers also interpret media literacy as a component of media culture. For example, N. Rustamova defined the concept of "personal media culture" as follows: "Personal media culture is a necessary part of personal culture, based on getting to know the types of mass media distributed through them, selecting, sorting, analyzing and evaluating them, acquiring theoretical knowledge, practical skills, competencies in relevant

areas, the sum of skills to skillfully apply this knowledge in professional, everyday, cultural, spiritual and educational (practical) activities" [5. 106].

Continuing his opinion, the researcher came to the conclusion that the assimilation of media culture by an individual is not a spontaneous process, but based on the evolutionary development in several stages of the general essence of the formation of media culture in an individual: media literacy, media literacy, media skills and media competence.

Today, the culture of information selection and correct evaluation (virtual culture) is one of the most pressing issues in the world media. In seeking a solution to this problem, we believe that first of all every parent in the family should have a virtual pedagogical culture. To do this, each parent must teach their children to use the media (TV, computer, internet chat, forum, Facebook, Twitter) effectively, first of all, consciously. The above-mentioned media are the means of communication, through which people have the opportunity to talk to each other and communicate in a variety of ways. They use these opportunities to carry out their activities, gain information, gain knowledge, exchange experiences, conduct commercial and advertising activities, such as trade. This is definitely evident in every area. On the one hand, it allows for distance learning and develops intellectual, creative skills, on the other hand, we can see that real communication is becoming a virtual form. Now parents, basically, virtually communicate and control their children, rather than face to face. By the will of fate, parents, children working or studying abroad at a distance communicate only in virtual form. If we consider these as certain manifestations of today's information society, then social welfare, social harmony should serve in the formation and upbringing of a perfect human personality, and the virtual culture of society should also develop and improve. But unfortunately, there are also some problems with the use of the media.

Today, haste in writing SMS and spelling errors in messages are becoming more common among students. Confirmation of this can be errors in offers on social networks, such as "Join my channel, it's easy to go out if you don't want it", "Children, look, spread it among the rest" and "Send them to other children". Today, such a situation, which is sad and ridiculous, is a departure from the Uzbek literary language by mixing dialect and slang words, which indicates a decrease in general literacy.

Since children are used to seeing various "jokes" in social networks every day, a feeling of solidity becomes a habit, imitation and a state are formed in which a person does not think about the consequences of his actions. There is a superficial view and indifference to the changes taking place in nature and society, to those around them, to life. A



striking example is a fact that today, instead of helping those in need (eg natural disaster, fire, car accident, etc.), young people get “likes” by shooting them on video and posting them on the Internet.

It is possible to continue such problems related to mobile phone encountered in life. Aside from the organizers of websites that prepare and disseminate information that contradicts our national and religious traditions, we consider it a big mistake of parents who create the conditions for these problems and fail to control them in time.

In today's world, where various contradictions are growing, the time itself shows that it is more important than ever to strengthen the spiritual immunity of our youth, to spend their free time meaningfully.

It is known that the future, prospects and prosperity of any country or society are in the hands of young people. But it is not hard to imagine how the state, society, or family, which falls into the hands of the youth who are irrigated by the fanatical ideology that is a member of various destructive currents, could fall into disrepair. Therefore, in order to protect young people and protect them from the above-mentioned destructive vices, it is necessary for parents to have a virtual pedagogical culture.

We are not saying that “children should not be given modern computers or mobile devices or they should not be allowed to access social sites”. In this regard, the first President of Uzbekistan IA Karimov in his book "High spirituality is an invincible force" said: “Today, our young people receive a variety of information and data not only in educational institutions, but also through radio and television, the press, the Internet. In such a situation, when the global information space is expanding, to surround the minds of our children with one-sided education, to shield them with an iron fence and to prohibit them from reading anything and to visit some sites, no doubt does not meet the requirements of the time or our noble goals. After all, we have set ourselves the task of building an open and free democratic society in our country, and we will never back down from this path”[3.p.71].

Conclusion. Based on the above information, we can recommend the following to parents:

Parents need to get their children used to respecting teachers and mentors;

parents should teach their children to respect their peers, parents, neighbors;

parents should inform their children of their ancestors, family trees;

parents should buy their children mobile phones only when it is absolutely necessary, and in this case not the latest model. The fewer functions of these tools, the better for the future of children;

if children have modern mobile devices, strictly agree on the time, conditions and duration of their use, and strictly adhere to this agreement,

setting restrictions if necessary;

when parents are not using mobile phones, make sure that they are at least 20 cm away from children and at night at a distance of 3 m;

parents should recommend to their children games that are placed on computers and mobile phones that are not only mechanically played with finger movements for fun, but also related to memory and logical thinking, and in the process control the children's time regimes;

every parent should take the time and opportunity to seriously monitor their online activities, taking into account the interests of their children;

it is necessary for every parent to create conditions for their children to receive timely education, play sports, eat and rest.

According to Professor M. Kuronov, today children live two different lives. The first is in real life and the second is in virtual life. Virtual life is preferable for them, so they can be called Google generations (children). After all, parents should not allow their children to become descendants of Google.

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# STATUS AND RESPONSE TILL THIRD STAGE OF 2019 NOVEL CORONAVIRUS DISEASE (COVID-19) IN NEPAL

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## ABSTRACT

*An outbreak of severe acute respiratory syndrome coronavirus infection occurred in Wuhan, China at the end of December 2019 and spread of this virus already reached to almost 210 countries around the world. WHO declared COVID-19 as 'global pandemic' on 11 March, 2020 and accounted South Asia as the high-risk region. Nepal, a landlocked country bordering two most populous countries, India and China, was expected to have high number of cases of COVID-19 due to its proximity to the highly infected country China, and lately spreading country India. Also, many of the Nepali people are engaged in the businesses related with China and India. However, there has been very few reported cases in Nepal. The first case was reported on 24<sup>th</sup> January 2020, one and half months after the first case was confirmed in China. It took almost three months for the number of cases to reach 45 and to kick off the community spread stage of the pandemic. This research presented the detailed situation of the cases, testing facilities, quarantine and isolation, hospital, and nursing care etc. before the start of Community Transmission stage in Nepal. The scenario has been represented graphically and the condition of other South Asian nations has also been compared and visualized. The steps taken by the government, individuals, and other organizations are also highlighted. This paper also provides the concrete data and their analysis about the pandemic which can be helpful not only for the current but also for the future pandemic controls.*

**KEYWORDS:** COVID-19, coronavirus diseases 2019, global pandemic, South Asia, Nepal

## 1. INTRODUCTION

An ongoing outbreak novel coronavirus (COVID 19), was reported in Wuhan, Hubei province, China (1). In the beginning, this disease was known as “2019 novel corona virus” or “2019-nCoV”. Later, WHO named this virus as COVID-19 where 'CO' stands for 'corona,' 'VI' for 'Virus,' and 'D' for 'Disease'. COVID-19 is respiratory illness associated with mild symptoms of fatigue, fever, common cold, dry cough, & shortness of

breath which is usually transmitted from an infected person through droplets of saliva or discharge from the nose when someone coughs or sneezes (2). The present course of this virus is unstoppable and rapidly spreading worldwide as the vaccines and specific medications are not available so far. Only way to save lives is by isolating the suspected people, monitoring the sign & symptoms, collecting clinical data, travel history, possible diagnostics & applying preventive treatments to reduce the spread of COVID-



19(3). Observing its evolving and transmitting pattern, WHO declared the (4) outbreak a pandemic on March 11, 2020(5). In lieu of WHO guidelines, Nepal, thus, opted for a nationwide lockdown on March 24, 2020. It suspended all the air travel inbound and outbound on March 22, 2020, in the hope of containing its spread inside Nepal. The reason to this immediate response was due to its vulnerable health care services. In case the decision was to be delayed, the consequences would have led to a panic state stressing already vulnerable health care service. The vulnerability of health care services can be interpreted in terms of total available working ventilators count all over Nepal. The figure suggests that there are a total of 263 working ventilators which technically mean 1 ventilator per 114,000 people(6).

Nepal which is a land lock country accounts for a total of 0.37% of the world's population. With a population density of around 203 people per km<sup>2</sup>, 21.4% of the population lives in the urban area whereas 78.6% lives in rural areas. The 44 main cities are the connecting hubs between urban and rural settings. Every year thousands of young Nepalese travel abroad in search of good job opportunities. More than 28% of the total workforce work abroad contributing to 30% of the country's GDP(7). But the figure is mostly underestimated as the workforce outflow through an open border with India is not considered. The informal economy is quite leveraged in terms of its contribution to the nation's GDP. The current attractive workforce destinations for Nepalese workers are Malaysia, Qatar, Saudi-Arabia, Korea, and Japan. Further, more than 300,000 Nepalese students applied to study abroad. Out of which, more than 63000 are currently studying in countries like Australia, Japan, Cyprus, India, China, Canada, the US, New Zealand, and South Korea as per recent 2019 data. This implies the probable influx of the abroad Nepalese would increase the COVID case as the first two patients one male and the other female were the students traveling from Wuhan and France respectively(8).

Nepal allocated a staggering Rs 2.68 billion for tourism infrastructural development through its national budget of fiscal Year 2019/2020 on 29th May 2019 (9). Moreover, declaring Visit Nepal Year, Nepal targeted to welcome more than 2 million tourists in the year 2020. The tourism sector had a total contribution of 7.9% in the country's gross domestic product and it accounted for more than 1 million job opportunities within the country (10). Likewise, if you see the trend of tourist inflow, Nepal welcomed almost 1.9 million tourists in the Year 2019. India alone was huge contributor for Nepal with 254,150 tourists in a single year followed by China at the second place with

169,543 tourists (11). And this trend was expected to increase exponentially in 2020. In retrospect, before the Wuhan was hit by the coronavirus, Nepal was all set to collect more than Rs240.7 billion in revenue for its economy from tourism sector alone. But due to the unprecedented event, Nepal had to comply with WHO guidelines and initiated its nationwide lockdown. This scenario froze the tourism industry completely. From the big chain hotels to mini food markets in the nation, everyone is severely affected by its wave. The norm of social distancing is highly communicated but there is uncertainty on its implementation. The socio-cultural norms and traditions make it hard to exercise. If the corona virus stays longer, Nepal's tourism industry is going to get a huge blow with millions losing their jobs. The new entrants, medium to large tourism industry players will have difficulties to curtail its financial obligations. Nevertheless, for time being the lockdown have barred tourist's inflow decreasing the high risk of sporadic transmission.

On the basis of transmission, the COVID19 pandemic is mainly categorized into three stages, excluding the no cases condition(12). First, the imported cases only (sporadic transmission), which includes the cases seen on people having abroad travel history. This is the phase when the cases are first introduced in a country. After first stage, the virus is seen on the family members, friends, neighbors, or other people who are reported to be in contact with the infected person. This is the second stage of the transmission and it is called Local transmission (cluster of cases). After local transmission stage, the tracing becomes difficult and the spread of the virus starts at the community level. The number of positive cases starts to incline and there exists numerous untraceable chains between the positive samples and the previously infected patients. This stage is called Community Transmission stage and after this, the number of death cases also starts to incline(13). Now onwards, the term "stage 1" refers to Sporadic Transmission, "stage 2" refers to Local Transmission, and "stage 3" refers to Community Transmission in this paper.

Currently Nepal is in Community Transmission stage with high risk of COVID-19 cases spiking in few days to come. We will chronologically outline the status on situation of the cases, testing facilities, quarantine and isolation, hospital, and nursing care etc. before the start of Stage 3 in Nepal here-within this paper. Firstly, Nepal borders with two most populous countries, India and China, were expected to have the high number of cases of COVID-19 in South Asia. Secondly, the influx of tourists, Nepalese students studying abroad and migrant labors would highly penetrate the diseases spread. Thirdly, the unavailability of testing kit and



testing gear would expose larger population to contract the diseases leading to unforeseen deaths in short time. Fourthly, the lack of quarantine and isolation facilities would make spread exponential. Finally, the lack of nursing care and sophisticated health care equipments would add fire to catastrophic situation. Hopefully, with this paper government agency, international/national organization, and private bodies could narrow down their probable option and decide based on the data observed and presented. End of the day, saving single life is million battle won.

## 2. SCENARIO OF WORLD

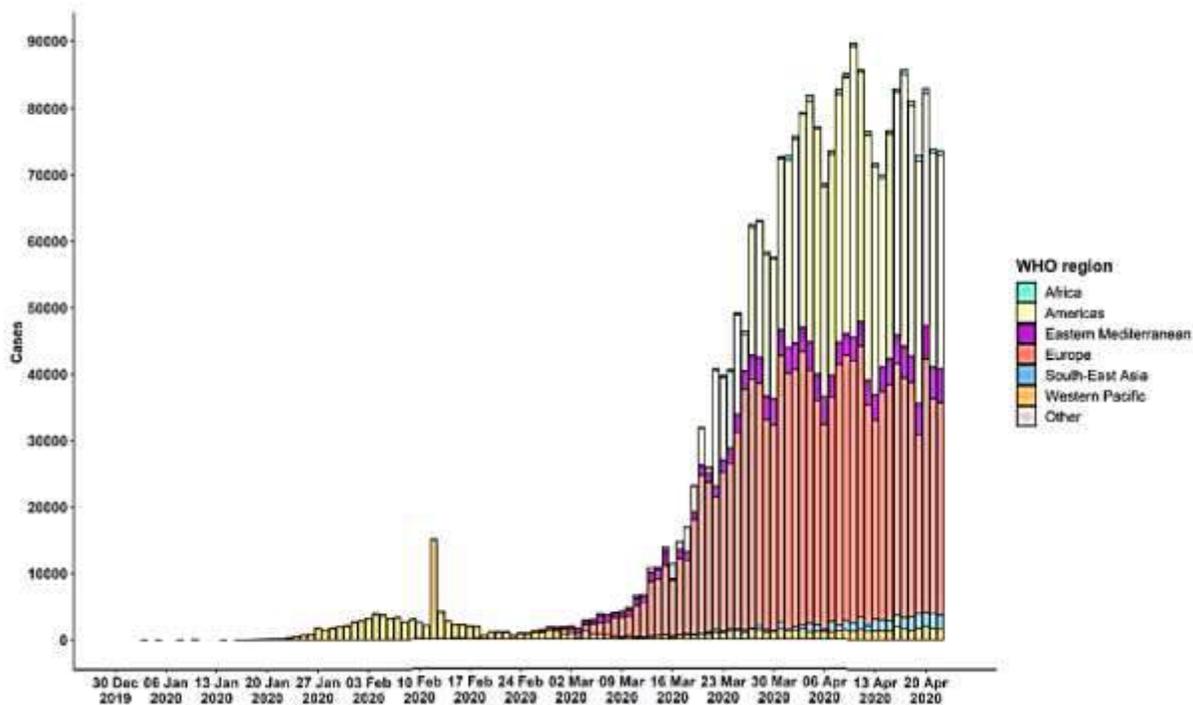
An outbreak of 2019 novel coronavirus diseases (14) in Wuhan, China has spread quickly nationwide. It was first detected in December 2019 in Wuhan city, Hubei province, P.R. China(4). Sohrabi et al. highlighted the excess with the World Health Organization (WHO) declaring the COVID-19 outbreak as a world-wide. They recommend not to travel to high-risk places, maintain distance with the suspected individuals, avoid eating meat from regions with known COVID-19, washing hands frequently, and using preventive personal equipment (15) like the face mask, etc(16, 17). On April 14<sup>th</sup> 2020, WHO confirmed 1,844,863 positive cases and Italy became the epicenter. Among the European countries, Italy initiated the complete lockdown policy by implementing it on 9<sup>th</sup> March 2020. On 14<sup>th</sup> April, 2020, the case count in Italy (159,516) reached almost twice the number of cases in China (83,696). This huge tally consists of 53,724 new cases that were confirmed between a two weeks spell that started on the 1<sup>st</sup> of April, 2020 (18). Andrea Remuzzi & Giuseppe Remuzzi studies suggested concern regarding the Italian national health system's capacity to effectively respond to the needs of patients who are infected and require intensive care for SARS-CoV-2 pneumonia and the percentage of patients in intensive care reported daily in Italy between March 1 and March 11, 2020, the number of patients infected since Feb 21 in Italy closely follows an exponential trend. Their analysis also suggested political leaders and health authorities to allocate enough resources, including personnel, beds, and intensive care facilities, to manage the situation in the next few days and weeks(16, 18). On 14<sup>th</sup> of March 2020, Spain, the second most affected nation in Europe, officially stated an emergency condition. Poland, Czechia goes lockdown 13<sup>th</sup> March 2020 with 29 confirmed cases and 16<sup>th</sup> March 2020 with 298 cases

respectively. On 14<sup>th</sup> April 2020, 6934 confirmed cases and 6059 confirmed cases were seen in Poland and Czechia respectively. Identical cases were confirmed on 14<sup>th</sup> March 2020 in the UK and Netherlands with 802 and 804 in numbers respectively. Dramatically, on 14<sup>th</sup> March 2020, three times confirmed cases have been found in the UK compared to Netherlands (88,625 and 26,551 respectively). The Netherlands became another country to implement lockdown on 16<sup>th</sup> March 2020 with the United Kingdom following the same path from 23<sup>rd</sup> March 2020(18). The study by Chen et al has suggested some positive symptoms in the efforts of preventing and controlling the disease. They suggested the rapidly producible Continuous Positive Airway Pressure (CPAP) device which has already been used extensively in Italy and China (18) .

The vast amount of cases (over 650,000) were identified in the USA in between 100 days of the CoVid-19 onset (19). Scientists are racing to find the best drugs and geographic modeling of the diseases. Bashir et al applied and compare the performance geographically weighted regression (GWR) and multiscale GWR (MGWR) models to locally examine spatial non-stationarity geographic modeling of CoVid-19(18).

Francesca Scarabel et al found evidence that CoVid-19 has more impact on the older populations, it is not unreasonable to expect relatively more severe cases and fatalities in the population overall among persons in the United States and Canada increases with age. Social distancing is recommended for all ages to slow the spread of the virus, protect the health care system, and help protect vulnerable older adults(20, 21).

According to the latest data by the John Hopkins University and Africa Center for Disease Control on COVID-19 in Africa, the breakdown remains fluid as countries confirm cases 24,696, the number of deaths 1,193 with 6,415 recoveries out of 52 African major countries as of April 22. The spread of this contagious infection in Syria, Libya, and Yemen will have a catastrophic impact not only on the citizens of these countries. Coronavirus has been confirmed in all countries surrounding Syria and full alert has been utilized in Jordan, Iraq, and Lebanon as well as those countries surrounding Libya, (Egypt, Algeria and Tunisia) and Yemen (Oman and Saudi Arabia and even the African Horn countries and Madagascar)(4, 22). The epidemic curve across the world of confirmed cases COVID-19 by WHO (20<sup>th</sup> April 2020) is shown in fig.1(23)



**Figure 1: No of cases around the world(24)**

Middle east countries increase COVID-19 pandemic alert and AbdulkarimAl-Rabiaah et al highlight the need to establish psychological support programs for medical students during an infectious disease outbreak(24). Rajib Shaw et al studies the governance, technology, and citizen behavior pandemic in East Asian countries like China, Japan, and South Korea from COVID-19 analyzes peculiar government mechanism to reduce the spread of COVID-19(25).

Abdul Waris et al studies COVID-19 outbreak current scenario of Pakistan is not satisfactory, and the hospital, Psychological Crisis Intervention Model (PCIM), and quarantine facilities are not adequate as required(26). U. U. R. Qureshi et al suggested that Pakistan being the neighboring country of China is at risk, and the travelers from either of the countries should be scanned and suspicious should be in quarantined; the suspicious samples are sent to labs in China and Netherlands for testing. Their studies also suggest that the diagnostic and treatment facilities should be provided in risky areas(27).

Balaji Krishnakumar and Sravendra Rana analyzed that most of the affected people reached India from different parts of the world as like of COVID-19 carrier. They also appraised government announcement based on the international learning to maintain social distancing (1 m), forbidding the social gathering, provision of daily basic needs required for the

livelihood of the people(28). Deblina Roy et al suggested to overcome pandemic COVID-19 via education, and the increase in adult willingness for the preventive aspects(29).

The purpose of this part of study is to present the COVID-19 confirmed cases and deaths data scenario of countries in the world reported to WHO laboratory. On 20<sup>th</sup> April 2020, in Nepal, the number of confirmed cases reached 45(30) and the community transmission of the disease started. This study assures and increases the level of confidence to government of Nepal to apply the preventive measures. Nepal is a country having comparatively less technological development, insufficient medical test kits, inadequate health care and treatment. However, still having the smaller number of confirmed cases is a result of the different preventive measures, which we will discuss in the further sections of this paper.

### 3. COVID-19 in Nepal

The first confirmed case of coronavirus infection in Nepal was reported on January 24, 2020. The 31 year-old man doing Ph.D. in Wuhan returned from China on January 9, 2020. He felt sick and was aware of the coronavirus outbreak in China, so, he self-visited Sukraraj Tropical and Infectious Disease Hospital (STIDH) in Kathmandu on January 13, 2020. He was isolated keeping his travel history in mind and provided



with the supportive treatment along with broad-spectrum antibiotics. The throat swab was sent to the WHO Collaborating Center, Hong Kong. After clinical improvement, he was discharged on January 17, 2020. He was kept 4 days in isolation. On January 24, 2020, the hospital received test results; positive for COVID-19. He was informed with advice to remain under self-quarantine. Subsequent follow-up tests on January 29 and 31 were found Negative for COVID-19 and the patient was declared cured(18, 31).

The following topics cover the major causes of the transmission of COVID19 virus in Nepal.

#### *By Aerial Route*

With the cancellation of all the international flights from March 20, 2020, there were no more chances of additional cases to be transmitted through the aerial route. However, there are people who traveled earlier than such cancellation, who are tested positive. The table below shows the details of such cases. Here, the “Correlated Case No.” column refers to the tracing identification of the cases. The number ‘y’ in the “Correlated Case No.” column for the “x<sup>th</sup>” case indicates that the case ‘y’ is seen concurrently or after case ‘x’ and have the connection with case ‘x’. The connections can be the same family, same locality, and the same flight. The column is left empty if there were no other cases having such a relationship such that other cases were identified prior to the current case.

**TABLE 1. Stage 1 COVID19 confirmed cases until 04/22/2020 in Nepal: From Aerial Route**

S.N.	Travelled From	Arrival Date	Case Confirmed Date	Gender	Age	Case No.	Correlated Case No.
1.	China	01/09/2020	01/24/2020	Male	32	1st	
2.	France	03/17/2020	03/23/2020	Female	19	2nd	
3.	UAE	03/19/2020	03/25/2020	Male	32	3rd	
4.	UAE (via New Delhi)	03/20/2020	03/26/2020	Male	34	4th	
5.	Belgium (via Doha)	03/17/2020	03/28/2020	Female	19	5th	2
6.	Belgium (via Doha)	03/17/2020	04/02/2020	Female	65	6th	2, 5
7.	UK	03/18/2020	04/14/2020	Male	58	15th	16
8.	UK	03/18/2020	04/14/2020	Female	81	16th	15
9.	UK (via Hongkong)	03/18/2020	04/17/2020	Male	27	29th	30
10.	UK (via Hongkong)	03/18/2020	04/17/2020	Female	63	30th	29

The first case seen in the nation was from the Aerial route. The Nepali student, studying at Wuhan--the epicenter of the novel COVID19 virus-- travelled on 9<sup>th</sup> January 2020. Furthermore, 7 out of 10 cases were seen on people traveling from Europe. The remaining two other patients were from the United Arab Emirates (UAE). Excluding the first patient who recovered at the end of January, all other cases are seen on people traveling to Nepal only one week before the shutdown of aerial transportation. Considering the imposition of indefinite flight cancellation, and with the median incubation period of 5.1 days and the symptoms are seen on almost all the infected people within 14 days(32), it is unlikely that any new stage 1 cases will be seen on Nepal which are related to the Aerial route.

#### *By Road*

The open border between Nepal and India extends to 1751 km with India surrounding Nepal from East, South, and West. China is on the north side of the Himalayan nation and due to the mountainous topography, the two countries are connected through only a few locations by the road links. So, the terrestrial travel cases are seen on people who travelled to Nepal through the Nepal-India open border.

Due to open-border policy, cultural similarity, and low travel cost, a large number of Nepali people, especially from western Nepal, migrate to India in search of a job(33). However, due to the coronavirus outbreak in India, they returned to Nepal in thousands of numbers before the border lockdown was announced officially on March 20, 2020. But the border lockdown still left many returning Nepali people waiting to enter the country. Due to open travel access, the exact number of



such people entering Nepal is only known roughly and there is no record of the date they entered. With the incubation period of the virus passed already, it is unlikely that more COVID19 stage 1 cases will be seen

on people who traveled by road. Also, the date when they entered Nepal has not been traced Following table depicts the cases seen on people travelling by road.

**TABLE II. Stage 1 COVID19 cases in Nepal: From India (By Road)**

S.N.	Case Confirmed Date	Gender	Age	Case No.	Correlated Case No.
1.	04/04/2020	Male	21	7 <sup>th</sup>	
2.	04/04/2020	Male	41	8 <sup>th</sup>	
3.	04/13/2020	Male	19	14 <sup>th</sup>	

The table above shows all the patients are male. As most of the job-seeking Nepali population in India are male, depicted data sounds logical. Also, the empty Correlated Case No. column shows that there are no relations between these detected cases.

*Transmission on people without recent abroad travel history*

The table below shows the data of people who have not travelled to any abroad countries recently but still are tested positive on Polymerase Chain Reaction (PCR) test. Nepal entered to Stage 2 of corona outbreak on 4<sup>th</sup>

of April, 2020, when the relative of fourth patient was tested positive on PCR test. This shows that it took 72 days for Nepal to enter stage 2 from stage 1. However, neglecting the first case, considering this as an outlier, it took 13 days for Nepal to enter stage 2 from stage 1. Also, the first community transmitted case was confirmed officially on 21<sup>st</sup> of April when, 11 Nepali citizens of Udayapur district are tested positive on PCR test. It took 30 days for Nepal to enter the third stage of pandemic, neglecting the first case as an outlier. However, considering that data also, it took Nepal 89 days to enter the third stage of pandemic.

**TABLE III. COVID19 cases other than stage 1 seen in Nepal**

S.N.	Case Confirmed Date	Gender	Age	Location	Case No.	Correlated Case No.	Transmissi on Stage
1.	04/04/2020	Female	34	Kailali	9 <sup>th</sup>	4	2
2.	04/13/2020	Female	65	Kailali	13 <sup>th</sup>	10,11,12	unknown
3.	04/17/2020	Male	34	Udayapur	28 <sup>th</sup>	18 to 27, 31	unknown
4.	04/21/2020	Male	18, 18, 20, 33, 40, 41, 41, 52, 58	Udayapur	32 <sup>nd</sup> to 40 <sup>th</sup>	18 to 28, 31 to 42	3
5.	04/21/2020	Female	36, unknown	Udayapur	41 <sup>st</sup> , 42 <sup>nd</sup>	18 to 28, 31 to 42	3
6.	04/22/2020	Male	24, 60, 72	Udayapur	43 <sup>rd</sup> , 44 <sup>th</sup> , 45 <sup>th</sup>	18 to 28, 31 to 45	3



*Transmission seen on Indian Citizens in Nepal*

**TABLE IV. Transmission seen on Indian Citizens in Nepal**

S.N.	Case Confirmed Date	Gender	Age	Location (in Nepal)	Case No.	Correlated Case No.	Transmission Stage
1.	04/11/2020	Male	37	Birjung	10th	11,12,13	1
2.	04/11/2020	Male	44	Birjung	11th	10,12,13	1
3.	04/11/2020	Male	55	Birjung	12th	10,11,13	1
4.	04/17/2020	Male	34, 29, 26, 28, 28, 28, 22, 25, 20, 40, 19	Udayapur	17 <sup>th</sup> to 27 <sup>th</sup>	18 to 28, 31	1
5.	04/18/2020	Male	65	Udayapur	31 <sup>st</sup>	18 to 30	1

Due to the open border, many Indian people visit Nepal for several purposes like business, tourism, religious visits, and so on every year. The first COVID19 case on Indian citizens in Nepal was seen on the 11<sup>th</sup> of April 2020 at Birjung, where three Indian citizens residing together were tested positive on the PCR test. Twelve more Indian citizens were tested positive a week later at Udayapur, notifying the chances of a third stage outbreak. The stage 3 outbreak followed three days from the same place.

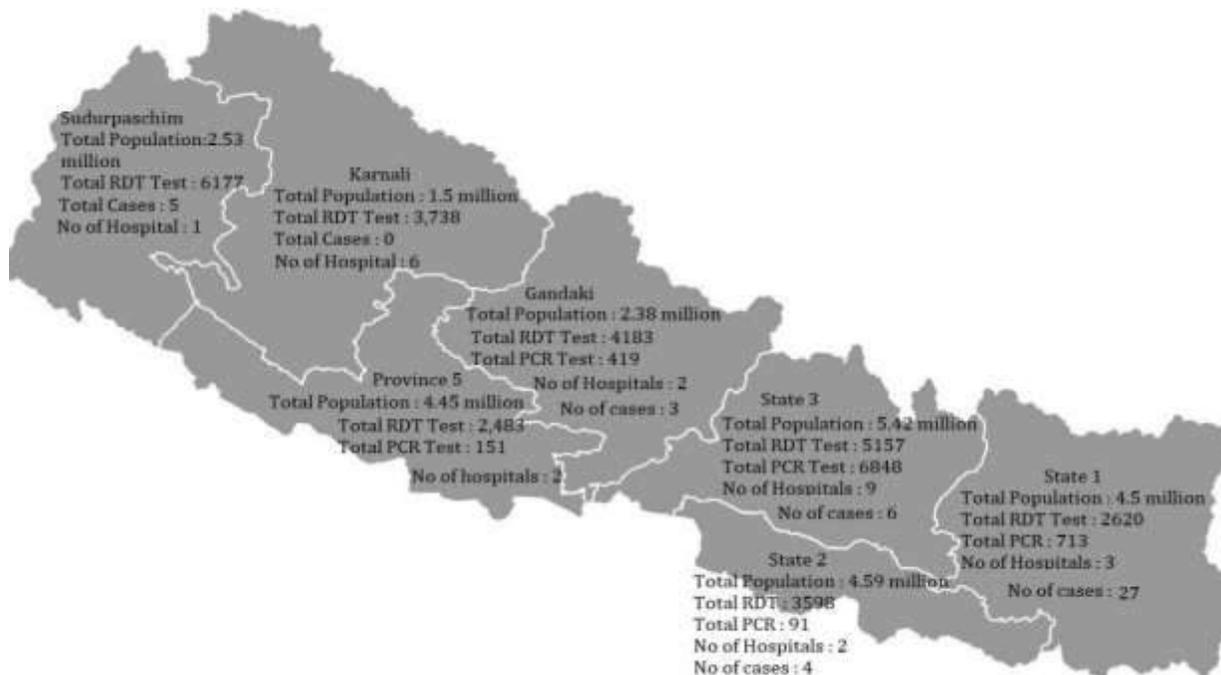
### 3.1 Prevention Infrastructure

#### *Governmental Approach*

As per the report of the Ministry of Health and Population (MoHP) Government of Nepal on 28<sup>th</sup> January 2020, Government instructed all main and satellite hospitals to identify a dedicated space and beds with isolation facilities for COVID-19 cases. The MoHP prepared documents for the investigation and containment of COVID-19, and the thermal scanner was installed at Tribhuvan International Airport(34). The MoHP updated the capacity of National Public Health Laboratory (NPHL) for laboratory confirmatory diagnosis of COVID-19 from 27 January 2020, ensured availability of Personal Protective Equipment at different places and developed and disseminated information education and communication (IEC) materials(35). The capacity of main hospitals in Kathmandu regarding the collection and safe transfer of laboratory samples to NPHL for laboratory confirmatory diagnosis was developed. A high-level technical team has been formed to monitor the situation across the hub and satellite hospitals network in Kathmandu valley.



Date	Important decisions, activities and approach
Jan 17	<ul style="list-style-type: none"> <li>• Screening of passengers landed in Tribhuvan International Airport from China, Thailand and Japan was started.</li> </ul>
Jan 28	<ul style="list-style-type: none"> <li>• Instructed to focus on the process of managing isolation facilities along with preparing medical resources, emergency spaces for COVID-19 cases to all main hospitals.</li> <li>• Installation of thermal scanner at Tribhuvan International hospital for investigating, documenting &amp; preventing COVID-19.</li> <li>• Renovated the capacity of laboratory equipment's for performing diagnosis of COVID-19 cases in NPHL i.e. National Public Health Laboratory.</li> <li>• Survey on 5 Hub Hospital and 13 key satellite Hospitals to maintain proper allocation &amp; isolation facilities for COVID-19 cases.</li> </ul>
Feb 14	<ul style="list-style-type: none"> <li>• Preparation was carried out to bring Nepali citizens stranded in epicenter of COVID 19 outbreak, Wuhan and to keep them in isolation in Bhaktapur and also decided to aware the people and distribute protective kits.</li> </ul>
Feb 16	<ul style="list-style-type: none"> <li>• Evacuates 175 citizens, mostly students, from Wuhan.</li> </ul>
Feb 29	<ul style="list-style-type: none"> <li>• A high-level committee was formed in the leadership of deputy prime minister to fight against COVID 19</li> <li>• All the activities for Visit Nepal 2020 along with its promotion was stopped.</li> <li>• Labor migration to South Korea was also suspended.</li> </ul>
March 1	<ul style="list-style-type: none"> <li>• Announcement of suspension of <u>visa-on-arrival</u> service for China, South Korea, Japan, Italy and Iran.</li> <li>• General public was requested to avoid large gatherings</li> </ul>
March 2	<ul style="list-style-type: none"> <li>• An interim order was issued by the Supreme Court to suspend flights to and from countries affected by COVID-19</li> </ul>
March 9	<ul style="list-style-type: none"> <li>• Visa-on-arrival service suspension was extended to include France, Germany &amp; Spain.</li> </ul>
March 12	<ul style="list-style-type: none"> <li>• On-arrival tourist visa was suspended for all countries, excluding to diplomats and officials.</li> <li>• Land border entry points were closed for third country</li> <li>• Mandatory two weeks self and home quarantines in Nepal was introduced to all who want visit to Nepal.</li> </ul>
March 18	<ul style="list-style-type: none"> <li>• All classes were suspended and examinations from school to universities level were postponed</li> </ul>
March 20	<ul style="list-style-type: none"> <li>• The National Assembly was suspended for indefinite period.</li> </ul>
March 22	<ul style="list-style-type: none"> <li>• Land border with India and China was closed for a week effective from 03/23/2020.</li> </ul>
March 24	<ul style="list-style-type: none"> <li>• The country-wide lockdown started.</li> </ul>
March 29	<ul style="list-style-type: none"> <li>• The suspension of international flights was extended until 04/15/2020.</li> <li>• The country-wide lockdown was extended until 04/08/2020.</li> </ul>
April 14	<ul style="list-style-type: none"> <li>• The countrywide lockdown was extended until 27 April.</li> <li>• The border closures and suspension of international flights were extended until 1 May.</li> </ul>



**Figure 2 : Status of COVID 19 cases and test facilities according to the demographic and political structure of Nepal**

#### *Hospitals and Testing Facilities*

Two types of method have been practiced in Nepal to detect presence of virus on body of human i.e.

#### **1) RT-PCR (Real time Reverse transcriptase- Polymerase Chain Reaction):**

RT-PCR is not a diagnostic test, it is process for research purpose. Worldwide, it is used because there is no other option. When the virus infects upper nasal cavity then, through nose swab which is known as Nasopharyngeal and Oropharyngeal swab which is like cotton bud. The swab is big enough with flexible head & used to take sample & the sample is enough to find out the presence of virus by using RT-PCR. (32). WHO-recommended gold standard for the diagnosis of COVID-19 is the qualitative detection of COVID-19 virus nucleic acid via reverse transcription polymerase chain reaction (RT-PCR)(32). From the investigation in china, RT-PCR is reported to have a sensitivity of 95% and a specificity of 100%; for every 100 COVID-19 positive patients, RT-PCR would have a falsely negative result in 5 patients (36). So, the test result on Nepal by RT-PCR also shows the same unreliability. It gives data currently are you infected or not.

#### **2) RDT (Rapid Diagnostic Test):**

RDT kit works on the idea that our body is already been infected with the virus through blood sampling which is like pregnancy kit. Our Body will produce antibodies Immunoglobulin G (IgG) and Immunoglobulin M (IgM) against the virus & the body will take at least 6 days for producing IgM and 15days for IgG, once when virus infect human body. The antibody will fight against the virus & tries to kill the virus. So, they start producing more & more antibodies to kill the specific bacteria or virus. Thus, it is prove that the virus has already attacked.

Among two antibodies, IgM is known as primary immune response antibodies it is produces by the body when first time our body has been infected with new virus or bacteria i.e. SARS-CoV-1 and SARS-CoV-2 & IgG which is produces for the second time when our body has been infected with the same virus or bacteria. RDT kit will just detect the presence of IgM or IgG antibodies in our body. So, if IgG is more then it means we are infected with couple of times with same virus or bacteria & if IgM is more it means we are infected with new viruses i.e. COVID-19. In this way the RDT kit shows its result & it is only 86% sensitive and cannot distinguish whether it is SARS-CoV-1 and SARS-CoV-2. WHO suggested, it's more appropriate to use the real-time PCR for the



COVID-19 testing rather than Rapid Diagnostic Test(37).

*Private and Individual Approach*

Along with government of Nepal numerous steps including lockdown to contain COVID-19 and prevent its spread into community, different private institution and individuals also shown some initiatives for COVID-19 relief program. Most of these organization keep in mind the health risks the medics looking after

the coronavirus victims are exposed to, they had worked on making personal protective equipment PPE. Although government of Nepal tried to import the PPE and other medical equipment to fight against COVID-19 pandemic, due to the scarcity in the global market, many hospitals and testing center lack of these facilities. So these private organizations and individuals contribute in manufacturing PPE and other facilities in Nepal.



**Figure 3 : Swab collection booth made by NIC(38) (left side); swab collection booth in Korea. (39)**

As single-person booth to test for COVID-19 was launched first time in world from Korea, Social activist and scientist Mahabir Pun' National Innovation Center (NIC) took initiative in preparing PPE in Nepal as a copy of the booth in Korea. Doctors safely swab a sample from the patient inside the booth using gloves equipped on the booth and talk to the patient via intercom. NIC has also taken initiative to manufacture

or repair other medical equipment like ventilator, PPE, N-99 masks, robots etc. After the initiation from NIC other organization like Nepal Engineers Association, Robotics Association of Nepal etc also started making these facilities to help government. Besides these efforts, Non-Resident Nepalese Association (NRNA) also contribute for the providing medical equipment and facilities in Nepal along with other relief packages.



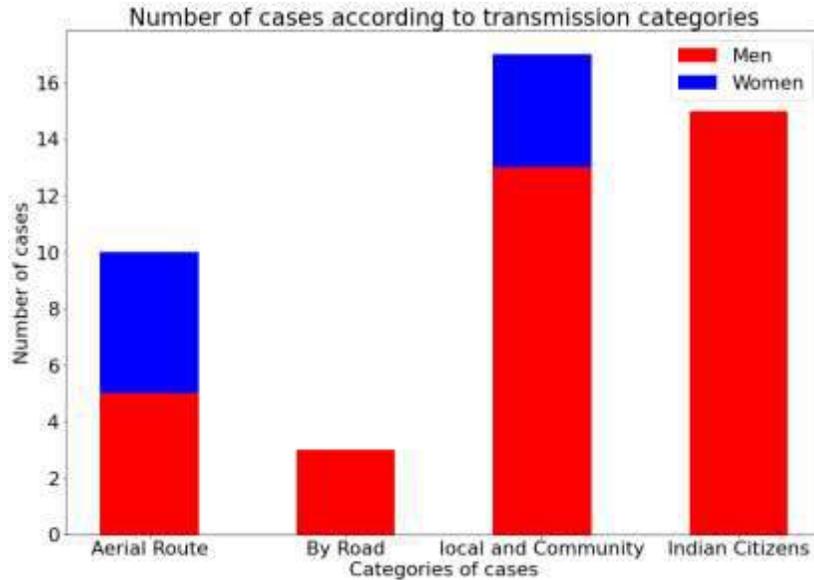
**Figure 4: From left: N-95 masks, ventilator, Aerosol Box manufactured and repaired by NIC (40)**



**4. ANALYSIS AND DISCUSSION**

Our main objective is to visualize the context of Nepal that is seen until the onset of stage 3 or pandemic. The following are the different plots that summarize the

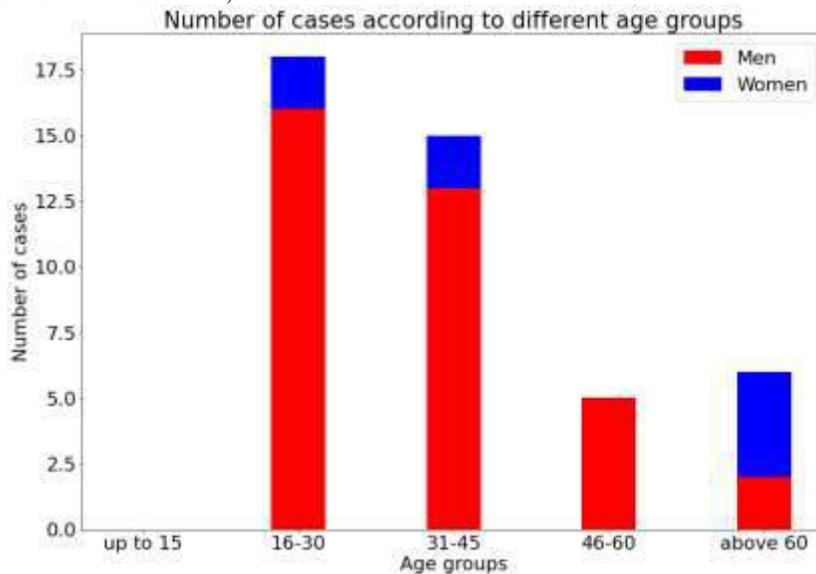
demographic details of the cases that are seen until the third stage outbreak. The python programming language along with the libraries like Matplotlib and Pandas were used for data visualization purposes.



**Figure 5. Graphical representation of cases of each gender with respect to the transmission classes**

Excluding the cases seen on people coming from the aerial route, we observe that the male population comprises the maximum number of cases for each of the categories. In the excluded category, the number of male and female cases are equal. Also, all the stage 1 patients who entered by road and all the positive tested Indian citizens are found to be male. So, until the onset

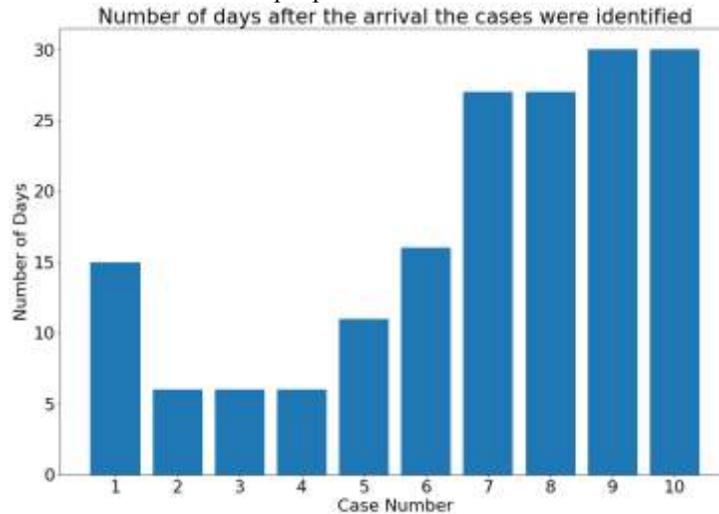
of the third stage of the COVID19 outbreak in Nepal, the total percentage of the male infected population is found to be 80% and the female infected population is found to be 20%. Here, the point to be noted is that all the Indian citizens who are infected came by road through the open border.



**Figure 6. Number of cases according to the age groups**

Another important parameter to be considered is the age group of the infected population. It is seen that the maximum number of infections are seen in the age groups between 16 to 30 years of age. Considering gender, the maximum numbers of male infected people

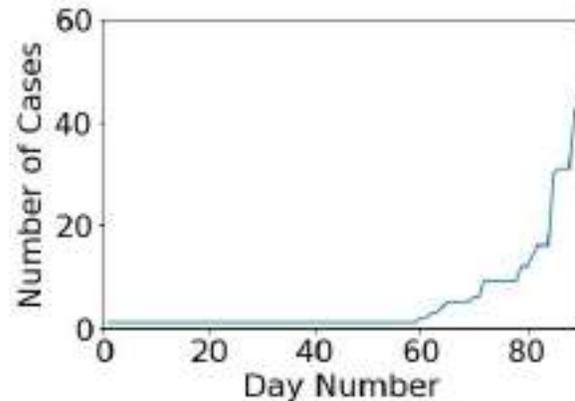
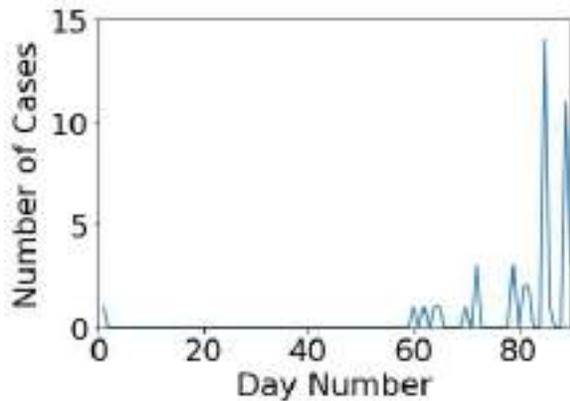
are between 16 to 30 years. In the case of female, the maximum number of patients are found to be over 65 years of age. In this graph, the data of one woman was not included whose age was not identified.



**Figure 7. Graph showing the number of days required to identify the cases after arrival of the paritents from the aerial route**

The graph above shows the number of days taken to diagnose the infection after the arrival of the patients by the aerial route. In general, the patients are diagnosed within a week, which is well inside the incubation period of the virus. However, the outlier

data points also represent that the numbers of patients were diagnosed only after 25 days of their arrival. The condition of all of them were found to be normal and they did not develop any acute symptoms throughout the incubation period.



**Figure 8. (a) Waveform indicating the number of cases per day from day 1 to day 90 (b) Waveform indicating the cumulative number of cases from day 1 to day 90**

The waveform above shows the number of COVID19 cases seen in Nepal from Day 1 (Sporadic Transmission onset) to Day 90 (second day of Community Transmission). It is clear from the diagram that the second case was seen only after 60 days of the first case. However, after the second case, the graph

starts to incline showing the increment in the number of patients. This shows the slow increment in the number of cases in Nepal while comparing to the other countries in the world.



Comparison of scenario in Nepal and Abroad  
 Till the onset of the third stage of the COVID19 pandemic in Nepal, no death cases were seen. However, it is important into take in account the risk factors in the future. The south Asian nations have

almost a similar lifestyle, cultural norms, and economic status of the people. Therefore, we have compared the scenario in Nepal with the other south Asian nations namely Bhutan, India, Maldives, Sri Lanka, Pakistan, Bangladesh, and Afghanistan.

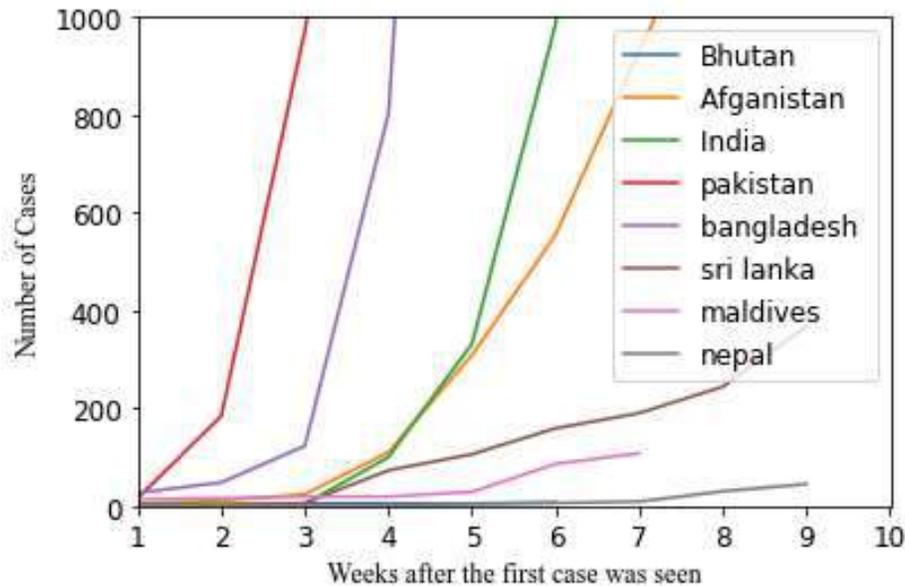


Figure 9. COVID19 cases increment trends in the south Asian Nations for the first 10 weeks

Figure 6 in this section represents the case increment nature seen in all the South Asian nations for the first ten weeks. We can see that in the most populated four countries of the region, namely India, Pakistan, Bangladesh, and Afghanistan, the number of cases

crossed 1000 within the first few weeks. However, four other countries—Nepal, Sri Lanka, Maldives, and Bhutan—have a controlled increase in the number of cases.

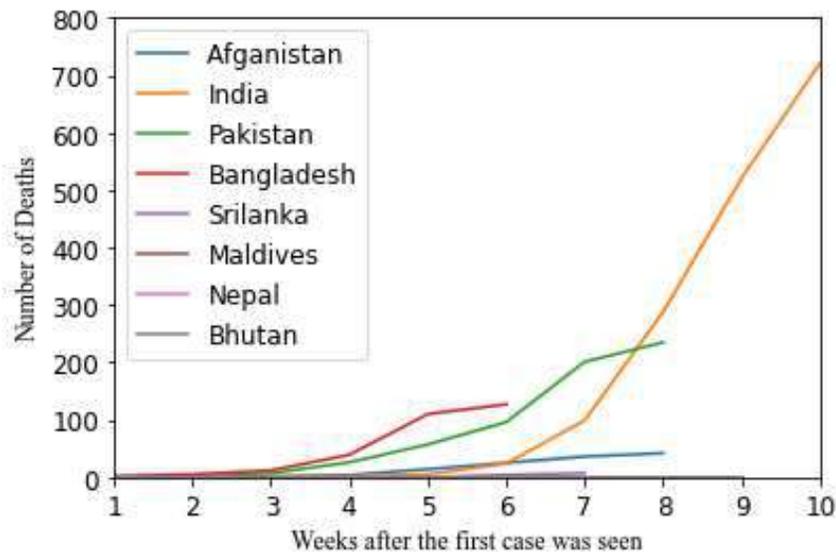


Figure 10. COVID19 cases increment trends in the south Asian Nations for the first 10 weeks



Similarly, it is seen that Nepal, Maldives, and Bhutan are the countries having no death cases until the first 10 weeks of the pandemic. This is the significant information to deal with as in most of the nations around the world, the death cases start to appear within this period.

All in all, Nepal has controlled the exponential increment and delayed the onset of stage 3. On a positive note, the major credits behind this go to the support that the government has received from the people in the implementation of lockdown. However, the lack of test facilities in the first few weeks can be another cause due to which the numbers were significantly low for the first few weeks. But still, Nepal comes in the better half of South Asia in controlling the outspread of the pandemic jointly with Maldives and Bhutan.

## 5. CONCLUSION

Nepal's initial response to COVID-19 was comparably slow but the government accelerated the efforts after COVID-19 was declared as a 'global pandemic' by WHO. Government of Nepal's steps to lock down the nation and shut down the land border and international flights prevented the risk of spread of COVID 19 from abroad countries. Furthermore, the countrywide lockdown afterwards prevented the spread of COVID-19 from the infected people who came to country before lock down. These all steps are in the right direction but very few cases were confirmed till the seventh week after first cases was seen. However, the significant growth in the number of confirmed cases after that shows there was a lack of testing facilities in country. However, the government's efforts are commendable to slow down the spread and delay the community spread. Inferring from the data, Nepal is in a better situation than many other countries in the world and in better position in comparison to many other countries in south Asia. However, aggressive efforts should be taken by the government and the testing facilities should be maximized throughout the nation. In the meantime, government should also extend the health service by hiring a greater number of doctors and nurses, importing PPE, ventilators and other medical facilities to Nepali hospitals. Meanwhile, public should also practice non pharmaceutical methods like social distancing, personal hygiene habits like hand washing, using tissues, and also quarantining the people through contact tracing. If government and public both equally fight against this global pandemic likewise, Nepal can be an example of how a society can respond quickly to a crisis and protect themselves.

## Acknowledgment

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# STUDY OF DIFFERENT DISTRIBUTION MODELS FOR INDUSTRIAL CONSUMABLES AND APPLICABILITY IN INDIA

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## ABSTRACT

*Industrial consumable products are the products which are generally consumed by an industrial organization but they are not used as raw material for final product. The switchgear manufacturers are generally multinational organizations and operate in almost all available markets and what differences the operations in various markets is the Distribution strategy as not only this plays a vital role in organizations efficiency to serve customers but also a critical success factor in organizational strategy and since The products are required by the industry to continuously run their operations and the need is random & difficult to predict hence the availability of these is critical for industries and hence the distribution network of these products becomes a critical success factor for the manufacturers of these products. The purpose of this paper is to analyse and understand the different distribution models adopted by organizations across the world and their applicability in different locations for factors related to the business as well as geography. The paper will also comments on the applicability of these models in India.*

**Paper Type:** Literature Review

## Research Methodology

This paper will be based on the current and historical literature review. The historical data of switchgear manufacturer's distribution model approach and its evolution along with the research of various scholars has been referred as the data source for the same. This paper uses descriptive research methodology and the literatures reviewed projects global outlook as both Indian as well as international research work has been included in the review.

## Findings

The findings of the paper suggest that a decentralized distribution network where the distributors are appointed at multiple locations and they cater to a smaller geography or a local industrial cluster and providing services as well as managing offer of

complimentary products. Since the operating margins in India are lower hence a central distribution or company owned distribution system may not be the most effective one.

## Limitations

The paper is based upon the available literature on the public domain data & websites of switchgear manufacturers along with the current and historical literature available on the internal portals and other online resources. The available resources have been used as secondary data for the paper and hence the future scope can be to extend the research as an empirical research by collecting primary data and drawing conclusion based on the data analysis.



### Research Gap

Switchgear being a field of specialization, has limited manufacturers and the market size is also corresponding to the same hence there are very limited research papers which are focused on the switchgear market. Also the entry of new players and the reconciliation they merger & acquisition in between existing players is also impacting the ever evolving distribution model. The available literature & other publications may not be directly linked with then switchgear market but a bridge is been built between two so that the findings of one can be utilized in other without impacting the sanctity of the subject. The researchers of the paper have attempted to bridge the gap by discussions on available piece of information and how it relates to the achievement of desired results through the distribution model.

### Research Objectives

Distribution channel serves many purposes for an organization & one of them is to ensure the delivery of right product to the right customer, the selection of the appropriate distribution model is the key to success in almost any market and not only this gives an competitive edge to the manufacturer but also acts as an a channel for market intelligence. The purpose of this research is to identify the best suited distribution model for electrical consumable products in India by comparing it against the other prevailing models. The secondary objective is to gauge the importance of this model & reason out the core need for the same as its often considered as an external entity but in reality it is the most important internal strategy and its effective roll out guarantees the success of an organization in market place.. The major research objectives of the paper can be summarized as:

- To critically analyse the different distribution model for electrical consumable products globally.
- To scale the applicability of these in India.

### Research Methodology

This research paper involves exploratory and descriptive research methodology. The researchers have tried to explore as many online and offline research papers and other available and accessible literatures on switchgear manufacturers and the scenario for adoption of this strategy over other available strategies. The aim of the deliberation is to study the distribution models adopted by electrical consumable companies and the cause & effect of the same.

### Literature Review

The literature review has been divided in to various parts where we will first explore briefly about the Industrial consumable products and later we will analyse the globally practised distribution model for this market and at last we will analyse impact and importance of those in context to the model widely used in India..

### Industry & Industrial Consumable Products

Industries are defined as “Economic activity concerned with the processing of raw materials and manufacturing of goods in factories” (Oxford University Dictionary), in simple terms an Industry is an entity which converts raw material to a finished product, which can be sold in market. In order to process the raw material and to manufacture goods the industries install various machines which convert the raw material into finished products by processing, adding additional components, creating finished product & also packing them for transit as well as for final sales. Normally, these machines are capital investment and apart from regular maintenance, these machines does not require reoccurring expense however there are always some products or components which do not bring any value addition to the final products but are extremely critical for the safe and secured operations of these machines. Generally, these products are called the industrial consumables or industrial consumable products and can be used inside machine for maintenance or alongside machine for safety of installations & operating staff.

Specific definition of industrial consumable products is defined by Directorate General of Foreign Trade in India’s Exim Policy (Chapter 9, Clause 9.15) which mentions the This definition clarifies, that the products which are purchased by industries to ensure that their manufacturing operations are continued without any interruption and the same are consumed during the course of manufacturing good are called industrial consumable products however we need to critically analyse the definition by Directorate General of Foreign Trade that these products do not form part of end product. Typically in an industrial set up the consumable products are fuel, lubricants, tools, electrical and mechanical protection devices, paints etc.

### Electrical Consumable Products “Low Voltage Switchgear”

As per international directory of oxford university the term switchgear is defined as” switching equipment used in the transmission of electricity”. Collins English Dictionary gives a little more



elaborated definition and defines switchgear as any of several devices used for opening and closing electric circuits, especially those that pass high currents. Since switchgear is an engineering product hence a more accurate and technical definition can be gathered from the regulatory & governing body for switchgear (International Electrotechnical Commission).

As per IEC 60947 the definition of Switchgear is “generic term covering all low voltage switching devices and the possible combinations which can be derived including metering & protection devices, The assemblies including supports, enclosures and all other accessories which are intended to be used in generation, conversion, transmission & distribution of electric power”. While IEEMA (Indian Electrical and Electronics Manufacturers' Association) defines it as “switchgear is the combinations of electrical disconnect switches, fuses or circuit breakers used to control, protect and isolate electrical devices” (<https://ieema.org/division/mvvhv-switchgear/>)

Switchgear products are globally governed by multiple standard authorities or institutions like International Electrotechnical Commission (IEC) or Underwriters Laboratories (UL) or Canadian Standards Association (CSA) etc, these authorities or institutions are generally region or geography specific like IEC is a European standard body while CSA is for Canada and UL is more for North America region. In India the governing body is Bureau of Indian Standards (BIS) and in the year 2004 BIS agreed to adopt the IEC Standard for LV Switchgear (National Foreword - IS/IEC 60947-1 (2004)) which has resulted in adoption of the IEC standards for Indian as well as imported LV products getting sold & consumed in India.

Apart from the standard authority whose major contribution is setting up the guidelines for design and manufacturing of the products, India also has a national representation organization called Indian Electrical and Electronics Manufacturers Association (IEEMA), which works as an intermediary between switchgear industry and government. It also manages the reporting for various actions including production as well as import - export of Switchgear in India and as per IEEMA LV Division, Low voltage switchgear is one of the well-established industries in India. The estimated volume of the low voltage switchgear industry including the modular switches used for domestic applications would be almost INR. 11,050 Crore. This Industry covers Low Voltage switchgear products such as Air Circuit Breakers, Moulded Case Circuit Breakers, Miniature Circuit Breakers, Residual current devices, Fusegear products, H.R.C fuses, Thermal overload and protection relays, Contactors, Starters, Distribution boards and Factory- built assemblies. The

industry caters to end-user segments such as manufacturing industries, buildings – residential and commercial, agriculture, infrastructure entities, utilities and OEMs. The low voltage switchgear represents 10.1% of the whole electrical market. (Source – IEEMA Divison LV Switchgear - <https://ieema.org/division/lv-switchgear/>)

With the increased production output from existing industrial set up & also a keen focus from Centre and State Governments on industrialization which includes initiatives like ‘Make in India’, the average consumption of consumables has increased in India and this growing trend means the sales for such products will see gradual rise in coming years as well. With each and every new installation the scope of consumables is also expanding and the need of having a network to serve these needs is also on a rise. The new entrants in India are also keen to take a share of this pie and the existing players are also fighting for the same and in order to be relevant in market. Since the market is competitive and consists of potential substitutes and complimentary products hence the business model of distribution makes it even more important.

### Business Models of Industrial Products

Typically there are three kinds of distribution models prevailing in the industrial markets

⇒ Manufacturer owned & operated distribution model:

Typically for very high value equipment or equipment which require extremely high level of application engineering, manufacturers prefer to have their own distribution network and the company employees manage the sales & service network, these kind of networks generally not feasible for consumable products as the revenue per product is extremely low and also the potential replacement concern via the competing products makes it a very competitive market where such operations are not economically viable.

⇒ Centralized / Exclusive or Master distributor model:

For the markets where the average cost of skilled manpower is high and also the transactional margins are significant, this model works well. The primary reasons for this model to work are that manufacturers are focused on their expertise of manufacturing & services while the distribution companies exhibit their expertise of creating & managing the channel for the distribution of the product.

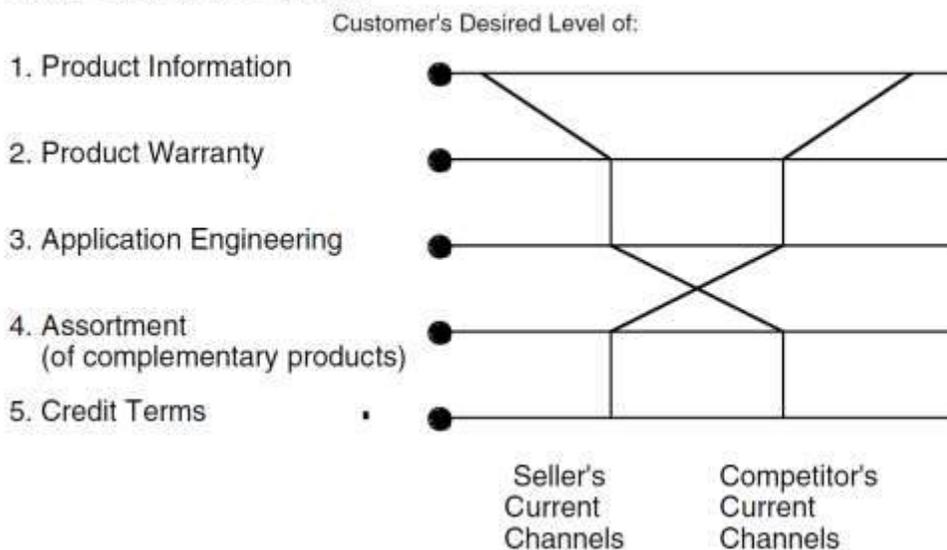


This generally has a fair share of margin for distributor as they have to spend significantly on creation & managing the secondary distribution setup. These distributors are typically one for the whole nation or large regional geography.

⇒ Decentralized / Scattered nation or geography wide distribution:

For the markets where the manpower is available in abundance and even the cost of skilled manpower is not significant it is physically more viable to have decentralized distribution model however it is not the only parameter for selection, for large geographies which require the representation at multiple locations and inventory as well as services are required at multiple clusters, this can be a useful model, since the cost of operations will be lower for distributor and they can operate at a lower margin than the above two cases. The selection is also dependent on nature of

**Large Customer Segment**



**Electrical Consumables Distribution Business Models**

The end user or the consumer of the switchgear is always the industrial application where the product is used as industrial consumable however the route from the manufacturing facility of switchgear to the end user can be different in different countries.

The definition of this route is known as business model & this may include multiple agencies including the manufacturer and the consumer. Now, hypothetically if we can divide the markets or countries in terms of their size then we can have two categories

product and also the market practises in that specific geography.

Since the products which are in discussion are typically the consumables and have characteristics of potential replacement or complimentary goods so in a market of complimentary goods, where distribution costs exhibit economy of scale, its advisable to have multi brand distribution rather than single brand or exclusive distributor (Coughlan, Journal of Research in Marketing 4, p.85-97, 1987)

The selection of distribution model is also dependent upon the maturity of the market as the matured markets have a different characteristics then the markets which are not so matured (Designing channels of distribution, Harvard Business School, 1994), for mature markets the design seem more like the one below while for markets which are still in progression mode will have entirely different characteristics.

where on one side we can have nations with relatively smaller geographical area (say, up to 500 thousand Sq KM) & on other side the nations which are larger than the criteria of 500 thousand Sq KM. With such demarcation we will have a list which will have similarities in their business models as well.

Typically the countries in Europe or other smaller geographies, the industrial installations are located in a specific part of that geography and generally the industries are found in clusters or industrial zones which are the major consumers of



Switchgear hence for switchgear manufacturers the need for coverage is only for a small geography. Under such conditions it is viable for switchgear manufacturers to have a representative office in those industrial clusters and possible to have a warehouse also in those areas to serve the customers.

However in larger geographies (example – USA, China, India etc) there are multiple industrial clusters where every demography has its own specialisation towards industrial installation as well as towards the nature and need of industrial consumable products and that is the reason that in larger geographies the switchgear manufacturers decided to have the well spread network of distributors who represent the switchgear manufacturer in a pre-defined

area or territory and cater to the local or regional industrial consumer product needs.

If we take India as an example then it has 8 large industrial regions (*Source – Industrial Regions: 8 Major Industrial Regions of India by Smriti Chand - <http://www.yourarticlelibrary.com/industries/industrial-regions-8-major-industrial-regions-of-india/14159>*)

- Mumbai-Pune Industrial Region
- The Hugli Industrial Region
- Bangalore-Tamil Nadu Industrial Region
- Gujarat Industrial Region
- Chotanagpur Industrial Region
- Vishakhapatnam-Guntur Industrial Region
- Gurgaon-Delhi-Meerut Industrial Region
- Kollam-Thiruvananthapuram Industrial Region



Fig. 27.18. India - Industrial Regions

### Figure : 8 Major Industrial Regions of India.

Apart from these 8 Industrial regions, India also has 13 Minor Industrial Regions.

#### Minor Industrial Regions

1. Ambala-Amritsar in Haryana-Punjab.
2. Saharanpur-Muzaffamagar-Bijnaur in Uttar Pradesh.
3. Indore-Dewas-Ujjain in Madhya Pradesh.
4. Jaipur-Ajmer in Rajasthan.
5. Kolhapur-South Kannada in Maharashtra-Karnataka.

6. Northern Malabar in Kerala.
7. Middle Malabar in Kerala.
8. Adilabad-Nizamabad in Andhra Pradesh.
9. Allahabad-Varanasi-Mirzapur in Uttar Pradesh.
10. Bhojpur-Munger in Bihar.
11. Durg-Raipur in Chhattisgarh.
12. Bilaspur-Korba in Chhattisgarh.
13. Brahmaputra Valley in Assam.



Now in order to cater all these locations it is essential to have local presence which is impossible for a manufacturer to have and manage, hence the industrial distributors are appointed in such areas that can cater to the regular and reoccurring requirements of industrial consumable products.

In order to validate the statements about the business model of leading switchgear manufacturers, I have taken the below three examples where all of the companies are originated from Europe (France & Germany) where they have the direct transaction business model (as the geographies are smaller in size) and having almost no distributors however their Indian operations consist of manufacturing locations,

distributed warehousing arrangements & wide spread of distributors across India to cater to the needs of the industrial clusters. We have added the example of UAE where none of these have manufacturing base and the business is more about serving the local needs and still for a consortium of seven Emirates the number of distributors are much lesser than India as the concept of centralized distribution works well there. In the same contrast USA which consists of 50 states and works like a group of 50 independent legislatures & trade norms has similar number of distributors as in India as the nature of geography and presence of multiple industrial and user clusters exists there as well.

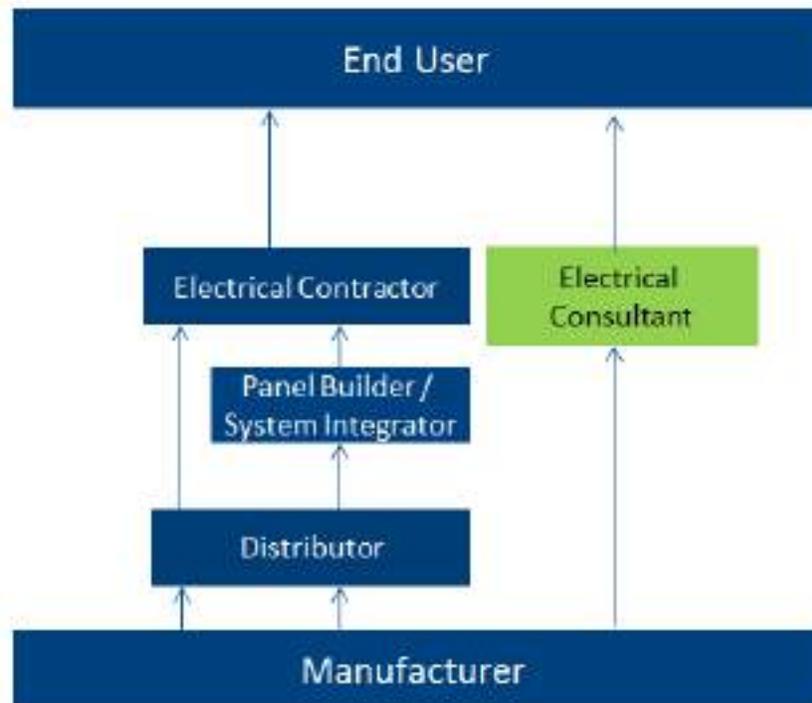
S. No	Company	Distributors in India	Distributors in UAE	Distributors in USA
1	Schneider	599	41	592
2	Hager	178	17	183
3	Socomec	111	3	19

There are many more countries like Malaysia or Thailand or Maldives where the same central distribution works well because of the limited geography and only a few clusters of users however for a country like USA or India needs to have a decentralized and closer to user approach where not only product but associated services can also be made available.

There can always be exceptions in the theory and such exceptions like China where inspite of being significantly larger geography the approach is still centralized distribution model and only a handful companies manage the distribution either by their own outlets or by managing the secondary distribution while

examples like Japan are also present where the geography is small but still a decentralized distribution model is adopted and it works well for Japan. With the mentioned explanation the selection factor is not a arimatical formula but it's a rather complicated method as something which works well at one country may not work well in another.

These examples also demonstrate that in a wide spread nation like India the Distribution Network is the only possibility to serve the customers and the typical model for the same would be as below, which integrates all the components of value chain:



**Figure 6: Typical model of Value Chain / Influencers for Industrial Consumable Products Purchase.**

### Findings & managerial implications

On the basis of the literature review and distribution models adopted in industrial consumable products it can be suggested that the out of the three most common distribution model, India is a place where the decentralized distribution model suits the best as India is significantly large in geography and also has multiple industrial clusters where to maintain the customer service, provide delivery support and also to address potential case of complimentary products by offering alternate products. India being a large nation, the transportation and commute is also a time consuming as well as expensive exercise with a complex network of manufacturing and distribution hubs so it is advisable to have a local inventory partner in shape of a distributor to make it more effective. Financial aspects is also a critical factor as Indian distribution system operates at a single digit margin and as a result they may not have enough resources to spend on development of secondary distribution or provide any value addition to customer, their expertise is to execute a transaction and provide the required consumable or its alternate and under such financial situation their capability to invest in business development activity or dedicated marketing activities is also limited hence the work is well spread between manufacturer who takes care of manufacturing, quality, services and marketing while the distributor is a

commercial entity managing only financial transactions.

### Limitations & future Research

The paper is based upon the available literature on the websites of switchgear manufacturers and the current and historical literature available on the internal portals and other online resources and hence can be considered as secondary research only. The future research can be on one of the specific cases in form of a case study where we discuss and analyse each aspect of marketing actions in detail.

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# RESPONSE OF LEGUERRE POLYNOMIAL VIA DINESH VERMA TRANSFORM (DVT)

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## ABSTRACT

*The Dinesh Verma Transform (DVT) is a mathematical tool used in solving the differential equations. Dinesh Verma Transform (DVT) makes it easier to solve the problem in engineering application and make differential equations simple to solve. In this paper, we will Study on Applications of Dinesh Verma Transform (DVT) with Leguerre polynomial.*

**KEY WORDS:** Dinesh Verma Transform (DVT), Leguerre Polynomial, Differential Equation.

## I. INTRODUCTION

The Dinesh Verma Transform (DVT) has been applied in different areas of science, engineering and technology [1], [2], [3] [4], [5], [6], [7]. The Dinesh Verma Transform (DVT) is applicable in so many fields and effectively solving linear differential equations. Ordinary linear differential equation with constant coefficient and variable coefficient can be easily solved by the Dinesh Verma Transform (DVT) without finding their general solutions [8], [9], [10], [11], [12], [13], [14], [15], [16], [17], [18] [19], [20], [21], [22]. The Leguerre polynomial of nth order generally solved by adopting Laplace Transform, Elzaki Transform [23], [24], [25] [26], [27], [28], [29], [30], [31], [32], [33], [34], [35], [36].. This paper we will Analyze the Dinesh Verma Transform (DVT) of Leguerre polynomial of nth order and the application of Dinesh Verma Transform (DVT) in solving the differential equations including Leguerre Polynomial.

### 1. BASIC DEFINITIONS

#### 2.1 DEFINITION OF DINESH VERMA TRANSFORM (DVT)

Dr. Dinesh Verma recently introduced a novel transform and named it as **Dinesh Verma Transform (DVT)**. Let  $f(t)$  is a well-defined function of real numbers  $t \geq 0$ . The **Dinesh Verma Transform (DVT)** of  $f(t)$ , denoted by  $D\{f(t)\}$ , is defined as

$$D\{f(t)\} = p^5 \int_0^{\infty} e^{-pt} f(t) dt = \bar{f}(p)$$

Provided that the integral is convergent, where  $pmay$  be a real or complex parameter and  $D$  is the **Dinesh Verma Transform (DVT)** operator.

#### DINESH VERMA TRANSFORM OF ELEMENTARY FUNCTIONS

According to the definition of **Dinesh Verma transform (DVT)**,

$$\begin{aligned} D\{t^n\} &= p^5 \int_0^{\infty} e^{-pt} t^n dt \\ &= p^5 \int_0^{\infty} e^{-z} \left(\frac{z}{p}\right)^n \frac{dz}{p}, z = pt \\ &= \frac{p^5}{p^{n+1}} \int_0^{\infty} e^{-z} (z)^n dz \end{aligned}$$

Applying the definition of gamma function,

$$\begin{aligned} D\{y^n\} &= \frac{p^5}{p^{n+1}} [(n+1)] \\ &= \frac{1}{p^{n-4}} n! \\ &= \frac{n!}{p^{n-4}} \end{aligned}$$

Hence,  $D\{t^n\} = \frac{n!}{p^{n-4}}$



Dinesh Verma Transform (DVT) of some elementary Functions

- $D\{t^n\} = \frac{n!}{p^{n-4}}$ , where  $n = 0,1,2,..$
- $D\{e^{at}\} = \frac{p^5}{p-a}$ ,
- $D\{\sin at\} = \frac{ap^5}{p^2+a^2}$ ,
- $D\{\cos at\} = \frac{p^6}{p^2+a^2}$ ,
- $D\{\sinh at\} = \frac{ap^5}{p^2-a^2}$ ,
- $D\{\cosh at\} = \frac{p^6}{p^2-a^2}$ .
- $D\{\delta(t)\} = p^4$
- The Inverse Dinesh Verma Transform (DVT) of some of the functions are given by
- $D^{-1}\left\{\frac{1}{p^{n-4}}\right\} = \frac{t^n}{n!}$ , where  $n = 0,1,2,..$
- $D^{-1}\left\{\frac{p^5}{p-a}\right\} = e^{at}$ ,
- $D^{-1}\left\{\frac{p^5}{p^2+a^2}\right\} = \frac{\sin at}{a}$ ,
- $D^{-1}\left\{\frac{p^6}{p^2+a^2}\right\} = \cos at$ ,
- $D^{-1}\left\{\frac{p^5}{p^2-a^2}\right\} = \frac{\sinh at}{a}$ ,
- $D^{-1}\left\{\frac{p^6}{p^2-a^2}\right\} = \cosh at$ ,
- $D^{-1}\{p^4\} = \delta(t)$

### DINESH VERMA TRANSFORM (DVT) OF DERIVATIVES

$$D\{f'(t)\} = p\bar{f}(p) - p^5 f(0)$$

$$D\{f''(t)\} = p^2\bar{f}(p) - p^6 f(0) - p^5 f'(0)$$

$$D\{f'''(y)\} = p^3\bar{f}(p) - p^7 f(0) - p^6 f'(0) - p^5 f''(0)$$

And so on.

$$D\{tf(t)\} = \frac{5}{p}\bar{f}(p) - \frac{df(p)}{dp}$$

$$D\{tf'(t)\} = \frac{5}{p}[p\bar{f}(p) - p^5 f(0)] - \frac{d}{dp}[p\bar{f}(p) - p^5 f(0)]$$

and

$$D\{tf''(t)\} = \frac{5}{p}[p^2\bar{x}(p) - p^6 x(0) - p^5 x'(0)] - \frac{d}{dp}[p^2\bar{x}(p) - p^6 x(0) - p^5 x'(0)]$$

And so on.

### II. METHODOLOGY Laguerre Polynomial

The Laguerre polynomial is defined as [4, 5]

$$L_n(u) = \frac{e^u}{n!} \frac{d^n}{du^n} (e^{-u} u^n)$$

We know that by the definition of Dinesh Verma Transform (DVT)

$$D\{f(t)\} = \bar{f}(p) = p^5 \int_0^\infty e^{-pt} f(t) dt.$$

Therefore,

$$D\{L_n(t)\} = p^5 \int_0^\infty e^{-pt} \left\{ \frac{e^t}{n!} \frac{d^n}{dt^n} (e^{-t} t^n) \right\} dt$$

$$= \frac{p^5}{n!} \int_0^\infty e^{-(p-1)t} \left\{ \frac{d^n}{dt^n} (e^{-t} t^n) \right\} dt$$

$$= \frac{p^5}{n!} [(p-1) \int_0^\infty e^{-(p-1)t} \frac{d^{n-1}}{dt^{n-1}} (e^{-t} t^n) dt]$$

Integrating again,

$$\frac{p^5 (p-1)^2}{n!} \int_0^\infty e^{-(p-1)t} \frac{d^{n-2}}{dt^{n-2}} (e^{-t} t^n) dt$$

Integrating n again,

$$= \frac{p^5 (p-1)^n}{n!} \int_0^\infty e^{-(p-1)t} (e^{-t} t^n) dt$$

$$= \frac{(p-1)^n}{n!} [p^5 \int_0^\infty e^{-pt} (t^n) dt]$$

$$= \frac{(p-1)^n}{n!} D\{t^n\}$$

But, By the definition of Dinesh Verma Transform (DVT)

$$D\{F(t)\} = p^5 \int_0^\infty e^{-pt} f(t) dt.$$

Hence,

$$\frac{(p-1)^n}{n!} D\{t^n\} = \frac{(p-1)^n}{n!} \cdot \frac{n!}{p^{n-4}}$$

Hence,

$$D\{L_n(t)\} = \frac{(p-1)^n}{p^{n-4}}$$

(A) Solve the differential equations

$$(D^2 + D)y = L_1(t)$$

with initial conditions

$$y(0) = 0, y'(0) = 1$$

Solution:

Given equation can be written as

$$y'' + y' = L_1(t)$$

Taking Dinesh Verma Transform (DVT) on sides

$$D\{y''\} + D\{y'\} = D\{L_1(t)\}$$

Because Leguerre polynomial of order 1 is

$$L_1\{t\} = \{1 - t\}$$

$$[p^2\bar{y}(p) - p^6 y(0) - p^5 y'(0)]$$

$$+ [p\bar{y}(p) - p^5 y(0)] = p^4 - p^3$$

Applying initial conditions, we get

$$[p^2\bar{y}(p) - p^5] + p\bar{y}(p) = p^4 - p^3$$

$$(p^2 + p)\bar{y}(p) = p^5 + p^4 - p^3$$



$$\bar{y}(p) = \frac{p^5 + p^4 - p^3}{(p^2 + p)}$$

Applying Inverse Dinesh Verma Transform (DVT), we get,

$$y = 2t - 1 + e^{-t} - \frac{t^2}{2}$$

**(B) Solve the differential equations**

$$(D^2 + d^2D)y = L_1(t),$$

with initial conditions

$$y(0) = 0, y'(0) = 0$$

**Solution**

Given equation can be written as

$$y'' + d^2y' = L_1(t)$$

Taking Dinesh Verma Transform (DVT) on sides

$$D\{y''\} + d^2D\{y'\} = D\{L_1(t)\}$$

Because Leguerre polynomial of order 1 is

$$L_1\{t\} = \{1 - t\}$$

**(C) Solve the differential equations**

$$(D^2 + 4)y = L_2(t)$$

With initial conditions

$$y(0) = 0, y'(0) = 1$$

**Solution:**

Given equation can be written as

$$y'' + 4y = L_2(t)$$

Taking Dinesh Verma Transform (DVT) on sides

$$D\{y''\} + 4D\{y\} = D\{L_2(t)\}$$

Because Leguerre polynomial of order 2 is

$$L_2\{t\} = \frac{1}{2}\{2 - 4t + t^2\}$$

Now,

$$[p^2\bar{y}(p) - p^6y(0) - p^5y'(0)]$$

$$+ 4\bar{y}(p) = p^2(p - 1)^2$$

Applying initial conditions, we get

$$(p^2 + 4)\bar{y}(p) = p^2(p - 1)^2 + p^5$$

$$\bar{y}(p) = \frac{p^2(p - 1)^2}{(p^2 + 4)} + \frac{p^5}{(p^2 + 4)}$$

Applying inverse Dinesh Verma Transform

(DVT), we get,

$$y = \frac{3}{16} + \frac{t^2}{8} - \frac{t}{2} - \frac{3}{16}\cos 2t + \frac{3}{4}\sin 2t$$

## CONCLUSION

This paper has presented how to get the Dinesh Verma Transform (DVT) of Leguerre polynomial of nth order and the application of Dinesh Verma Transform (DVT) for solving the differential equations including Leguerre Polynomial.

$$[p^2\bar{y}(p) - p^6y(0) - p^5y'(0)]$$

$$+ d^2[p\bar{y}(p) - p^5y(0)] = p^4 - p^3$$

Applying initial conditions, we get

$$[p^2 + pd^2]\bar{y}(p) = p^4 - p^3$$

$$\bar{y}(p) = \frac{p^4}{p(p + d^2)} - \frac{p^3}{p^2(p + d^2)}$$

Applying Inverse Dinesh Verma Transform (DVT), we get,

$$y = \left(\frac{1}{d^2} + \frac{1}{d^4}\right) \cdot t - \frac{t^2}{2d^2} + \left(\frac{1}{d^6} + \frac{1}{d^4}\right) (e^{-d^2t} - 1)$$

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# IMPLANTATION OF THE FIRST VOCATIONAL SCHOOLS AND TEACHING METHODS IN UZBEKISTAN

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## ABSTRACT

*This article discusses the first vocational schools in Uzbekistan in the late XIX and early XX centuries and their pedagogy. There are clear facts about the content and form of education in the process of formation and development of vocational education during this period.*

**KEY WORDS:** Vocational education, Bell-Lancaster method, teaching labor work, craftsman, apprentice, training workshop.

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## DISCUSSION

Nowadays, there is a need for personnel who have mastered new knowledge and understand the scope of innovative opportunities in specific professions. They must have analytical skills that not only competently solve current economic and production issues, but also make the right decisions. Uzbekistan's aspiration to integrate into the modern industrialized world requires it to create an education system that can adapt to the rapidly changing needs of the labor market. It has become necessary to develop competition that creates incentives for the development of educational institutions and the provision of quality educational services by them.

In order to improve the system of vocational education on the basis of best international practices, to train qualified and competitive personnel for the labor market through the introduction of primary, secondary and higher education and to involve employers in this process, on September 6, 2019, the President of the Republic of Uzbekistan issued a decree "On additional measures to further improve the system of vocational education". Of course, the sudden change of the existing system and the introduction of new procedures will not be easy. In this regard, special attention should be paid to each issue, taking into account the experience of other countries and international practice, and most importantly, the wishes of the population [1].

Now, starting from the 2020/2021 academic year, the Republic of Uzbekistan will establish a network of new primary (vocational schools), secondary (colleges) and secondary special (technical) vocational education systems and educational institutions with differentiated educational programs. The International Classification consists of 9 levels, 0, 1, 2 degrees for preschool and general secondary education, 3, 4, 5 degrees for vocational education, 6, 7, 8 degrees for higher and postgraduate education.

Training in vocational schools corresponding to the 3rd level of the International Classification is carried out in the form of full-time education on the basis of 2-year integrated programs of general education and specialty subjects in groups formed at the expense of 9th grade graduates of secondary schools.

Now let's look at the first vocational schools in Uzbekistan in the late XIX and early XX centuries and their pedagogy.

On November 10, 1881, in the 44 issue of the "Turkistanskies Vedomosti" newspaper, the circular (order) of the Minister of Public Education №5562 was published. The decree considers the requirements and sources of improving higher, secondary and primary education. In particular, when talking about secondary education, it is noted that secondary education is a stage that strengthens not only basic knowledge, but also views on skills, spirituality, faith. The document emphasizes the need to strengthen ties between the



family and schools. Attention is paid not only to the types of education, but also to the enrichment of its content. For example, there have been various reports in the press about news on teaching methods[2].

For example, in the December 15, 1881 issue of the *Turkistanskije Vedomosti* newspaper, *Joseph Lancaster* (1778-1838), a teacher who introduced collaborative learning in North America, and *Andre Bellem* (1752-1832), an Englishman who worked in a similar way, introduced the method of co-teaching. In this method, students are divided into groups, and the best help the lagging behind. Excellence is the teacher's assistant, passing the monitoring task. The teacher is the supervisor and helps the students when needed[3].

In 1881, pedagogical interviews were organized in the educational institutions of the Turkestan region, and on March 9, 1882, published in "Turkistanskije Vedomosti" *A. Pronevsky's* article on the introduction of pedagogical dialogues in Tashkent gymnasiums highlights their importance in harmonizing the pedagogical community with parents[4].

In the early 16th century, the German reformer Luther and his colleague Melancthon ushered in a new era in the history of pedagogy, advocating the establishment of effective relationships between parents, families, and educators. In the seventeenth century, *Amos Comenius* argued that the close relationship between family and school would improve the educational process. *Johann Heinrich Pestalozzi*, a Swiss who lived in the late 18th and early 19th centuries, tried to organize the school in a family circle. This method of providing the perfect human upbringing was advanced by *August Hermann Niemeyer*, *Friedrich Froebel*, *Adolph Diesterweg*, and *Carl Schmid*[5].

In the period we are studying, teacher meetings have been described as turning parts into a whole. The teacher is the first educator, if the doctor treats the body, the teacher is recognized as the healer of the soul.

In 1887, it was considered permissible to introduce vocational training in the workshops of educational institutions and to provide children with religious and secular education in educational institutions, as well as to teach children the skills of handicrafts and craftsmanship. This idea was first put forward by the priest of the Finnish Church of St. Petersburg (pastor) in Russia.[6]

The manual labor training system is manufactured by Otto Solomon at the Naas Seminary in Sweden. The system is a collection of 100 models of wooden items used in the family, house economy, household, and the pupil who collects this collection can not only make them, but also know how to use

them. It has been found that this skill is needed by everyone in life, even the merchant, the clerk, the craftsman. If an official can apply this skill in household chores, he will use it in farming, and for a craftsman, this skill from his childhood will save him time in learning and gaining experience in his craft. In this system, the formation of labor skills in teaching in world pedagogy is established[7:36].

In Russia, manual labor training in secondary schools was first used by the St. Petersburg Teachers' Training Institute and later spread to the St. Petersburg province.

Handicraft classes are taught for 2 hours every day, and by the end of the school year, they have produced a good teacher of the subject. Teachers of the city school practiced this lesson 3 times a week for 2 hours. While not all students are required to work in a workshop, students who are well-versed in the size of students' interests are allowed to work in a workshop. Based on the experience of the Teachers' Institute, it is allowed to involve children from 10 years of age in labor lessons. It took 3 years to process all 100 models. The teacher had the opportunity to work with 20 students at a time. There was no boredom in the lessons taught under this model, the students were constantly on the lookout and constantly busy. Students who learned the craft according to the Solomon method were able to become apprentices to a master craftsman by the age of 13.

In order to implement this method in Turkestan schools, a graduate of the course was invited to Tashkent as a teacher. The teacher was paid a monthly salary of 300 rubles. The cost of Solomonov's collection was 25 rubles, and the collection of paintings was 3 rubles. During the holidays, teachers studied this subject[6].

Many training workshops were opposed to this Western-European experience. According to them:

1. This method has led to an inefficient approach to materials and time;
2. Has not developed the habit of continuous labor required for the future artisan;
3. The supply of training workshops is very expensive for the school;
4. If these shortcomings were not remedied, vocational training could become an area of harm rather than benefit.

Hence, the implementation and effectiveness of this method depended on specific economic opportunities and costs.

However, taking into account all the shortcomings of the West, vocational training continued in Russia. Pupils in vocational schools in Ryazan and Orenburg, Russia, took an active part in production.



According to the experience of vocational training in Margilan, craft classes in vocational schools should be given priority, enough time should be allocated for them, and they should be combined with theoretical lessons: drawing, painting lessons.

In the process of learning a craft based on the teaching method, students became students themselves by learning the beginning of the work in the hands of the students, the assembly of the parts.

The fact that students did not stay until the end of the course was due to parents sending their children from school to private workshops or merchants for apprenticeship. On the contrary, there are parents who want their child to learn a profession perfectly, but teaching the same material every year for 3 years of compulsory education has become boring for students and has weakened their interest in lessons.

Margilan school has experience in attracting children with low mastery to such classes, based on which it is possible to involve students in drawing, painting, writing lessons for no more than 6 hours a week, to prepare them as professionals for 4-5 years. During this time, the students learned on the basis of craftsmanship endurance, speed, and sufficient reading, writing, and drawing experience. If an 11-12 year old comes to the workshop, he turns out to be a professional at 16-17 years old.

In conclusion, we can say that in the process of formation and development of vocational education in Uzbekistan from the end of the XIX century to the beginning of the XX century to the current high level, although the content and form of education differed, there is one truth behind its historical development, education has always been based on creativity, honest work and high faith in it.

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# ESTABLISHMENT OF THE MINISTRY OF COMMUNITY AND FAMILY SUPPORT IS AN IMPORTANT STEP IN SELF-GOVERNMENT

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## ANNOTATION

*This article is devoted to the role of self-government bodies in building a civil society and the issues of modernizing the mahalla institution in Uzbekistan, as well as the contents of the decree of the President of the Republic of Uzbekistan on measures to further improve the institute.*

**KEY WORDS:** Ministry of neighborhood and family support , action strategy, self-government, Mahalla Foundation, Civic Assembly, Mahalla Institute, "Mahalla Iftihori" badge.

## DISCUSSION

“Communities have responsibilities  
legally execute efficiently  
along with the basics, enough  
There must also be conditions ”  
Sh.M. Mirziyoyev.

The process of reforming civil society and the rule of law in Uzbekistan during the period of national independence has shown that the transition from the old totalitarian system to a democratic society is gradual, and overcoming these problems requires broad and active participation of citizens in governance and political decision-making. (Kyrgyzbaev 2010.193 p.)

In the middle of the 19th century, Tashkent had about 200 mahallas, with 370 mosques, 14 madrasas, 11 baths, and several dozen schools. By the second half of the 19th century, teahouses had been added to the mosque, which was the center of the neighborhood. (R.Murtazaeva,A.Utamurodov,O.Musaev, D.Inoyatova.Tashkent. “Turon-iqbol” 2018, page 11).

It is clear that the neighborhood has always been a place that unites people around an idea, discussing their problems. As a result of the process of reforms aimed at modernization and liberalization of self-government in Uzbekistan during the transition to a strong society, reforms to build a civil society based on the harmonization of national traditions and international experience are deepening.

[1. M. Kyrgyzbaev 2010. p. 194] The Decree of the President of the Republic of Uzbekistan Sh. Mirziyoyev dated February 3, 2017 No PF-4944 "On measures to further improve the institution of the mahalla" provides a legal basis for this structure, making the mahalla the closest and most popular structure, with government agencies and civil society institutions. Priorities for further development of cooperation have been identified. Improvement of mahalla institutions requires significant changes in the development of its long-term concepts in accordance with the action strategy of the 5 priorities of further development of Uzbekistan. During the years of independence, about 10,000 mahallas, villages, auls and towns have been established as self-governing bodies, of which 8,142 are mahallas. [1. M. Kyrgyzbaev 2010. p. 195.] It is obvious that the issues of increasing the consistency and efficiency of citizens' assemblies in the mahalla began in the years of independence.

We are well aware that the building of civil society goes from simple to complex, that is, based on the laws of gradual development, which requires the improvement of local self-government, as well as the expansion of their powers to build a strong civil society. In the formation of mahalla institutions, President Shavkat Mirziyoyev said, "The mahalla should be a bridge between the people and the state. The main task of the mahalla is to always be aware of people's joys and concerns." In the formation of mahalla institutions, President Shavkat Mirziyoyev said, "The mahalla should be a bridge between the people and the state. The main task of the mahalla is



to always be aware of people's joys and concerns." The Decree of the President of the Republic of Uzbekistan "On measures to further improve the institution of the community" to increase the role of citizens' self-government bodies in effectively addressing issues of local significance, identified organizational and legal measures aimed at further developing cooperation with law enforcement agencies and civil society institutions. This document outlines the priorities for further improvement of the mahalla institution, the introduction of a number of new regulations. The main focus was on coordinating the activities of citizens' self-government bodies on the basis of a single transparent and convenient system, as well as further strengthening the interaction of mahallas with governmental and non-governmental organizations. The most important aspect of the decree is to transform the Republican Council for Coordination of Mahalla Activities into an association of citizens' assemblies, to give it the status of a legal entity and to establish a permanent executive structure. In our country, the neighborhood has long been a center of education. Its role and significance in preserving the national values passed down from generation to generation, the way of life and thinking of our people are invaluable. In order to transform the mahalla institute into a separate organizational structure, President Shavkat Mirziyoyev issued Decree No. PF 5938 "On measures to improve the socio-spiritual environment in society, further support the mahalla institute and bring the system of working with families and women to a new level." This decree consists of 20 points, which provide for the payment of labor, the provision of material and technical base to the latest information and technical means, from the organizational structures of the Ministry of Mahalla and Family Support.

Including; In order to strengthen the material and economic base of citizens' self-government bodies, expand employment opportunities for citizens, social programs for entrepreneurial activity, including the program "Every family is an entrepreneur", "Crafts Development Program", "Youth - It is planned to approve proposals for the allocation of soft loans on the basis of the program "Our Future". [6. [www.LEX.UZ](http://www.LEX.UZ).] On the way to the transition to a full-fledged civil society, the previous decrees or resolutions should be accompanied by new reforms, which require updating the legislation. The issue of self-government has risen to the level of public policy. During the years of independence, raising the prestige of the mahalla institution has been identified only as a social task, and large-scale measures have been taken to create the necessary conditions for it to serve as a reliable base and influential force in the development of civil society. In particular, for the first time in the history of our national statehood, town, village, aul and mahalla

citizens' assemblies as territorial units of self-government were enshrined in Article 105 of the Constitution of the Republic of Uzbekistan. The participation of citizens' self-government bodies in certain spheres of public life is reflected in more than a hundred normative legal acts.

In the last five years alone, about 20 new laws on the activities of mahallas and their public structures have been adopted. applied. In addition, training courses for employees of the system and the educational TV and radio channel "Mahalla" were organized. In particular, the Decree identifies the following as priorities for further improvement of the mahalla institution: further strengthening the role and place of citizens' self-government bodies in society, making them real colleagues and supporters of the people on the ground; to further increase the role and prestige of mahallas in the formation of an atmosphere of mutual respect, kindness and solidarity in our society, the preservation and development of national and universal values; Strengthening the interaction of citizens' self-government bodies with governmental and non-governmental organizations in the field of educating spiritually rich and physically healthy youth, ensuring their employment, protecting the younger generation from ideological threats, social support for the needy, the elderly; expanding the direct participation of communities in ensuring public order and safety, early prevention of crime, strengthening the sense of respect for the law among citizens; introduction of effective mechanisms for protection of the rights and legitimate interests of citizens' self-government bodies and coordination of their activities, ensuring the practice of application of a single law in the mahalla system. In order to implement the above-mentioned main tasks and new norms, the Decree approved a Comprehensive Program of Measures, which provides for the implementation of 37 specific measures to further improve the activities of councils and support citizens' self-government bodies. In this regard, the fact that the President personally introduced the program "Year of Prosperous Neighborhood" testifies to the comprehensive reform of mahalla institutions. The Resolution of the President of the Republic of Uzbekistan dated June 27, 2018 No PP 3812 "On approval of the main parameters of the program" Obod mahalla "and ensuring their implementation" approved the main parameters of the program "Obod mahalla". According to the resolution, 275,526 apartments in 220 mahallas of the country were covered, for which 3,054.3 billion soums were allocated. [3. [Tashkent "spirituality" 2019, p.18](#)] In order to ensure the implementation of the program "Year of Prosperous Neighborhood", mahalla funds for the development of citizens' self-government were established. The work on the development of small and medium business, as well as private entrepreneurship in the neighborhoods, the creation



of new jobs, the provision of the population with natural gas and clean drinking water has been clearly identified. [2.D.Urokov, A.Sharopov 518 p.]

## CONCLUSION

Upgrading the infrastructure of neighborhoods involves gradual improvement in sync with the urbanization process. Thanks to the efforts of our President, not only the legislative principle of local self-government bodies, but also the infrastructure of mahallas is being radically renewed. In short, we can recognize that the system of "new Uzbekistan - new neighborhood" is becoming an integral part of civil society. In addition, measures will be taken to ensure the independence of mahalla citizens' assemblies in resolving issues of local importance, to reorganize town, village and aul citizens' assemblies into mahallas in order to avoid redundancies in the system of self-government. is done.

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# EFFECTS OF COVID-19-PANDEMIC LOCKDOWN OF CHURCHES IN NIGERIA ON PASTORAL MINISTRY: MATTERS ARISING<sup>1</sup>

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## ABSTRACT

*Many churches and other public places in Nigeria and other places throughout the world experienced lockdown as result of the ravaging COVID-19 pandemic. These affected church activities and pastoral ministry of many church pastors greatly. In response to this lockdown and its negative effects, many pastors in Nigeria start to explore other ways to perform their pastoral ministry to their church members. This study explores how pastors are performing their pastoral ministry to their church members during the COVID-19 pandemic lockdown. Some open-ended questions were sent randomly to some pastors through WhatsApp Messenger. The pastors responded either by WhatsApp or email. There were further correspondences with some of the respondents through WhatsApp and phone calls. The findings of the study revealed that while some of the respondents were still using some of the old traditional means of pastoral ministry during the lockdown, many pastors have started adapting to the current situation by exploring other possible means to perform their pastoral ministry to their church members. One prominent means is Internet ministry. Many of the respondents bear their minds on how pastors can respond productively to the situation. Some recommendations and suggestions for further study are made at the end of the paper.*

**KEYWORDS:** Nigerian church, pastoral ministry, COVID-19 pandemic, Internet ministry, lockdown

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## INTRODUCTION

Coronavirus disease (also called COVID-19, 2019-nCov, 2019 Novel Coronavirus) – an infectious disease caused by a new virus that had not been previously identified in humans and causes respiratory illness (like the flu) with symptoms such as a cough, fever and in more severe cases, pneumonia<sup>2</sup> – started around December 2019 in Wuhan, China.<sup>3</sup> It ravaged the world unabated in the

year 2020 as the pandemic spread like wild fire to every part of the world within months of its outbreak. As parts of efforts to curtail its spread, churches and other public places were locked down in the late March 2020. When this took place, little did the church leaders and other people know that it would take months for churches in particular and other public places in general to be opened again for large gathering. Church leaders with the cooperation of



their church members started looking for alternative ways of worship and doing other church activities.

### STATEMENT OF THE PROBLEM

Against the backdrop that the lockdown of churches and other public places have prevented pastors from performing their pastoral ministry in the traditional ways through physical contacts, churches had to find other means of holding their church activities, and pastors had to explore alternative means of performing their pastoral ministry. Therefore, this paper is an attempt to find out the effects of the COVID-19 lockdown and how the church can move forward, especially how pastors can be more effective in their pastoral ministry, after the churches are re-opened for congregational gatherings.

### CONCEPTUAL FRAMEWORK PASTORAL MINISTRY

This conceptual framework is based on a review of Ağılkaya-Şahin (2016)'s "Theoretical Foundations of Pastoral Care in Christian Tradition".<sup>4</sup> In Ağılkaya-Şahin (2016)'s article, the concept of pastoral ministry is "illustrated in terms of definition, characteristics, subjects, objects, aims, tasks and theology."<sup>5</sup> The aim of pastoral ministry, otherwise referred to as pastoral psychology, is to help persons with their religious and non-religious challenges through a religious framework of interdisciplinary work of theology and human/social sciences.<sup>6</sup> This aim varies "according to time and approach."<sup>7</sup> The word "pastoral" is derived from the concept of shepherding as adopted by the Early Church. This concept of pastoral care is based on the qualities underscored in the Bible, "such as consolation, resolution, counseling, and healing."<sup>8</sup> In spite of the fact that it is difficult to give a precise definition of pastoral ministry, however, it can be described as the art of helping "in improving people's religious and ethical development" or "psychotherapy in the context of the Church".<sup>9</sup> Characteristically, pastoral ministry "provides mutual help, enforcement, and possibilities"<sup>10</sup> for people that need spiritual assistance or want to grow in their spiritual lives. Theologically, pastoral ministry is "embedded in Christian scripture."<sup>11</sup> The Christian scripture presents God as the first pastoral minister who did, and is doing, pastoral ministry in creating and sustaining the heavens and the earth, sending Jesus Christ to the world to die for the sin of the world, selecting the first apostles to continue the earthly pastoral ministry of Jesus Christ, and enabling the first apostles to pass on the baton on pastoral ministry to other believers in Jesus Christ (especially the clerics). Although pastoral ministry is not specifically found in the Christian scripture, Ağılkaya-Şahin (2016) concluded his treatise by highlighting some concepts of pastoral ministry

found in the Christian scripture and their scriptural references.<sup>12</sup>

### COVID-19-PANDEMIC LOCKDOWN

As part of the efforts to curtail the spread of COVID-19 pandemic, governments throughout the world started to restrict gathering of large number of people in public places and movements from one place to the other, especially interstate and cross-border movements, and advocate stay safe or stay at home. It also involves what is termed social (or preferably physical) distancing – "a way to keep people from interacting closely or frequently enough to spread an infectious disease" where "schools and other gathering places such as movie theaters may close, and sports events and religious services may be cancelled."<sup>13</sup> This restriction is popularly known as lockdown. With the advent of a COVID-19 case in Nigeria on February 27, 2020, the Nigerian governments at the federal and state levels started imposing series of lockdown measures.<sup>14</sup> Undoubtedly, this lockdown affected churches and the ways pastors are performing their pastoral ministry among the church members.<sup>15</sup>

### TARGETED POPULATION, INSTRUMENT AND PROCEDURE FOR DATA COLLECTION

The targeted population of this study was randomly selected Nigerian pastors that are young, intermediate or older in pastoral ministry. The instrument used to collect data for the study is a form of open-ended questions sent to respondents through WhatsApp Messenger, and the respondents sent in their responses through either WhatsApp Messenger or email. As occasions demanded it, there were further correspondences with some of the respondents through WhatsApp Messenger or phone calls. This researcher adapted and employed this means for his data collection because of the current situation in the world that discouraged people from moving from one place to the other and the advocacy for social/physical distancing and staying safe. The time frame of this research is the months of March to May 2020.

### DATA PRESENTATION AND DISCUSSIONS OF RESULTS NUMBER OF RESPONDENTS

Out of one hundred and fifty (150) pastors that were contacted through WhatsApp Messenger, one hundred and seventeen (117) responded. This represented seventy-eight per cent (78%) of the total number of people contacted. With this percentage, this researcher is of the opinion that this method of data collection is considerable better, more effective and more result-oriented to other methods of data collection in social sciences research.

## YEARS OF EXPERIENCE IN PASTORAL MINISTRY

Figure 1: Years of Experience in Pastoral Ministry



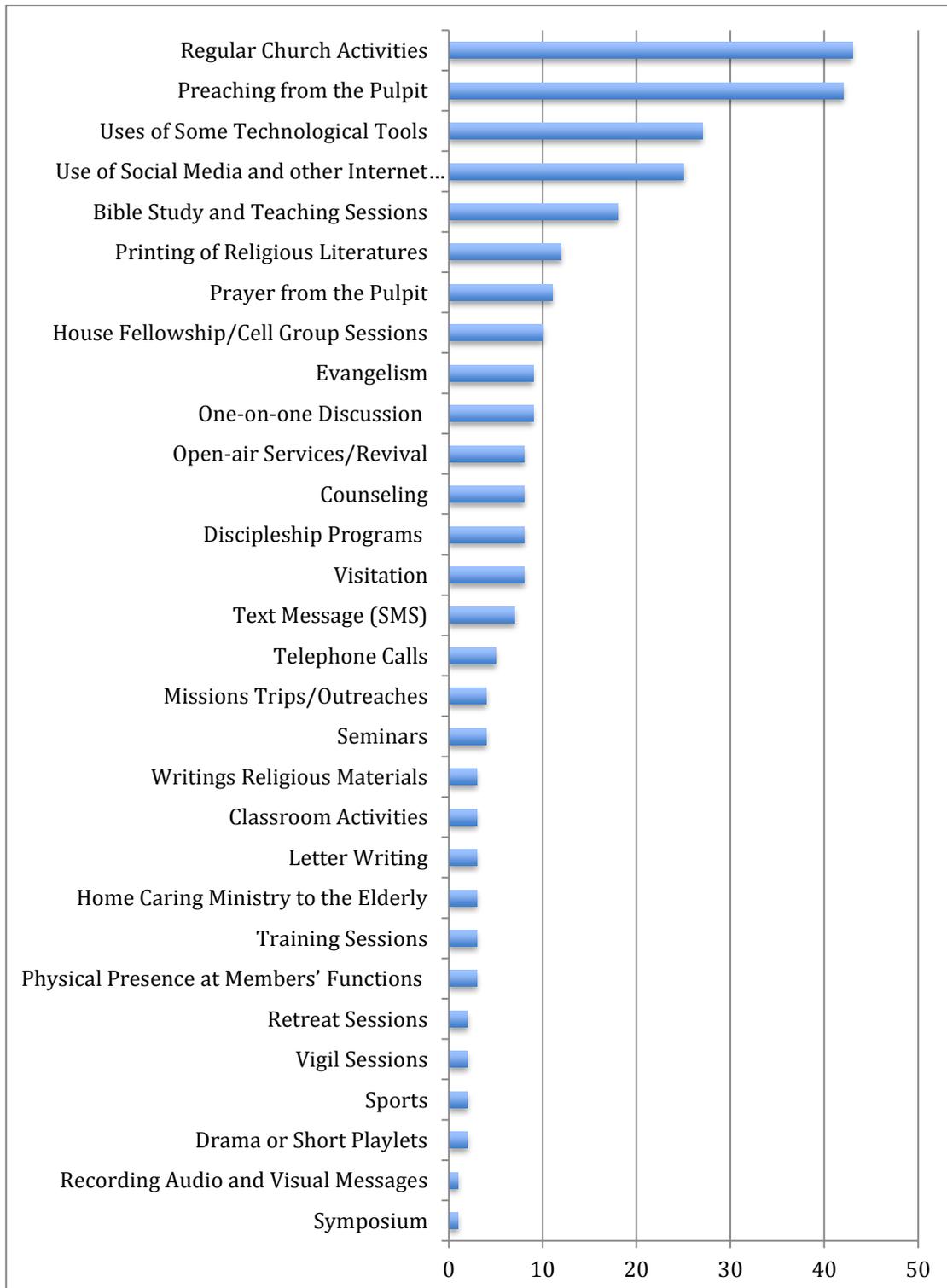
From the number of pastors that responded as shown in Figure 1, twenty-one (21) respondents that represent eighteen per cent (18%) have had pastoral ministry experiences for less than 9 years, forty (40) respondents that represent thirty-four per cent (34%) have had pastoral ministry experiences between 10 and 19 years, while fifty-six (56) respondents that represent forty-eight per cent (48%) have had pastoral ministry experiences for at least 20 years. This result shows that most of the respondents are

experienced pastors in their pastoral ministry. It is has to be noted here that few of these respondents are missionaries while some are teachers in pastors' training schools. This exception is reflected in the responses of these particular pastors.



## MAJOR TRADITIONAL WAYS OF PASTORAL MINISTRY BEFORE COVID-19 PANDEMIC PERIOD

Figure 2: Major Traditional Ways of Pastoral Ministry before COVID-19 Pandemic Period





It is evident that as their main responsibility, pastors have been performing their pastoral ministry in various ways before the outbreak of COVID-19 pandemic that caused some restrictions to curtail the spread of the pandemic. The respondents identified some of these ways as represented by Figure 2. These responses do not mean a respondent chose only one response. The respondents had the opportunity of identifying as many ways as possible. The responses indicate that each of them has been using many ways to perform his pastoral ministry before the outbreak of COVID-19 pandemic.

A quick glance at the Figure 2 shows that attending (and in most cases presiding over) regular church activities (43 respondents representing 36%) is most noticeable means of pastoral ministry among the respondents. These activities include the

conventional gatherings mostly on Sundays and some other days during the week. Preaching from the pulpit is the second most recognizable way many of the respondents (42 respondents representing 35%) indicated as the traditional way of engaging in pastoral ministry before the COVID-19 pandemic period. Two other more recognizable ways are uses of some technological tools (27 respondents representing 23%) and uses of social media and other Internet platforms (25 respondents representing 21%). This indicates that some of the respondents are technologically inclined in their pastoral ministry. Other ways that have respondents between 10 and 20 (representing 8% and 17%) are prayer from the pulpit, Bible study and teaching sessions, house fellowship/cell group sessions, and printing of religious literatures.

## WAYS OF PASTORAL MINISTRY DURING COVID-19 PANDEMIC

Table 1: Ways of Pastoral Ministry During COVID-19 Pandemic

Ways of Pastoral Ministry During COVID-19 Pandemic	Numbers of Respondents
WhatsApp Group	74
Facebook	55
Social Media Platforms	48
House Fellowship/House Cell Church	43
Telephone (for counselling and prayers)	41
Zoom	37
YouTube Media Channels of the Church	32
Text Message (SMS)	29
Facebook Live Streaming	19
Telegram Messenger	17
Sunday Service Online	16
Email	15
Teleconference	15
Recorded Messages and Songs	14
Weekly Radio Broadcast	14
Multiple Number of Services per Sunday	13
Conference Call	13
Visitation	13
Online Prayers Sessions	13
Family Fellowship	12
Typing of Messages	12
Website Posting	12
Personal Counselling (for few emergencies)	12
Twitter	12
Instagram	12
Video Recording	12
Physical Ministration	10
Internet Radio	8
Transferable Videos, Audio and Text	7
Webinar	6
Imo Messenger	6
Distribution of Relief Packages	5
Print Media	5
Use of Google Forms	5
Online Class Sessions	5



Sharing of God's Word Early in the Morning	5
Television	5
Paying Tithe through Online Banking Transfer	5
Google Classroom	4

A question was posed to the respondents on how they are doing pastoral ministry during the COVID-19 pandemic period. This is a subjective question that allowed the respondents to give as many answers as possible. As shown in Table 1, there are still some traditional ways of pastoral ministry like house fellowship/cell church (43 respondents representing 36%), telephone calls for counselling and prayers (41 respondents representing 35%), weekly radio broadcast (14 respondents representing 12%), physical ministrations to limited number of people (10 respondents representing 8%), multiple number of services per Sunday (13 respondents representing 11%), visitation (13 respondents representing 11%), personal counselling for few emergencies (12 respondents representing 10%), distribution of relief packages (5 respondents representing 4%), and sharing of God's Word early in the morning (5 respondents representing 4%). However, most of the ways indicated as shown in Table 1 as the ways of pastoral ministry during the pandemic are Internet-inclined (369 responses representing 315%). This clearly indicates that apart from the earlier identified traditional means of pastoral ministry, various aspects of the Internet ministry take a very major role in the pastoral ministry of respondents to their church members during the pandemic.

### MORE FINDINGS

Many of the respondents used the opportunity of the research to bear their minds on the effects of the pandemic lockdown on church activities and especially performing pastoral ministry in a time like this. Some of these opinions are given here. A respondent was of the opinion that "...the development and the exposure brought about by the experience of COVID-19 has obviously created a shift from what pastors have been doing before the outbreak of the pandemic and what [pastors] have to do after we overcome the pandemic." This respondent went further to say that pastors that are not ready to adapt with this shift may be overtaken by time and become irrelevant in pastoral ministry in the post-COVID-19-pandemic world. Another respondent agreed with this position and encouraged pastors to understand the current trend in the society and take advantage of every resource at present to serve as platform for pastoral ministry. Pastors can do this by improving and developing themselves to be relevant in this current trend. One self-development that is paramount, according to many of the respondents, is the knowledge of the new trends in information and communication technologies (ICT) as the world is now more technologically driven.<sup>16</sup> Another finding is that the pandemic has

revealed that pastors should be more concerned about the needs and situations of their church members apart from the traditional weekly messages during Sunday worships. Church members are going through a lot of challenges occasioned by the pandemic.<sup>17</sup> This is the time that pastors should be more passionate to show that they really care for the church members. This care can be in form of visitation (if possible), phone calls, sending of encouraging text messages, leading the church to give monetary or material tokens to needy church members, and other ways that will make the church members to feel the positive impacts of the pastors and the churches in their lives and situations. Pastors are enjoined to be more dynamic in the way they are conducting their church activities and other aspects of pastoral ministry. They are to make necessary adjustment in their service plans and messages (through sermons and Bible teachings). The age of parochialism is over. New innovations are needed in pastoral ministry to combat the challenges that the COVID-19 pandemic has posed to the world.

### RECOMMENDATIONS AND CONCLUSION

The initial aim of this study was to explore the possibility of Internet ministry as an alternative means of pastoral ministry during the COVID-19 pandemic in Nigeria. The study indeed revealed that Internet ministry – the use of the Internet and other technological tools in Christian ministries in general and pastoral ministry in particular<sup>18</sup> – has become an alternative avenue for pastoral ministry.<sup>19</sup> However, the study also revealed that there are others means of pastoral ministry that are needed to be more encouraged while some are needed to be less encouraged. As enumerated above, pastors are advised to tackle the challenges of the COVID-19 pandemic dynamically. Therefore, these additional recommendations<sup>20</sup> are made:

1. Every pastor should study the uniqueness of his congregation and locality and fashion out how to respond to the challenges that the COVID-19 pandemic has posed in the context of the peculiarity of his congregation and locality.
2. Pastors should embrace the use of the Internet and other technological tools in their pastoral ministry. While the traditional physical means of pastoral ministry should be continued as much as possible, pastors should be thinking of how to make Internet ministry not only an alternative ministry, but



also as supplementary to the traditional ways of pastoral ministry.

3. Churches should invest more in their multimedia ministry<sup>21</sup> by training pastors on how to use several tools to enhance the multimedia ministry, and by training some church members to assist the pastors and the church in the use of technological tools for ministry.
4. Pastors should consciously teach church members to be able to stand without depending on the pastors or church activities during trying times.
5. Pastors should train some committed church members some rudiments of pastoral ministry so that such trained people will be able to assist the pastors in the pastoral ministry.
6. Multi-staff ministry (that will involve a group of Christian persons – not necessarily trained pastors – who are committed to serve God by serving other members of the church to enable the church achieve its missions and responsibilities<sup>22</sup>) should be encouraged even in the remote or smallest churches.
7. Less emphasis should be placed on large congregational gathering while more emphasis should be place on small groups in forms of cell churches, house fellowships, home fellowships, and the likes.
8. Less emphasis should also be placed on constructing large auditoria while more emphasis should placed on activities that will build the church members up in their spiritual lives.
9. More efforts should be given to visitation and caring of church members through phone calls and sending of text messages.

### **SUGGESTIONS FOR FURTHER STUDY**

Based on the outcome of this study, the following are recommended for further study:

1. Coping with challenges of post-COVID-19 pandemic.
2. Revisiting the cell church/house fellowship system.
3. Effectiveness of multi-staff ministry in the contemporary world.

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**Conflicts of Interest:** The author declares no conflict of interest.



## ENDNOTES

<sup>1</sup> This paper is a follow-up paper from a study carried out by this researcher on a theme on Internet ministry as an alternative means of pastoral ministry in churches in Nigeria during the COVID-19 pandemic situation. The premier paper is presently under consideration for publication in another journal. Therefore, some of the information in this paper is directed extracted from the other paper by the same researcher.

<sup>2</sup> Yan-Rong Guo, et al (2020). "The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak – an update on the status". *Military Medical Research* (2020) 7:11. Retrieved May 30, 2020 from <https://doi.org/10.1186/s40779-020-00240-0>, 2.

<sup>3</sup> Lo'ai Alanagreh, Foad Alzoughool and Manar Atoum (2020). "The Human Coronavirus Disease COVID-19: Its Origin, Characteristics, and Insights into Potential Drugs and Its Mechanisms". *Pathogens* 2020, 9, 331. Retrieved May 30, 2020 from <https://doi.org/10.3390/pathogens9050331>, 1.

<sup>4</sup> Zuhâl Ağilkaya-Şahin (2016). "Theoretical Foundations of Pastoral Care in Christian Tradition". *Spiritual Psychology and Counseling*, 1, 65-74. Retrieved May 27, 2020 from <http://dx.doi.org/10.12738/spc.2016.1.0002>.

<sup>5</sup> Ağilkaya-Şahin, 65.

<sup>6</sup> Ağilkaya-Şahin, 66.

<sup>7</sup> Ağilkaya-Şahin, 70.

<sup>8</sup> Ağilkaya-Şahin, 67.

<sup>9</sup> Ağilkaya-Şahin, 68-69.

<sup>10</sup> Ağilkaya-Şahin, 69.

<sup>11</sup> Ağilkaya-Şahin, 70.

<sup>12</sup> Ağilkaya-Şahin, 71-72.

<sup>13</sup> "Tips For Social Distancing, Quarantine, And Isolation During An Infectious Disease Outbreak". Retrieved March 28, 2020 from <https://www.samhsa.gov/sites/default/files/tips-social-distancing-quarantine-isolation-031620.pdf>, p. 1.

<sup>14</sup> Peterson Ozili (2020). "Covid-19 pandemic and economic crisis: The Nigerian experience and structural causes". *International Journal of Sociology and Social Policy*, 2020. Retrieved June 7, 2020 from <http://dx.doi.org/10.2139/ssrn.3567419>, 2.

<sup>15</sup> Oyelola A. Adegboye, Adeshina I. Adekunle, and Ezra Gayawan (2020). "Early Transmission Dynamics of Novel Coronavirus (COVID-19) in Nigeria". *International Journal of Environmental Research and Public Health*. 2020, 17, 3054. Retrieved May 30, 2020 from <https://dx.doi.org/10.3390/ijerph17093054>, 7.

<sup>16</sup> Wayne F. Cascio and Ramiro Montealegre (2016). "How Technology Is Changing Work and Organizations". *Annual Review of Organizational Psychology and Organizational Behavior*. Volume 3, 2016. Retrieved June 10, 2020 from <https://www.annualreviews.org/doi/abs/10.1146/annurev-orgpsych-041015-062352>, 350

<sup>17</sup> See Chukwuka Onyekwena and Mma Amara Ekeruche (2020). "Understanding the impact of the COVID-19 outbreak on the Nigerian economy". Retrieved June 10, 2020 from <https://www.brookings.edu/blog/africa-in-focus/2020/04/08/understanding-the-impact-of-the-covid-19-outbreak-on-the-nigerian-economy/>.

<sup>18</sup> See Adebayo Ola Afolaranmi (2009). *Ministering through the Internet: An Essential Guide* (Ibadan: Charisa Books & Publishing), 39-44.

<sup>19</sup> Specific findings and recommendations on Internet ministry as an alternative means in pastoral ministry have been presented in the earlier paper by this researcher under consideration for publication in another journal.

<sup>20</sup> Some of these recommendations are extracted from the additional comments given by the respondents.

<sup>21</sup> For more on multimedia ministry, see Adebayo Afolaranmi (2019). "Effective Use of Technological Tools in Building the Church's Educational Ministries". Retrieved June 10, 2020 from <https://www.academia.edu/40251074/>, 1.

<sup>22</sup> See Jerry W. Brown (1973). *Church Staff Team That Wins* (Nashville: Convention Press), 23.



# PRODUCTS RANGE EFFECTS ON SAVINGS & CREDIT CO-OPERATIVE SOCIETIES' LOAN APPROACHABILITY BY CONSUMERS IN KISUMU COUNTY, KENYA

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## ABSTRACT

*The key goal of any Savings and Credit Co-operative Societies (SACCO's) is members' empowerment. Through mobilization on savings, credit payouts and ensuring long-term sustainability through judicious financial practices can this be realized. However, SACCO's encounter challenges in promoting quality financial management practices such as limited capital, credit hazards management, negative liquidity, deprived governance and very low credit approachability. There has been a continuous deterioration in access to credit in SACCO's in the near past years in Kenya. Therefore, this study sought to find out the products range effects on Sacco's credit approachability in Kisumu County, Kenya. The management level employees of SACCO's were the targeted respondents. Descriptive investigation and a Census sample strategy were employed in this study. The findings of this study revealed that credit convenience in SACCO's is positively inclined by product range. These findings were both supported by the rates of the respondent's responses which were presented in the form of percentages and scores' averages. The number of data pairs and of independent variables were accounted for by the model at  $R_{adj}^2 = 0.7611$ . Therefore, let the SACCO's flinch investing in products revolution in order to ensure that they have a wide range of products which are tailor made that can suit the consumer's needs. An increase in the level of credit accessed by the consumers will be realized and thus increase in the Sacco's key goal.*

**KEY WORDS:** SACCO, Census, Dependent and Independent variables, Adjusted R-Square.

## 1.0 INTRODUCTION

The objective of starting SACCO's is members' empowerment through savings mobilization, disbursement of credit and ensuring long-term sustainability through prudent financial practices. SACCO's have a solid base of small saving accounts constituting a stable and relatively low-cost source of funding and low administrative costs. Due to this, Sacco's are able to advance loans at interest rates lower than those charged by other financial providers. In addition, SACCO's have the ability and opportunity to reach clients in areas that are unattractive to commercial banks. This has made SACCO's more attractive to customers, thus deeply entrenching themselves in the financial sectors of many countries. [10] argued that SACCO's have not been efficient in achieving this objective especially in credit disbursement.

In India, for example, [14] on the study of formal and informal credit markets demand found that

SACCO's credit accessibility is affected by inadequate products to meet their customer needs. His recommendation was that there should be a variety of loan products to ensure that SACCO's members are not going for loans to other financial institution and this will enable the SACCO's to build more of institutional capital which ensures permanency, provide cushion to absorb losses and impairment of members' savings. The institutional capital, which comprises the core capital and less share capital, is mainly accumulated from the interest earned on credit advanced to the members and this ensures growth of the SACCO's even in turbulent economic times.

## 1.1 Problem Statement

SACCO's encounter challenges in promoting quality financial management practices in Kenya such as limited capital, lack of enough funds, credit risks management and negative cash liquidity, poor governance and very low credit accessibility. [9] found that SACCO's offers a competitive lending rates to



their members with an opportunity to borrow up to 3 times their shares contributions. A national survey conducted by Central Bank of Kenya on financial access [8] revealed that SACCO's credit accessibility has reduced from 13.5% in 2009 to 9.1% in 2013 despite the increase in credit demand. This continuous decline in access to credit shows that SACCO members are not able to access the credit from their SACCO's and they seek for credit from other financial institutions.

## 1.2 Study Objective

To find out the products range effects on Sacco's credit approachability in Kisumu County, Kenya.

## 2.0 LITERATURE REVIEW

According to a study by [11] on the effect of products innovation on performance of SACCO's in Kenya, they found that product range of SACCO's can only be possible if SACCO's are going to adopt innovation strategies such as product replacement, product repositioning and conformance to variety of products that will contribute to the SACCO's profitability. They also found out that product technological innovation, aggressive competitors marketing campaigns by other credit lenders have contributed to the inaccessibility of credit from SACCO's more. They concluded that adoption of product innovation which would be translated to a wide range of SACCO's credit products would increase profitability of the SACCO's through access to credit.

On financial constraint hindering growth of SME's, [6] argued that the need for credit is a key component that drives man's economic needs. To a large extent man has never been able to meet his needs at particular points in time as income and expenditure can rarely be matched. This has given rise to the need for financial credit in order to fill the gap of individual needs to cover the mismatch between income and expenditure. Members borrowing from SACCO's is sometimes unplanned and is usually driven by emergency situations in the businesses or family matters. Most borrowers would be faced with urgent needs that are unplanned and may have no choice but to obtain credit from either SACCO's or other formal or informal lenders. Thus, the uncertainty in life to an extent sustains demands for credit.

A survey conducted by [4] revealed that majority of SACCO's use lending as one of their principal business activities. The loan portfolio is typically the largest asset and source of revenue for SACCO's. The level of credit accessed from these SACCO's is attributed to the composition of its loan products portfolio. The study also showed that most

SACCO's do not engage in market research to understand the financial needs of current and potential clients as well as the type of loan products they prefer. Thus, SACCO's should conduct a thorough review of the products currently offered and identify features in their design, promotion or delivery that can affect their customers demand for those products or their ability to access them.

Despite the fact that every financial institution has its own loan products to offer, [12] in his study on transformative development and harnessing cooperative entrepreneurship advantage for women and youth in Africa, found out that products that are flexible and meet the customer's needs should be designed by the financial providers. Some clients, he argued, may need long-term housing loans, others may be interested in consumption loans to meet more immediate needs. Thus, his conclusion was that financial institutions should design loan products that are convenient and accessible.

Offering a wide range of products can help the SACCO's minimize risks which will be distributed over a wide range of products. This is according to [2] on his study on risk management in SACCO's that they could be effective if they can diversify their products portfolio.

[13], on credit practices in rural SACCO's in Ghana found out that there were low credit applications in SACCO's due to very limited products they offered that limited the credit decision of the clients. He also found out that SACCO's have no drafted credit policy documents on how to develop and introduce new products in the markets compared with the other financial institutions. These findings were supported by WOCCU that the financial discipline of provisioning for loan has been lagging behind in most SACCO's since they did not innovate and redesign their loan products in such a way that their clients will create interest to access the credit.

A study conducted by [1] on an analysis of the socioeconomic impact of co-operatives in Africa and their institutional context and found out that most SACCO's to a great extent used the number of products they offer determine how well the SACCO's can streamline their credit operations. He also noted that SACCO's need to employ a combination of performance indicators such as profitability, operating efficiency and portfolio quality indicators to measure their overall performance. This study agreed with the findings of [15], where it was stated that very low loan applications are received by SACCO's due to lack of innovativeness, friendly products, and a variety from where the client can choose what fits his/her needs. This have plunged some SACCO's into serious

liquidity problems, culminating in the erosion of public confidence in these SACCO's.

[3] stated that effective access to credit in SACCO's management function for maintaining the SACCO's safety and soundness. Therefore, SACCO's should employ the qualified and competent staff who can identify risks associated with limited types of

product. This study concluded that the credit management staff should possess the fundamental credit handling experience, quantitative analytics skills, marketing skills and experiences in innovating products that will see the SACCO's perform well in the market and increase its and credit accessibility to its customers.

## 2.1 Conceptual Framework

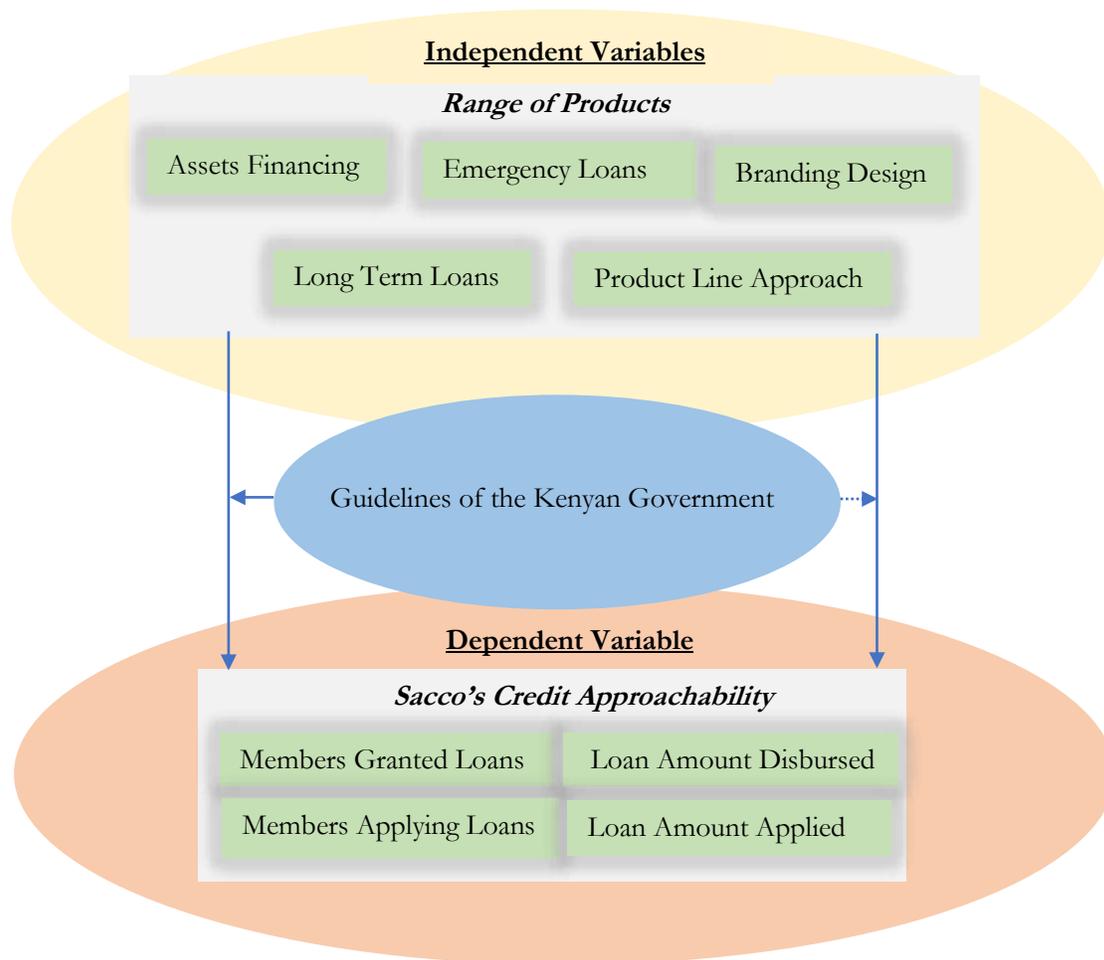


Figure 1: Conceptual Framework

## 3.0 RESEARCH METHODOLOGY

A descriptive research design, which we adopted in this study, is concerned with describing the characteristics of a particular individual, or groups [7]. The target population of the study was 25 SACCO's registered with the Ministry of Cooperatives within the county government of Kisumu, which all offer credits

to their members. The respondents were selected with reference to the critical role they play in designing credit policies and strategies. The credit officers advise the customers on the loan products offered that can suit their needs while the credit manager and the branch managers approve the loans at different levels of the loan processing.



Data was collected through questionnaire which had both open and closed ended questions. The reliability of the questionnaires was tested using the Cronbach's alpha correlation coefficient in Minitab version 18. The results of the reliability test produced an overall Cronbach Alpha correlation coefficient of 0.887. Descriptive statistics which included mean and standard deviations was used to analyze data. The study also used logistic regression analysis to test the hypothesis and the p-value from test statistic was used to determine whether any differences could be attributed to the ordinary random factors or not [5]. Regression was considered the best statistical method since the parameters were of qualitative response in describing the relationship between the dependent variable and independent variable.

#### 4.0 ANALYSIS OF THE FINDINGS

110 questionnaires were issued to the respondents of which 101 were fully returned in response to the questions, a return rate of 91.8%. in

regard to the product range, the following responses were revealed:

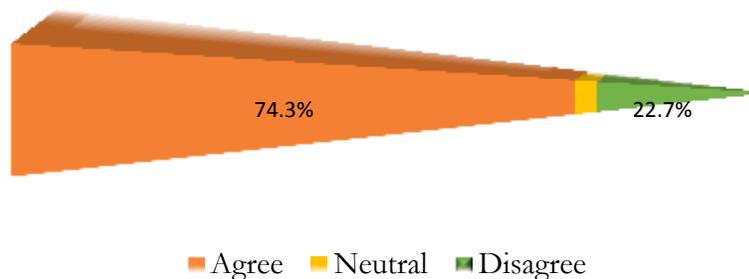
#### 4.1 Overall Descriptive Statistics Analysis

Statistic	Product Range
N	101
Mean	3.32
S.E	0.082
Variance	0.721

**Table 1: Descriptive Statistics**

From Table 1, we see that most Sacco's credit approachability is influenced by their product range as indicated by mean of 3.32. With 0.721 as the level of dispersion showing that very minimum product range is available to ensure that members access credit from their Sacco's. The management therefore, need to ensure there are available range of loan products so that members have a wide range to choose from and this will be well represented by a smaller standard deviation of 0.849.

#### 4.2 Product Range

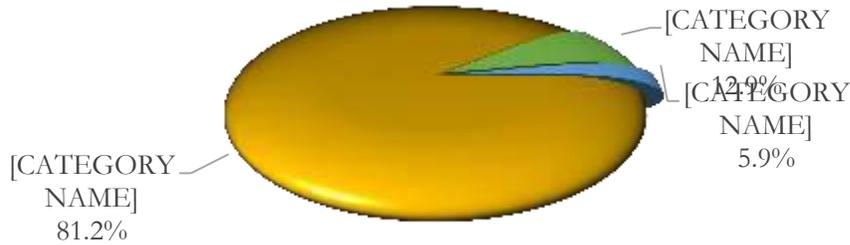


**Figure 2: Product Range Response**

The respondents were asked whether Sacco's product range determines credit approachability and data results revealed that 74.3% of the respondents agreed that Sacco's product range determines credit approachability in their Sacco's while 22.7% of the

respondents disagreed with this concept. Only 3% were neutral about the idea. This imply that if there are several products offered by the Sacco's, then more members will approach the Sacco for credits.

### 4.3 Long Term Loans Product:

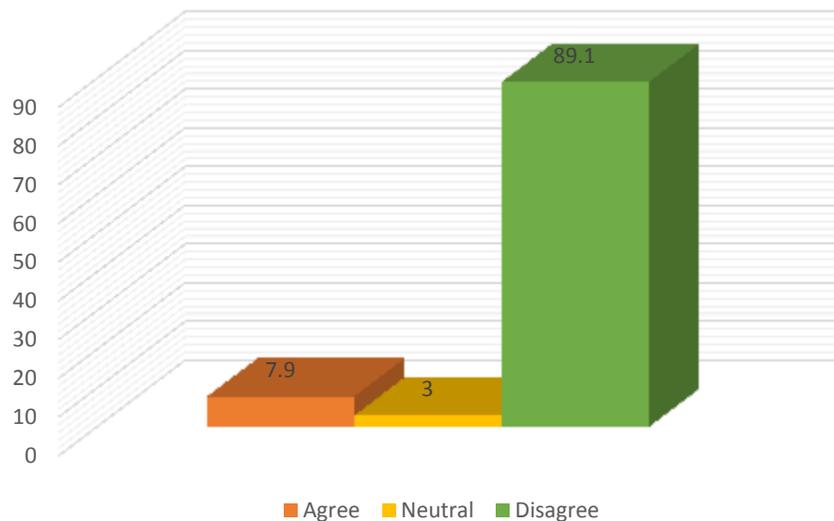


**Figure 3: Loan Term Response**

As to whether there is long term loan product, 81.2% of the respondents disagreed that their saccos have the long-term products, 12.9 agreed that indeed

their Sacco's have the long-term products while 5.9% neither agreed nor disagreed about the long-term loan products.

### 4.4 Assets Financing Products

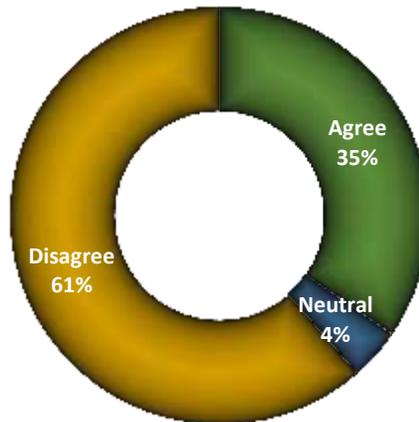


**Figure 4: Assets Financing Response**

On whether their Sacco's offers assets financing products, 89.1% of the respondents disagreed that they offer assets financing products while 7.9% agreed they

offer assets financing products and 3.0% of the respondents were neutral.

#### 4.5 Product Line Approach



**Figure 5: Product line Response**

Respondents were asked whether Sacco’s product line approach determines the access of credit by members and the results show that 61.4% of the respondents disagreed with the statement that Sacco’s

product line approach determines the access of credit. 4% were neutral in their response and 34.6% agreed that the products line by the Sacco’s will definitely determine how credit will be approached.

#### 4.6 Product Range Hypothesis Testing

##### Independent Variable

Credit Approachability

(r)

Sig. (2-tailed)

##### Product Range

0.748\*

0.001

**Table 2: Relationship between dependent and independent variables**

There was a positive correlation between product range and Credit approachability of 0.748 by SACCO Members. The p-value of 0.001 is less than the acceptable significance  $\alpha$  level, hence the  $H_0$  that

there is no correlation between product range and Credit approachability by SACCO Members in Kisumu County, Kenya was rejected. Therefore at 95% C.I, the sampled data can be applied to the general population.

#### 4.7 Credit Approachability Model Estimation

Model	R	R-Square	Adj. R-Square	SE Mean
1	0.879	0.773	0.7611	0.251

**Table 3: Model Summary**

Since 0.773 is dependent on the number of data pairs and the number of variable, 0.7611 takes into account the fact that when the number of data pairs and number of variables are approximately equal as per the

table, then the value of R is artificially high due to the sampling error rather than a true relationship among the variables. This occurs because the chance variation of all the variables are used in conjunction with one



another to derive the regression equation. Therefore, the model accounted for 76.11% of the total variation and it explained 77.3% of the variations in the credit approachability.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

It is true from the results that the product range impacts the Sacco's credit approachability by the consumers. This approachability of the products range was statistically significant with a p-value  $< 0.05$  hence rejecting the  $H_0$ . Sacco's product range can be catalyzed by Saccos adopting innovative strategies like product replacement, relocation and conformance to various products that will contribute to Sacco's profitability as opposed to the revealed lack of innovativeness in terms of the products offered.

Therefore, in line with the aforementioned facts, if the Saccos's yearn to achieve their goal of membership empowerments and profitability, let the product range not be overlooked. The SASRA and the GOK develop policies that enhances the credit approachability by the consumers.

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## METAPHORIC NOMINATION OF INTERNET TERMINOLOGY

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### DISCUSSION

As is known that the meaning of the words can be transferred differently. For example, the change in the semantics of the word takes place mainly on the basis of semantic transformation like metaphor, metonymy, and synecdoche. According to the unanimous opinions of the scientists, metaphor plays a basic role in semantic way of forming a term, as new terms appear based on the particular peculiarities of the words in common literary and living language, for example, their common likeness, and similarity in the shade. Metaphorization in languages is considered one of the ways of formation of terms based on special purposes.

According to the majority of linguists, metaphor plays an important role in the semantic way of the formation of a term. As in appearing new terms certain peculiarities of words used in communication based on the lexical (form) and shade similarities are considered.

As was known from the analysis of Internet terms, metaphor is widely used in nomination of the terminology in the present sphere in compared languages as well. For instance, Yu.N.Karaulov stressed the following when speaking of metaphorization of terms: “metaphor is used in nomination of special notions of information technologies, i.e. computer, programming and data carriers<sup>1</sup>.”

Russian scientist M.N.Volodina when speaking about terminology nomination, underlined the following: “The role of the language in science is vividly seen in the importance of metaphor. The feature of terminology nomination in coding the content of metaphor is very noticeable, as in the formation of a term along with the communicative function of the language the cognitive function is identified”<sup>2</sup>.

J.I.Glazunova argues that metaphorical images today serve as the basis for innovation in various fields of knowledge<sup>3</sup>. Yu.Stepanov states: “On the one hand, there is an exchange of denotations on the basis of metaphor. On the other hand, due to the direct connection between the system of meanings and the system of scientific concepts, the content of the significant is constantly becoming deep”<sup>4</sup>.

WE think that it is worth quoting here Yu.V.Rozhdestvenskiy’s opinion concerning terminological metaphors: “The comparative-typological and historical study of terminology leads to the idea that the phenomenon of figurative basis of terms is legitimate. The emergence of terminology is based on the general imagery of language tropes (including various manifestations of metaphor and metonymy, e.g. black hole, black box, conditional probability, historical process). But in the creation of terms, the function of tropes tends to be limited to a certain extent. The direction of the general content of the tropes is not to preserve the meaning of the everyday words used in daily life. Therefore, conditionally probability is that pleonasm (redundant elements) is evident in the terms of the historical process. In the term “КНИЖНЫЕ ПЕСНИ” the phenomenon of oxymoron is observed that there is a metaphor in terms of coefficient and sine. Tropes “break” the etymological meaning of the words that serve as the basis for the formation of terms, separating the polysemantic “chain”.

This direction in the formation of terminology and terms, that is, figurativeness and expressiveness, are still unexplored aspects”<sup>5</sup>.

V.P. Danilenko notes that in the process of terminology of general lexicon its types of meaning

<sup>1</sup> Караулов Ю. Н. Предисловие // Филиппович Ю. Н. Метафоры информационных технологий: рабочие материалы исследования. М.: МГУП, 2002. 288 с

<sup>2</sup> Володина М. Н. Национальное и интернациональное в процессе

терминологической номинации. М.: Изд-во МГУ, 1993. – С. 7.

<sup>3</sup> Глазунова О.И. Логика метафорических преобразований. – СПб., 2000. – 190 с.17.

<sup>4</sup> Степанов Ю.С. Основы общего языкознания. – М.,1975. – С. 23.

<sup>5</sup> <http://www.sgu.ru/journal/izvestiya/pj/2011-1/18-22>



and aspects of expression of certain information differ<sup>6</sup>.

Metaphor appears as one of the main tools in the expression of Internet concepts, after all, in research of Internet lexicon, this semantic phenomenon is considered as a fundamental cognitive operation that allows to transfer of figurative schemes from one conceptual field to another. Italian linguist Mikaela Rossi, while studying special language metaphors, states: "... special language metaphors are based on different and difficult processes and constantly experience semantic changes"<sup>7</sup>. The scholar points five functions of terminological metaphors: nominative, heuristic, hermeneutic, didactic and conceptual.

Metaphor requires the acceptance of the meaning of language units in discursive activity in its systematic, contextual, intertextual richness, and in any associative relations. The changes that occur in the semantics of terms, the phenomenon of acquiring a transferred meaning often take place metaphorically. For example, the transliteration of words in literary language and other field terms is real linguistic reality, in which the principle of metaphor plays an important role.

In the process of creating metaphors, connotation, which gives meaning and is specific to the environment of the English speakers, plays a key role. Differences in the linguistic landscape and mentality of the languages being compared may be the reason for the inconsistency of the English connotation for the Uzbek language culture. In this way, metaphorization of Internet terms can also apply to one language. For example, the term *electronic money* in Uzbek has a lower yield than *electronic money* in English.

Indeed, "the difference between the two terms, which have the same meaning and are formed by different, means of expression, depends on which side of the objective reality they are directed at"<sup>8</sup>. The main types of metaphorization processes observed in English and Uzbek Internet terms are classified as follows:

a) the following terms are a good example of metaphorization or on the basis of *external* similarity or formal similarity: *finger ring* – *бармоқ ҳалқаси*; *gateway page* – *дарвоза (кўп сонли мурожаатлардан ташкил топган веб-саҳифа)*; *green computer* – *яшил компьютер*; *hatch* – *туйнук*; *background* – *тағлик*, etc.

b) metaphorization based on the similarity of functions. *Head-Mounted Device (HMD)* – *Қалпоқ қурилмаси*; *address mask* – *манзил ниқоби*; *address modification* – *манзиллар турланиши*; *counter*– *санғич*; *electronic army*– *электрон армия*; *electronic glove*– *электрон қўлқоп*; *electronic purse*– *электрон ҳамён*, etc.

c) metaphorization based on similarity of behavior. *Alias* – *адашлар*; *artificial intelligence* – *сунъий тафаккур*; *data fragment*– *маълумотлар бўлаги*; *deadlock*– *боши берк ҳолат*; *default*– *сукут*; *disclosure*– *бузиб очиш*, etc..

If we look at the stages of formation of Internet terms, we can observe the appearance of new metaphorical terms by means of such methods.

Terms associated with the names of various objects: *address* – *манзил*. The metaphorical term is formed by adding the word *mask* – *ниқоб*: *address mask* – *манзил ниқоби*. This term has the concept of a process used to separate bits from an Internet address to the address a subnet. Or from the combination of the words bit (*бит*) and mask (*ниқоб*), metaphorical Internet term by adding *битлар* + *ниқоби* was created.

Metaphorical terms that related to human thinking include *artificial intelligence* – *сунъий тафаккур* or *artificial language* – *сунъий тил*. In this case *intelligence* – *тафаккур* is "the process of active perception of objective reality in the imagination, understanding and discussion, the ability to think, meaning thinking, *artificial* – *сунъий*". The term artificial intelligence is formed by means of a combination of qualities that carry insincere content, is formed on the basis or on the basis of similarity to human-specific activity.

A study of Internet terms in compared languages showed that similarity of metaphorical nominated terms is not always identifiable, and other features may appear in the process of metaphorical transfer, i.e. metaphorization is often based on multiple features.

If we look at the process of appearing, formation and development of Internet terms, first, in the creation of terminological metaphors, we notice that they serve as a source of everyday life surrounding people, secondly, the fact that metaphors always arise from the experience of experts, which in turn experience, we observe that they are related to the worldview manifested in language.

Most linguists argue that metaphor plays a key role in the formation of a term by the help of semantic method. This is because new terms are created by taking into account a certain feature of words in live communication, that is, similarity in a certain way, for example, similarity in shade: *hot swap* – *қайноқ алмаштириш*; *indexing*– *калитли номлаш*; *cookies* – *аввалги из*; *cyclic ring* – *даврий ҳалқа*; *dummy* – *ёлгон символ*;

<sup>6</sup> Даниленко В.П. Русская терминология. Опыт лингвистического описания. – М., 1977. – С. 23–24.

<sup>7</sup> www.terminologie.int.it

<sup>8</sup> Володина М. Н. Национальное и интернациональное в процессе терминологической номинации. М.: Изд-во МГУ, 1993. – С.22. 112 с.



*Fisher-фишер, Интернет қаллоблик*, etc. The use of terms in practice in a new metaphorical sense makes it possible to express an unfamiliar concept through a familiar concept.

Such transparency in terms helps to understand them quickly. For example, *main memory – тезкор хотира; mirror – кўзау; network wearing – тармоқ чоки; shopping cart program– электрон аравача; smart network – ақлли тармоқ*, etc.

The semantic development of the word is subject to the need of language to assimilate reality through metaphor and to know it through scientific concepts, two functions consisting of the participation of the concept. It has two directions: first, there is an exchange of lexeme denotations, which underlies the metaphor. Second, the content of the signifiers is constantly deepens due to its integral connection with the system of word meanings. The scholar goes on arguing that the term is formed as a result of the development of subsequent meanings based on the meaning of the word itself.

In conclusion, the terminological metaphor is a comprehensive source that enriches terminology, is based on the cognitive metaphors of analogy, relies on distinguishing commonness and similarities between different objects and processes, reflects the cultural-historical context of the period, and distinguishes between familiar and new fields of knowledge, and provides conceptual interaction.

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## TWO-PHASE FLOW, SOLID LIQUID SYSTEM

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### ABSTRACT

*Chemical engineers have at different times to work with two-phase flow, where two phases move at the same time by pipes. The authors have presented in other articles <sup>[30,31,32,33,34]</sup> the two phase flow with gas-liquid, gas-solid, in this final article the authors summarize the flow patterns that are presented and the pressure drops presented in the two -phase flow solid-liquid systems.*

**KEYWORDS:** *Two-phase flow, solid-liquid, flow patterns, pressure drops.*

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### 1. INTRODUCTION

The phenomenon of concurrent flow of granular or particulate liquids and solids (known in English as slurry flow) should not be ignored by chemical engineering, as its field of applications in the industry is vast and extensive. As in gas-solid systems, the design of equipment whose main component is the flow of liquids and solids in parallel, was an unknown art for any engineer outside these systems. In early 1906, liquid-solid flow systems comprised almost exclusively city and industrial drains, which were designed and built by civil engineers. With the design and construction of large coal-by-water pipelines in the early 1950s in various parts of the world, liquid-solid biphasic flow research intensified, and in this way chemical engineering was able to glimpse a better future by converting this discipline into science.

In addition to pipes for hydraulic transport of solid materials, there are other equipment where parallel flow conditions of liquids and solid particles are presented, such as catalytic reactors, press filters, ion exchange equipment, decanters, mixers, heaters and coolers, pumps for suspension handling, among others.

In the design of liquid-solid systems, the engineer's concern is focused on determining pressure drop, which depends on the flow pattern, the speed of the conveyor liquid, and the properties of both phases. The speed of the liquid phase is a critical variable as it determines the speed of solid particles. Poor selection of liquid velocity causes erosion of the internal walls of pipes and equipment with liquid-solid biphasic flow, and consequently the failure of them. Unlike the flow of gas-solid mixtures, there is no risk of explosion or fire, but the phenomenon of erosion leads to corrosion of tubes and equipment.

Although both a gas and a liquid can be used to carry solid particles, the behavior of both fluid-solid biphasic flows has important differences. In gas-solid flow, particle-to-particle interactions and the pipe wall dominate the interactions between fluid and particles. In liquid-solid flow, fluid-particle and particle interactions dominate over those between particles and the pipe wall. It is also worth noting the great similarity between the two phenomena, highlighting the flow patterns and the series of variables on which their behavior depends.

In order to optimize the design of these systems and improve their operability, it is necessary to know in greater detail the phenomenon of liquid-solid flow. Despite research in this field, it has not yet been possible to develop a general model, as the correlations existing to date depend on the flow pattern. However, thanks to similarities to the gas-solid flow, a large number of these correlations are applicable for both types of biphasic flow, which can lead us in the future to a general two-phase flow model.

### 1.1.- CLASSIFICATION OF SOLID PARTICLES

The fluidization of particle beds can occur in two ways, homogeneously or with the appearance of bubbles, depending on the size of the particles and the density of the particles. According to these fluidization patterns, Gibilaro, Hossain and Foscolo<sup>[1]</sup> classified the particles into three groups, presenting them on a graph (Figure 1).

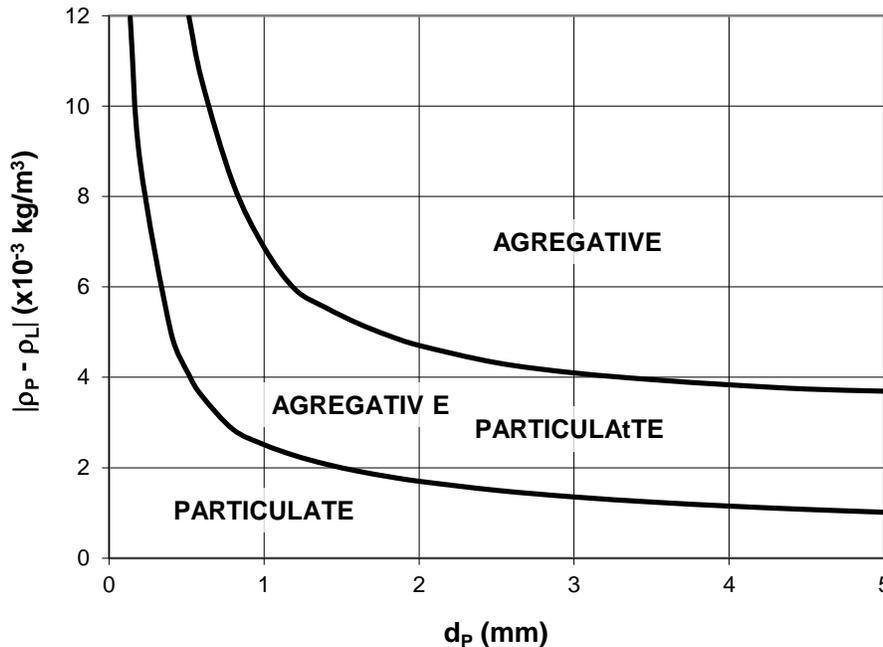


Figure 1.- Particle classification map of Gibilaro-Hossain-Foscolo.<sup>[1]</sup> (1986).

This map was built based on water fluidization data under atmospheric conditions. For other liquids and other pressure and temperature conditions, Di Felice<sup>[2]</sup> developed a classification map (Figure 2), based on the classification criteria proposed by him, Gibilaro and Foscolo<sup>[3]</sup>, and whose coordinates are dimensional. The map coordinates of Di Felice are:

$$d_p^* = d_p \left[ \frac{\rho_L (\rho_P - \rho_L) g}{\mu_L^2} \right]^{1/3} = Ar^{1/3} \tag{1}$$

$$De = \frac{\rho_L}{\rho_P} \tag{2}$$

Where:

$d_p^*$  = adimensional diameter of the particule ..

De = density ratio of the phases.

$d_p$  = particle diameter m.

$\rho_L$  = liquid density  $kg/m^3$ .

$\rho_P$  = solid particle density  $kg/m^3$ .

g = gravity= 9.81  $m/s^2$ .

$\mu_L$  = liquid viscosity  $kg/(m s)$ .

Ar = Arquímedes' number, also called Galileo's number (Ga):



$$Ar = \frac{d_p^3 \rho_L (\rho_p - \rho_L) g}{\mu_L^2} = (d_p^*)^3 \quad (3)$$

$$Ar = \frac{d_p^3 \rho_L (\rho_p - \rho_L) g}{\mu_L^2} = (d_p^*)^3 \quad (3)$$

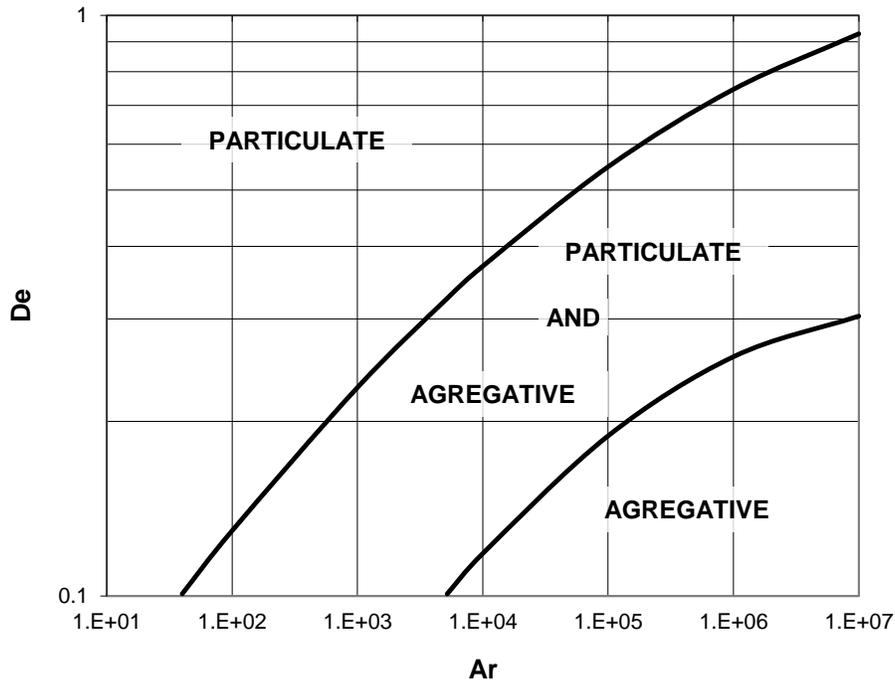


Figure 2.- Di Felice particle classification map.<sup>[2]</sup> (1995).

Readers interested in learning more about solid particle characterization are advised to consult the works of Brave Barderas<sup>[22]</sup>, Leva<sup>[23]</sup>, Kunii and Levenspiel<sup>[24]</sup>, Fan and Zhu<sup>[25]</sup>, and Shook and Roco<sup>[26]</sup>

## 1.2 .-FLOW PATTERNS IN HORIZONTAL PIPING

There are five liquid-solid biphasic flow patterns in horizontal pipes (Figure 3), which are arranged in decreasing order of liquid speed are as follows:

### Homogeneous flow

Solid particles are completely suspended in the liquid and are evenly distributed throughout the pipe flow area. The presence of particles affects the rheology of the liquid. If the concentration of the solids is less than 5% by volume, the flow behavior is of a Newtonian type, and if the concentration is higher, the flow behaves like a non-Newtonian fluid. This flow rate occurs at very high surface liquid speeds. By remebing a single homogeneous phase, it is often referred to as pseudohomogeneous flow.

### Heterogeneous flow

By decreasing the speed of the liquid, the larger and heaviest particles descend to be transported by the liquid phase in the lower portion of the tube. Particles are still suspended, so there is no sediment at the bottom of the pipe. It is also known as heterogeneous slurry.

### Dune flow.

Further decreasing the speed of the liquid phase, to a value less than the rate of sedimentation, the particles begin to precipitate, thus forming sediments whose transport is carried out in the form of dunes or mounds. The liquid velocity determines the type of dunes present, which are similar to those in the flow to two phases gas-solid:

### Longitudinal dune flow:



Immediately below the sedimentation rate, the particles form elongated dunes, parallel to the pipe, which advance in the direction of the flow. The width of these dunes is approximately 0.1 times the diameter of the pipe, and its length is 1 to 3 times the diameter of the pipe. It is also known as sediment flow, belt flow, or saltation flow.

#### Transverse dune flow

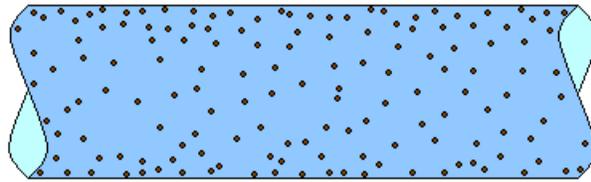
At a lower liquid speed, the particles form dunes perpendicular to the pipe, which advance in the direction of the flow. Its appearance is that of islands or clusters of well-defined particles. As the speed of the liquid phase decreases, the length of the dunes decreases and their height increases. This flow pattern is the classic dune flow, also known as stratified flow.

#### Ripple flow

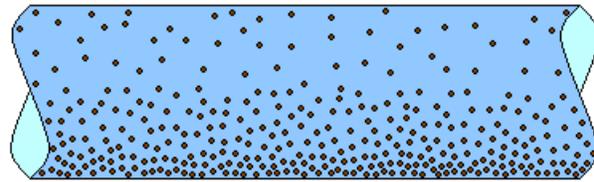
At lower liquid speeds, particles form a stationary bed at the bottom of the pipe. In the middle portion, the particles advance slowly, sliding over the stationary bed. At the top, the liquid is flowing freely at a higher speed relative to the stationary bed, carrying particles that form waves or waves that move in the direction of the flow as transverse dunes. It is often called flow with stationary bed.

#### Moving bed flow

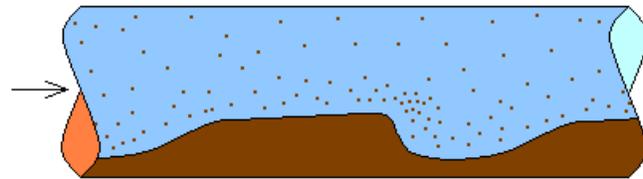
By further decreasing the surface speed of the liquid phase, the particles fully occupy the flow area of the pipe, thus the upper portion flowing slowly and the lower portion remains stationary. If the liquid speed drops further, the movement of the particles ceases causing the line to be blocked. It is also called continuous dense phase flow.



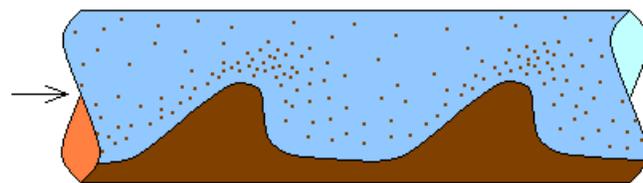
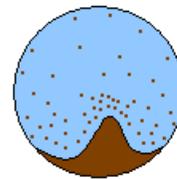
Homogeneous flow



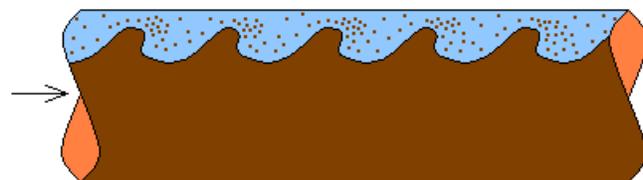
Heterogeneous flow



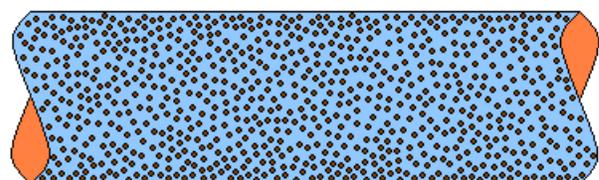
Longitudinal dune flow:



Transverse dune flow



Ripple flow



Moving bed flow

**Figure 3.- Flow patterns to two phases liquid-solid system in horizontal pipes.**



These flow patterns are classified according to the concentration of the solids in the flow area of the pipe, as follows:

### 1.2.1.- Diluted phase flow:

The concentration of particles is relatively low, as the surface velocity of the liquid is higher than that of sedimentation of solids, which are dispersed in the liquid phase; it is also known as diluted phase hydraulic transport: homogeneous and heterogeneous flows.

### Dense phase flow

The surface velocity of the liquid is less than that of sedimentation of the particles, causing an accumulation of particles in the pipe; it is also known as dense phase hydraulic transport: flows with dunes, wave and with mobile bed.

## 2.- PREDICTION OF FLOW PATTERNS IN HORIZONTAL PIPES

The determination of the flow pattern to two liquid-solid phases present in a transport line is the first step for sizing. Similar to the identification of horizontal flow patterns in gas-solid systems, in liquid-solid systems this identification is independent of the technique used by researchers, as flow patterns are recognized by the pressure drop profile in which they are presented.

One of the first maps of horizontal flow patterns was developed by Newitt and his collaborators<sup>[4]</sup>, based on the work of Durand and Condolios<sup>[5]</sup>, and using data on the transport of sand, gravel, manganese oxide and coal with water. Subsequently, other maps have appeared in the literature, including that of Turian and Yuan<sup>[6]</sup>, with the disadvantage of being specific to a particular system and certain flow conditions.

The only widespread map to date is that developed by Thomas<sup>[7]</sup> (Figure 4), which is based on theoretical considerations and experimental data. As seen in gas-solid systems, the data used by Thomas mainly correspond to water-solid systems, although some data belonging to air-solid systems was used.

Below is Thomas' map corresponding to the liquid-solid systems, along with its methodology for determining the horizontal flow pattern. The distribution of the patterns in this graph is similar to that of the Thomas map for gas-solid systems. The map shown below was constructed for a quotient  $(\rho_p - \rho_L)/\rho_L$  of 1.65, which is a common average value in liquid-solid systems and was originally used by Thomas when drawing up his map.

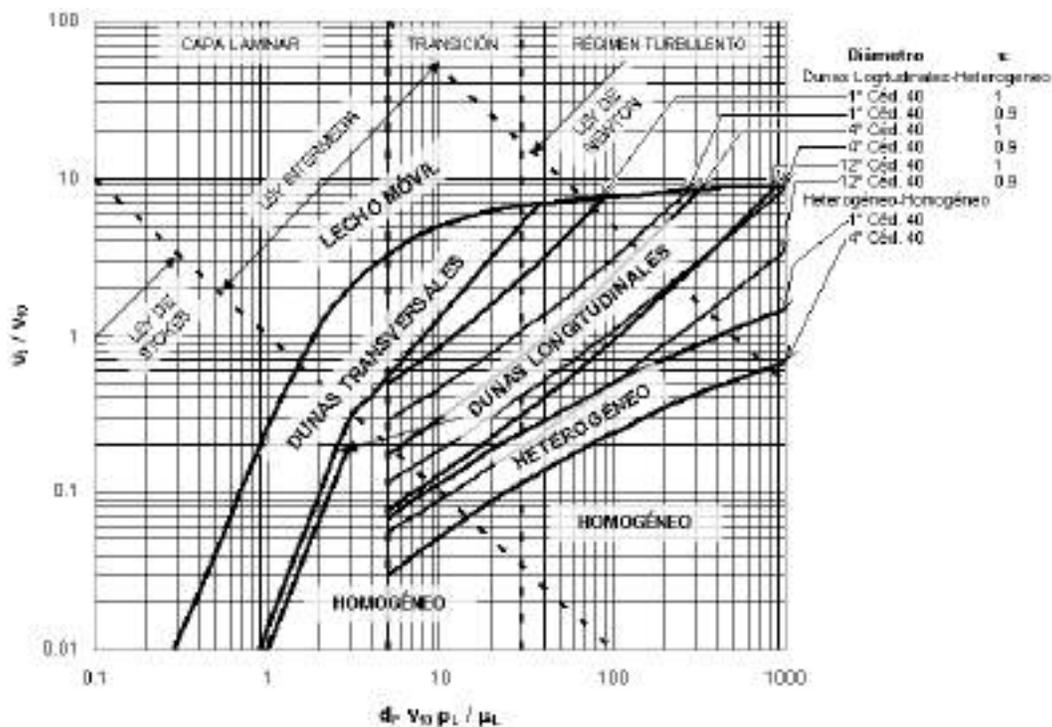


Figure 4.- Map of Thomas patterns for horizontal flow in liquid-solid systems<sup>[6]</sup>. (1964).

The fraction of gaps or liquid holdup is given by the following equation:

$$\varepsilon = \frac{Q_L}{Q_L + Q_P} = \frac{\frac{W_L}{\rho_L}}{\frac{W_L}{\rho_L} + \frac{W_P}{\rho_P}} \quad (4)$$

Where:

$Q_L$  and  $Q_P$  - volumetric flows of the liquid and solid phases in  $m^3/h$ .

2.1 Thomas method for determining horizontal flow patterns:

1.- Obtain the terminal velocity of the particles using the graph in Figure 5, and equation A:

$$v_t = (u_t^*) \left[ \frac{\mu \Delta \rho g}{\rho^2} \right]^{1/3} \left[ \frac{m}{s} \right] \quad (A)$$

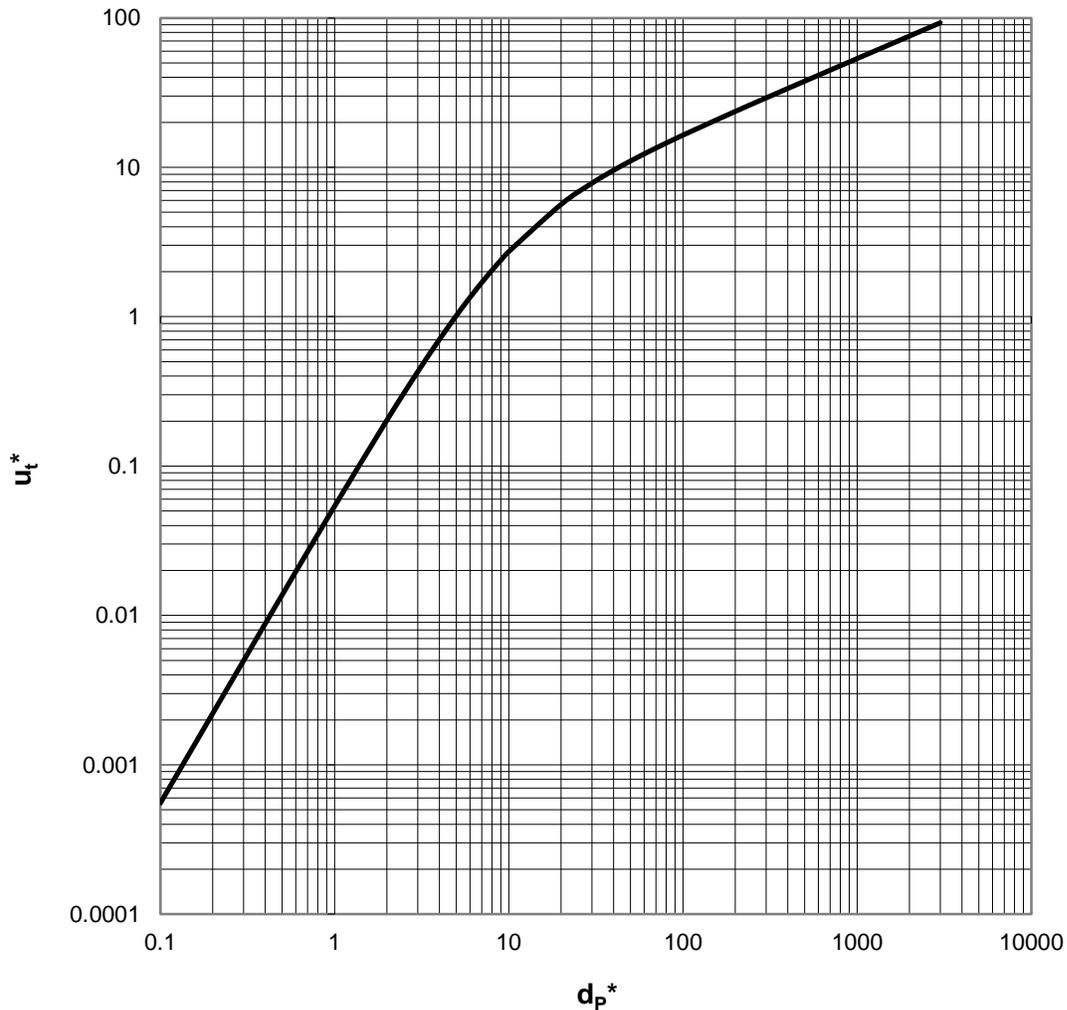


Figure 5.- Terminal speed of spherical particles in fluids.

2.- Calculate the superficial particle Reynolds:

$$Re_{SP} = \frac{d_P v_{SL} \rho_L}{\mu_L} \quad (5)$$

3.- Determine the friction factor of Fanning, using the superficial particle Reynolds and Moody diagram or, using the equations of Hagen-Poiseuille or Chen depending on the flow regimen (laminar or turbulent, respectively):

$$f_f = \frac{f_D}{4} \quad (B)$$

Laminar flow:  $f_D = \frac{64}{Re} \quad (C)$

Turbulent flow:

$$\frac{1}{\sqrt{f_D}} = -2 \log \left[ \frac{\epsilon}{3.7065 D} - \frac{5.0452}{Re} \log \left( \frac{1}{2.8257} \left( \frac{\epsilon}{D} \right)^{1.1098} + \frac{5.8506}{Re^{0.8981}} \right) \right] \quad (D)$$

4.- Calculate the frictional velocity at infinite dilution with the following equation:

$$v_{f0} = v_{SL} \sqrt{\frac{f_f}{2}} \quad (6)$$

5.- Obtain the coordinates of Thomas' map with the following equations, and determine the flow pattern present in the pipe:

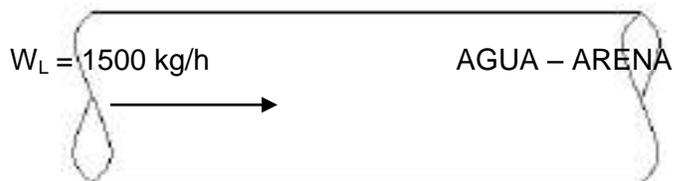
$$\text{Abscisa} = \frac{d_P v_{f0} \rho_L}{\mu_L} \quad (7)$$

$$\text{Ordenada} = \frac{v_t}{v_{f0}} \quad (8)$$

### Example 1

Determine the flow pattern present in a 4-inch horizontal line 40 by which 1500 kg/h of water flows, at a temperature of 25°C, transporting sand particles with an average diameter of 175 μm and its density of 2650 kg/m<sup>3</sup>.

1.-TRANSLATION



2.-Planning.

2.1.-Discussion

To find the flow pattern, the Parameters of Thomas must be known, which will be used in your flow pattern map in Figure 4.

2.2.-Thomas coordinates

$$\text{Abscisa} = \frac{d_P v_{f0} \rho_L}{\mu_L} \quad \text{Ordenada} = \frac{v_t}{v_{f0}}$$



### 3.-CALCULATIONS

#### 3.1.-Terminal particle speed .

The properties of water at 25°C are:

$$\rho_L = 997.08 \text{ kg/m}^3 \quad \mu_L = 0.8937 \text{ cp} = 8.937 \times 10^{-4} \text{ kg/(m s)}$$

$$d_p^* = (175 \times 10^{-6} \text{ m}) \left[ \frac{\left( 997.08 \frac{\text{kg}}{\text{m}^3} \right) (2650 - 997.08) \frac{\text{kg}}{\text{m}^3} \left( 9.81 \frac{\text{m}}{\text{s}^2} \right)}{\left( 8.937 \times 10^{-4} \frac{\text{kg}}{\text{ms}} \right)^2} \right]^{1/3} = 4.77$$

This adimensional diameter value is obtained from the terminal velocity plot of particles in fluids (Figure 5):

$$u_t^* = 0.95$$

$$v_t = (0.95) \left[ \frac{\left( 8.937 \times 10^{-4} \frac{\text{kg}}{\text{ms}} \right) (2650 - 997.08) \frac{\text{kg}}{\text{m}^3} \left( 9.81 \frac{\text{m}}{\text{s}^2} \right)}{\left( 997.08 \frac{\text{kg}}{\text{m}^3} \right)^2} \right]^{1/3} = 0.023 \frac{\text{m}}{\text{s}}$$

#### 3.2.-Frictional speed to infinite dilution

For a pipe of 4" nominal diameter ced 40, its internal diameter is:

$$D = 4.026 \text{ in} = 0.1023 \text{ m}$$

$$A = \frac{\pi}{4} D^2 = 0.008213 \text{ m}^2$$

$$v_{SL} = \frac{1500 \frac{\text{kg}}{\text{h}}}{3600 \frac{\text{s}}{\text{h}} \left( 997.08 \frac{\text{kg}}{\text{m}^3} \right) (0.008213 \text{ m}^2)} = 0.051 \frac{\text{m}}{\text{s}}$$

$$Re_{SP} = \frac{(175 \times 10^{-6} \text{ m}) \left( 0.051 \frac{\text{m}}{\text{s}} \right) \left( 997.08 \frac{\text{kg}}{\text{m}^3} \right)}{8.937 \times 10^{-4} \frac{\text{kg}}{\text{ms}}} = 9.96 \quad \text{laminar flow}$$

$$f_D = \frac{64}{9.96} = 6.43$$

$$f_f = \frac{6.43}{4} = 1.61$$

$$v_{f0} = 0.051 \frac{\text{m}}{\text{s}} \sqrt{\frac{1.61}{2}} = 0.046 \frac{\text{m}}{\text{s}}$$

3.3.- Thomas coordinates.



$$\text{Abcisa} = \frac{(175 \times 10^{-6} \text{ m}) \left(0.046 \frac{\text{m}}{\text{s}}\right) \left(997.08 \frac{\text{kg}}{\text{m}^3}\right)}{8.937 \times 10^{-4} \frac{\text{kg}}{\text{ms}}} = 8.98$$

$$\text{Ordenada} = \frac{0.023 \frac{\text{m}}{\text{s}}}{0.046 \frac{\text{m}}{\text{s}}} = 0.50$$

With these coordinates, the flow pattern corresponding to the intersection of these values is located on Thomas's map (Figure 4), the latter being observed in the flow region with longitudinal dunes.

#### 4.-RESULT

The pattern developed in the pipe corresponds to the flow with longitudinal dunes.

### 3.- PREDICTION OF PRESSURE DROP IN HORIZONTAL PIPES

To complete the process of sizing hydraulic particle transport pipes, it is necessary to determine the pressure drop in them. There is currently no general model capable of correctly predicting pressure losses in liquid-solid systems. Although empirical correlations have been developed to calculate pressure drops, none of them apply to other systems outside the range of experimental data with which the correlation was built. Correlations based on theoretical considerations better predict pressure losses in pipes, including Molerus and Wellmann<sup>[8]</sup>, who using dimensional analysis and based on a broad spectrum of experimental data, developed the best semi-empirical model to date for pressure drops in horizontal pipes.

#### 3.1.- Molerus-Wellman correlation

In general, the total pressure drop in liquid-solid systems is the sum of pressure drops for each of the phases, and is expressed as follows:

$$\Delta P_{2F} = \Delta P_L + \Delta P_P$$

Where:

$\Delta P_{2F}$  = Two-Phase total pressure drop kgf/m<sup>2</sup>.

$\Delta P_L$  = Liquid phase pressure drop kgf/m<sup>2</sup>.

$\Delta P_P$  = Solid phase pressure drop kgf/m<sup>2</sup>.

The first term of this equation can be determined by the Darcy equation:

$$\Delta P_L = \frac{f_L \rho_L v_M^2 L}{2Dg_C} \left[ \frac{\text{kgf}}{\text{m}^2} \right] \quad (9)$$

$f_L$  = Darcy friction factor for the liquid phase.

$v_M$  = Mixture mean velocity. m/s:

$$v_M = \frac{v_{SL} + v_{SP}}{2} \quad (10)$$

L = length of the pipe en m.

D = pipe diameter m.

$g_C = 9.81 \text{ m kg}/(\text{s}^2 \text{ kgf})$ .

$v_{SL}$  = liquid phase surfase velocity m/s:

$$v_{SL} = \frac{W_L}{3600 \rho_L A} \left[ \frac{\text{m}}{\text{s}} \right] \quad (11)$$

$v_{SP}$  = solid phase surfase velocity m/s:



$$v_{SP} = \frac{W_P}{3600 \rho_P A} \left[ \frac{m}{s} \right] \quad (12)$$

Molerus and Wellmann developed an expression to determine the pressure drop for the solid phase:

$$\Delta P_P = \frac{(x^*) \varphi (\rho_P - \rho_L) g L \left( \frac{v_M}{v_t} \right)^2}{g_C} \left[ \frac{kgf}{m^2} \right] \quad (13)$$

Where:  $x^*$  = adimensional pressure drop (Molerus-Wellmann parameter).

$\Phi$  = fraction volume of solids relative to the total volume of mixture:

$$\varphi = \frac{\frac{W_P}{\rho_P}}{\frac{W_L}{\rho_L} + \frac{W_P}{\rho_P}} \quad (14)$$

To get the value of the  $x^*$  parameter, Molerus and Wellmann defined three variables, the result of their dimensional analysis:

$$Fr_t = \frac{v_t}{\sqrt{gD(S-1)}} \quad (15)$$

$$Fr_P = \frac{v_M}{\sqrt{gd_p(S-1)}} \quad (16)$$

$$x_0 = \frac{\left( \frac{v_{SLIP}}{v_M} \right)_0^2}{1 - \left( \frac{v_{SLIP}}{v_M} \right)_0} \quad (17)$$

Where:  $Fr_t$  = number of Froude terminal.  $Fr_P$  = Particle Froude number.  $S$  - Density Ratio:

$$S = \frac{\rho_P}{\rho_L} = \frac{1}{De} \quad (18)$$

$x_0$  - dimension pressure drop independent of concentration.  $\left( \frac{v_{slip}}{v_M} \right)_0$  - dimensional sliding speed independent of the concentration of the solids.  $v_{slip}$  = sliding speed between phases (slip velocity) in m/s:

$$v_{SLIP} = v_L - v_P \left[ \frac{m}{s} \right] \quad (19)$$

$v_L$  = actual liquid speed at m/s.  $v_P$  - actual particle speed in m/s.

The slip velocity is, as in all two-phase flow systems, the main parameter in the transport mechanism and energy dissipation, since the drag force exerted by the fluid on the particle (or drop in the case of gas-liquid systems) depends on the relative speed between the two phases. The fluid always advances faster than the particles, causing some friction between the phases and, therefore, a loss of kinetic energy.

In order to determine the slip speed, Molerus and Wellmann produced a graph where this speed is a function of the terminal and particle Froude numbers, as shown in Figure 6. The  $x^*$  parameter depends on the volumetric fraction  $\varphi$ . as follows:

$$0 \leq \varphi \leq 0.25: \quad x^* = x_0 \quad (20)$$

$$\varphi > 0.25: \quad x^* = x_0 + 0.1 Fr_t^2 (\varphi - 0.25) \quad (21)$$



### 3.2.- Molerus-Wellmann method:

- 1.- Calculate the terminal and particle Froude numbers with equations 15 and 16.
- 2.- Determine the dimensional sliding speed using the graph in Figure 6.
- 3.- Calculate the parameters  $x_0$  and  $\varphi$  with equations 17 and 14, respectively.
- 4.- Get the  $x^*$  parameter with equations 20 and 21.
- 5.- Calculate the pressure drop of the solid phase with equation 13.
- 6.- Calculate the pressure drop of the liquid phase with equation 9.
- 7.- Determine the total pressure drop with equation 8.

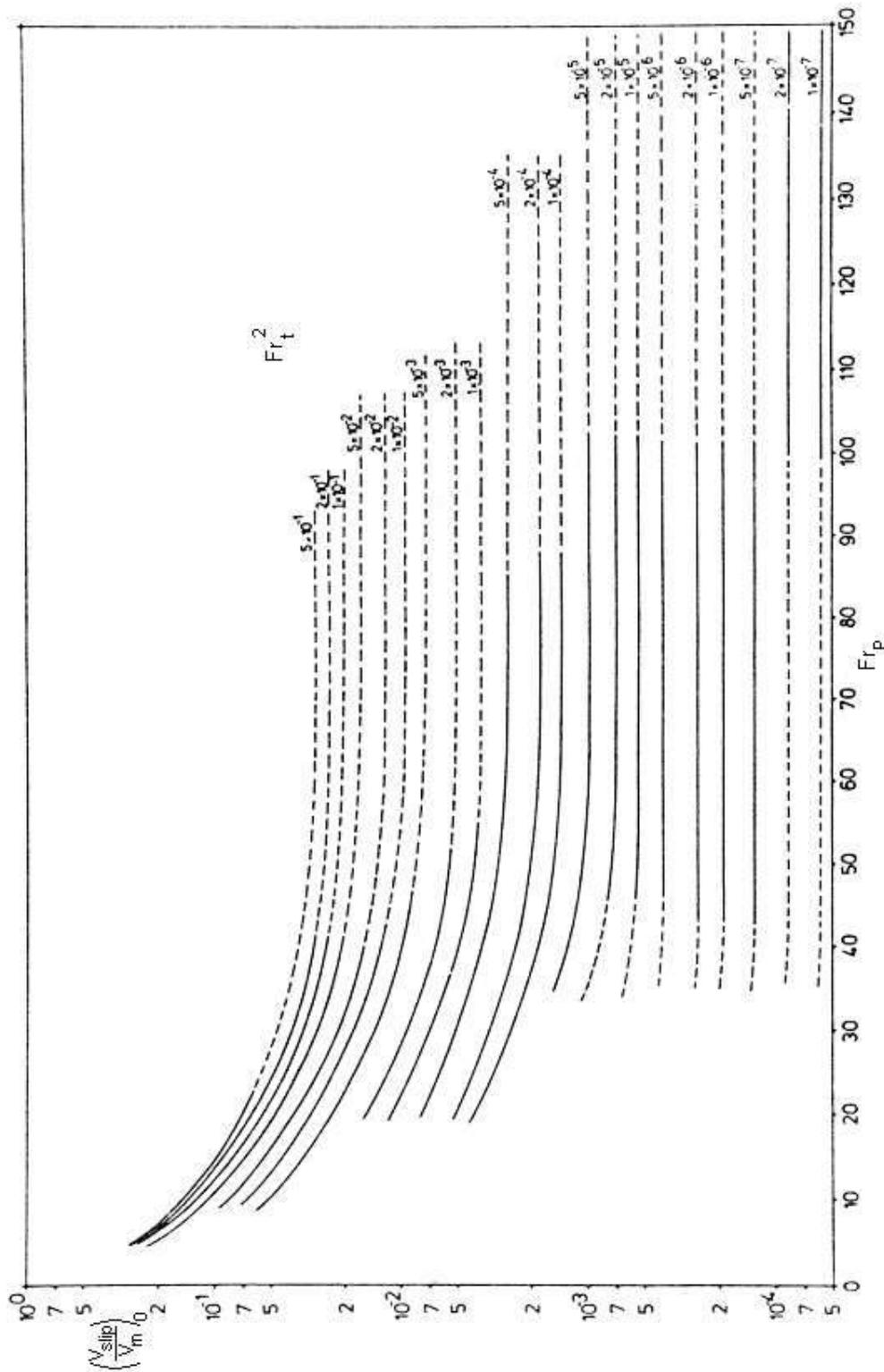


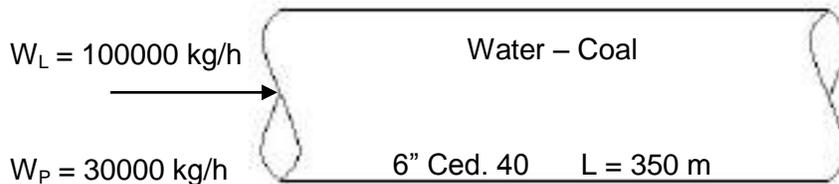
Figure 6.- Molerus-Wellmann graph for determining the dimensional slip speed. (1981)



**Example 2**

Get total pressure drop in a 6-inch horizontal pipe that transports mineral carbon particles at a rate of 30000 kg/h. These particles are dragged by 100000 kg/h of water at 20°C, having an average diameter of 5200 μm and a density of 1270 kg/m<sup>3</sup>. The length of the pipe is 350 m.

1.-TRANSLATION



2.-Planning.

2.1.-Discussion

To obtain the pressure drop in the line the Molerus-Wellmann method is used, which does not need the determination of the flow pattern.

3.-CÁLCULS

3.1.-Dimensional sliding speed

The water properties at 20°C are:

$$\rho_L = 998.23 \text{ kg/m}^3$$

$$\mu_L = 1.005 \text{ cp} = 1.005 \times 10^{-3} \text{ kg/(m s)}$$

$$d_p^* = 71.82$$

This adimensional diameter value is obtained from the terminal velocity plot of particles in fluids (Figure 5):

$$u_t^* = 13$$

$$v_t = 0.181 \text{ m/s}$$

$$S = \frac{1270 \frac{\text{kg}}{\text{m}^3}}{998.23 \frac{\text{kg}}{\text{m}^3}} = 1.27$$

For a 6" nominal diameter pipe 40, its internal diameter is:

$$D = 6.065 \text{ in} = 0.1541 \text{ m}$$

$$A = 0.0186388 \text{ m}^2$$



$$v_{SL} = \frac{100000 \frac{\text{kg}}{\text{h}}}{3600 \frac{\text{s}}{\text{h}} \left( 998.23 \frac{\text{kg}}{\text{m}^3} \right) (0.0186388 \text{ m}^2)} = 1.49 \frac{\text{m}}{\text{s}}$$

$$v_{SP} = \frac{30000 \frac{\text{kg}}{\text{h}}}{3600 \frac{\text{s}}{\text{h}} \left( 1270 \frac{\text{kg}}{\text{m}^3} \right) (0.0186388 \text{ m}^2)} = 0.35 \frac{\text{m}}{\text{s}}$$

$$v_M = \frac{1.49 \frac{\text{m}}{\text{s}} + 0.35 \frac{\text{m}}{\text{s}}}{2} = 0.92 \frac{\text{m}}{\text{s}}$$

$$Fr_P = \frac{0.92 \frac{\text{m}}{\text{s}}}{\sqrt{9.81 \frac{\text{m}}{\text{s}^2} (5200 \times 10^{-6} \text{ m}) (1.27 - 1)}} = 7.84$$

$$Fr_t = \frac{0.181 \frac{\text{m}}{\text{s}}}{\sqrt{9.81 \frac{\text{m}}{\text{s}^2} (0.1541 \text{ m}) (1.27 - 1)}} = 0.283$$

$$Fr_t^2 = (0.283)^2 = 8 \times 10^{-2}$$

With the Particle Froude ( $Fr_P$ ) and the square of the Froude terminal ( $Fr_t^2$ ), from the Molerus-Wellmann chart (Figure 6) you get:

$$\left( \frac{v_{SLIP}}{v_M} \right)_0 = 0.15$$

3.2.-Solid phase pressure drop.

$$x_0 = \frac{(0.15)^2}{1 - 0.15} = 0.0265$$



$$\varphi = \frac{\frac{30000 \frac{\text{kg}}{\text{h}}}{1270 \frac{\text{kg}}{\text{m}^3}}}{\frac{100000 \frac{\text{kg}}{\text{h}}}{998.23 \frac{\text{kg}}{\text{m}^3}} + \frac{30000 \frac{\text{kg}}{\text{h}}}{1270 \frac{\text{kg}}{\text{m}^3}}} = 0.191 < 0.25$$

$$x^* = 0.0265$$

$$\Delta P_p = 0.0265 (0.191) (1270 - 998.23) \frac{\text{kg}}{\text{m}^3} (350 \text{m}) \left( \frac{0.92 \frac{\text{m}}{\text{s}}}{0.181 \frac{\text{m}}{\text{s}}} \right)^2 = 12438.5 \frac{\text{kgf}}{\text{m}^2}$$

3.3.-Liquid phase pressure drop.

$$Re_{SL} = \frac{0.1541 \text{m} \left( 1.49 \frac{\text{m}}{\text{s}} \right) \left( 998.23 \frac{\text{kg}}{\text{m}^3} \right)}{1.005 \times 10^{-3} \frac{\text{kg}}{\text{ms}}} = 228062 \quad \text{turbulent flow}$$

$$\varepsilon/D = 0.0003$$

$$f_L = f_D = 0.0175$$

$$\Delta P_L = \frac{0.0175 \left( 998.23 \frac{\text{kg}}{\text{m}^3} \right) \left( 0.92 \frac{\text{m}}{\text{s}} \right)^2 (350 \text{m})}{2 \left( 0.1541 \text{m} \right) \left( 9.81 \frac{\text{kgm}}{\text{kgf s}^2} \right)} = 1711.6 \frac{\text{kgf}}{\text{m}^2}$$

3.4.-Total pressure drop.

$$\Delta P_{2F} = 1711.6 \frac{\text{kgf}}{\text{m}^2} + 12438.5 \frac{\text{kgf}}{\text{m}^2} = 14150.1 \frac{\text{kgf}}{\text{m}^2}$$

4.-RESULT

The total pressure drop is 14150.1 kgf/m<sup>2</sup>.



### Considerations

This method does not consider the flow pattern present in the line, as the theoretical basis used by these researchers implicitly carries the appearance or absence of sediment at the bottom of the pipe. The Molerus-Wellmann method predicts pressure drops to two liquid-solid phases in horizontal pipes with a maximum error of  $\pm 10\%$ , and is based on experimental data whose intervals are as follows:  $25 \text{ mm} \leq D \leq 315 \text{ mm}$  ( $1'' \leq D \leq 12''$ ),  $12 \text{ }\mu\text{m} \leq d_p \leq 5200 \text{ }\mu\text{m}$ ,  $1270 \text{ kg/m}^3 \leq \rho_p \leq 5250 \text{ kg/m}^3$ .

There are other methodologies for calculating pressure drops in horizontal flow to two liquid-solid phases. The interested reader can consult the correlations of Durand-Condolios<sup>[5]</sup>, Newitt-Richardson-Abbott-Turtle<sup>[4]</sup>, Condolios-Chapus<sup>[9]</sup>, Rose-Duckworth<sup>[10]</sup>, Turian-Yuan<sup>[6]</sup>, among others.

## **4.-FLOW PATTERNS IN VERTICAL PIPES**

Unlike the gas-solid flow, the existing patterns in the vertical and descending liquid-solid biphasic flow are practically the same, due to the great influence of the viscosity and density of the liquid on the fluid-particle interactions, which dominate along with particle-particle interactions over those existing between the particles and the pipe wall, as mentioned above. The only difference between the two types of flow is the actual movement of the particles, for this reason the upstream patterns will be exposed separately from those corresponding to the downstream.

### 4.1.- Upstream vertical flow patterns

There are three patterns of which one is two-phase flow and the other two are fluidization (Figure 7). The latter, along with the fixed bed, are exposed only to provide a broader view of the phenomenon. Fixed in increasing order of liquid velocity, flow patterns are:

#### Fixed bed

As seen in gas-solid systems, this flow rate is not a real flow pattern to two liquid-solid phases, nor fluidization, as the particles remain motionless while the liquid ascends through the gaps between them. This type of bed is presented at surface fluid rates lower than the minimum fluidization velocity. It is also called packed bed.

#### Particulate fluidization

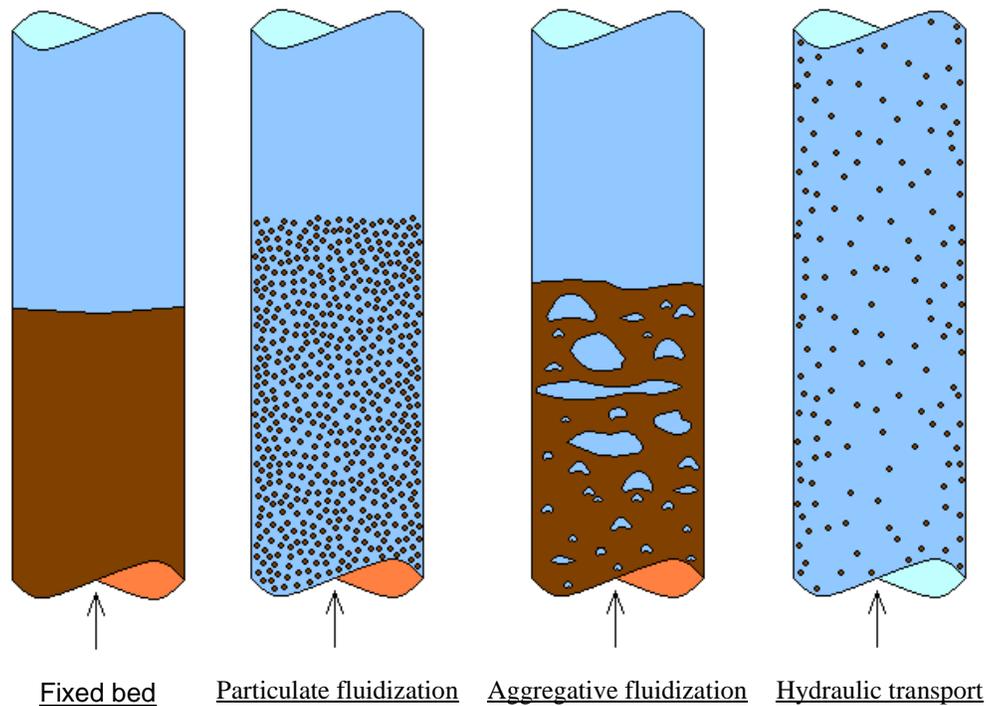
The bed expands as the surface velocity of the liquid increases. The liquid phase flows through the interstitials between the particles, which increase in size evenly with expansion. In this way, there are no inhomogeneities in the bed, such as bubbles or liquid bullets inside. It is given at surface rates of liquid greater than the minimum fluidization and lower than the terminal speed of descent of the particles (terminal settling velocity).

#### Aggregative fluidization

In this pattern of fluidization, inhomogeneities appear in the bed, such as the formation of liquid bubbles within the bed of solid particles, giving it an appearance of being boiling. Liquid bubbles are similar to those of their gaseous counterpart, in the fluidization with bubbling in gas-solid systems, as they have a station of particles in their immediate lower portion. Liquid bullets can also occur, similar to bullet flow in gas-solid systems, or the appearance of stretch marks or liquid bands, which move upwards. This fluidization regime occurs only with particles belonging to the group whose fluidization is of this type, and at surface rates of liquid greater than the minimum fluidization but less than the terminal rate of descent of the particles.

#### Hydraulic transport

This is the only real two-phase flow pattern observed in vertical uplines, as it is characterized by the dragging of particles from the bottom portion of the pipe to the top. At low liquid speeds, solid particles are evenly dispersed throughout the pipe flow area. At higher liquid rates, particles tend to flow preferably through the center of the tube, causing the formation of a liquid ring, which contains a small amount of particles in its sinus. It occurs at higher surface liquid speeds at the terminal rate of particle descent.



**Figure 7.- Upstream patterns to two phases liquid-solid system in vertical pipes.**

#### 4.2.- Downstream vertical flow patterns

This type of flow is rare but can be found in lines coming from storage tanks and drains. Fixed in increasing order of sliding speed between phases, flow patterns are as follows (Figure 8):

##### Packed bed flow

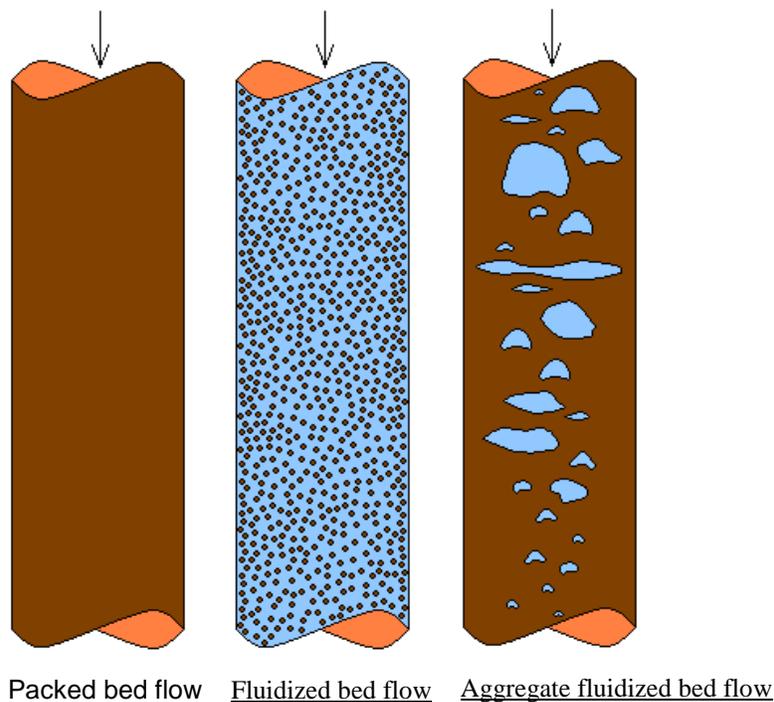
The particle descent is as a packed bed, where the liquid flows through the interstitials between the particles. Occurs at lower sliding speeds at the minimum relative fluidization speed.

##### Fluidized bed flow

This flow pattern is characterized by the decrease of solid particles as a bed with particulate fluidization. It is similar to its counterpart in gas-solid systems, and occurs at faster sliding speeds than the minimum relative fluidization speed.

##### Aggregate fluidized bed flow

Is characterized by the downstream flow of a particle mass as a bed with aggregative fluidization. It is similar to the bubbling fluidized bedflow of gas-solid systems, but occurs only with particles whose fluidization is aggregative, at sliding speeds greater than the minimum relative fluidization rate.



**Fig. 8.- Downward flow patterns to two phases liquid-solid system in vertical pipes.**

## 5.- PREDICTION OF FLOW PATTERNS IN VERTICAL PIPES

Thanks to the enormous similarity between the gas-solid and liquid-solid systems, the study and characterization carried out through the use of the same type of variables and correlations used in the case of gas-solid flow. One of the first attempts in this regard was made by Creasy<sup>[11]</sup>, who proposed a map with dimensional coordinates where he made a distinction between particulate and aggregative fluidizations. Later, Molerus<sup>[12]</sup> produced a map where the fixed and fluidized beds are located, whose coordinates are well-known dimensional groups.

Resuming the Molerus map, Grace<sup>[13]</sup> built her own by using the particle's dimensional diameter and the dimensional velocity of the fluid. This map (Figure 9) is similar to that corresponding for gas-solid upstream vertical flow, and as the most general is shown below.

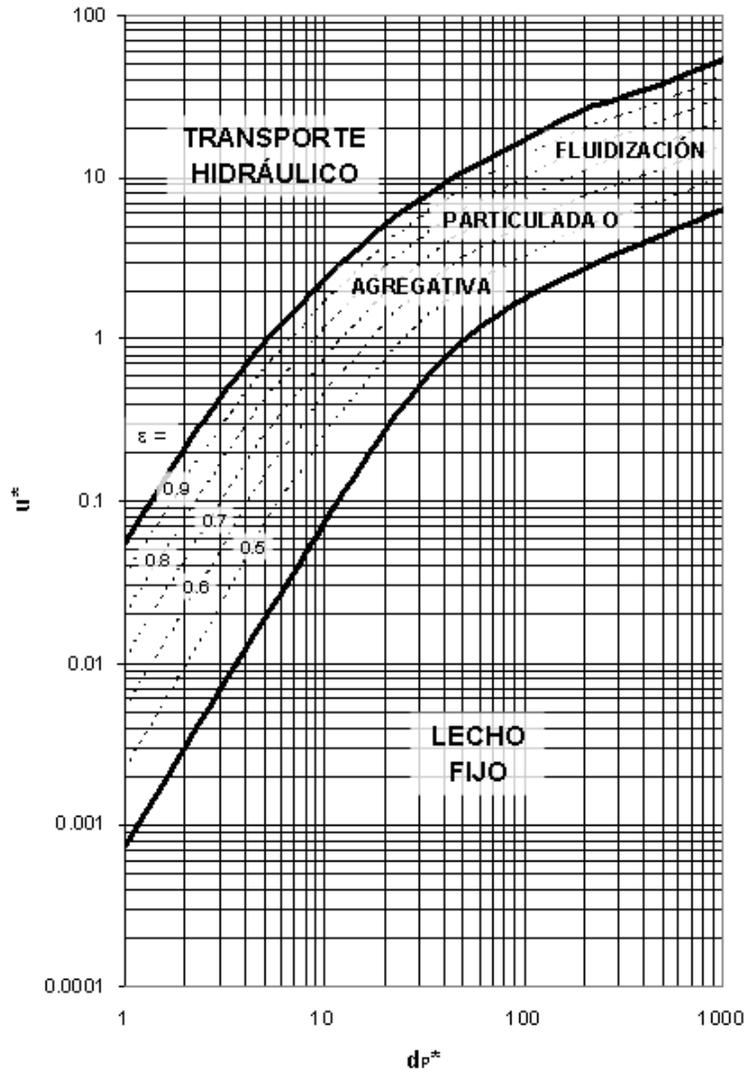


Figure 9.- Grace pattern map for upstream vertical flow in liquid-solid systems. (1986)

Where:

$d_p^*$  = Particle adimensional diameter .

$u^*$  = adimensional surface liquid velocity:

$$u^* = v_{SL} \left[ \frac{\rho_L^2}{\mu_L (\rho_P - \rho_L) g} \right]^{1/3} = Ly^{1/3} = \frac{Re_{SP}}{Ar^{1/3}} \quad (22)$$

Ly = Lyaschenko number or similarity number (M):



$$Ly = \frac{v_{SL}^3 \rho_L^2}{\mu_L (\rho_P - \rho_L) g} \quad (23)$$

To determine the type of fluidization (particulate or aggregative), any of the particle classification maps (Figures 1 and 2) should be used, depending on the type of fluid used in the system. In this map, the transition boundaries between flow or fluidization patterns do not depend on the mass velocity of the solid phase, nor on the diameter of the pipe. The transition criterion for the boundary between the fixed bed and the fluidized bed is the minimum fluidization speed, and the transition criterion for the boundary between the fluidized bed and hydraulic transport is the terminal speed.

Below is a generalized map of downstream vertical flow patterns (Figure 10), based on Grace's transition criteria and those proposed by Rhodes for fluid-solid systems. The ordering on this map is the difference in surface speeds (or sliding speed) between the two phases, and is defined by the following equation:

$$|v_{SL} - v_{SP}|^* = |v_{SL} - v_{SP}| \left[ \frac{\rho_L^2}{\mu_L (\rho_P - \rho_L) g} \right]^{1/3} \quad (24)$$

Similar to Figure 9, to distinguish bed flows with particulate fluidization and bed with aggregative fluidization, any of the particle classification maps shown in Figures 1 and 2 should be used. If the system is water-solid, Figure 1 is used, and if it is any other system, the Di Felice map is used (Figure 2). In the map in Figure 10, the transition criterion between the flow in the packed bed and the fluidized bed corresponds to the minimum speed of fluidization, but whose ordering is given by equation 24.

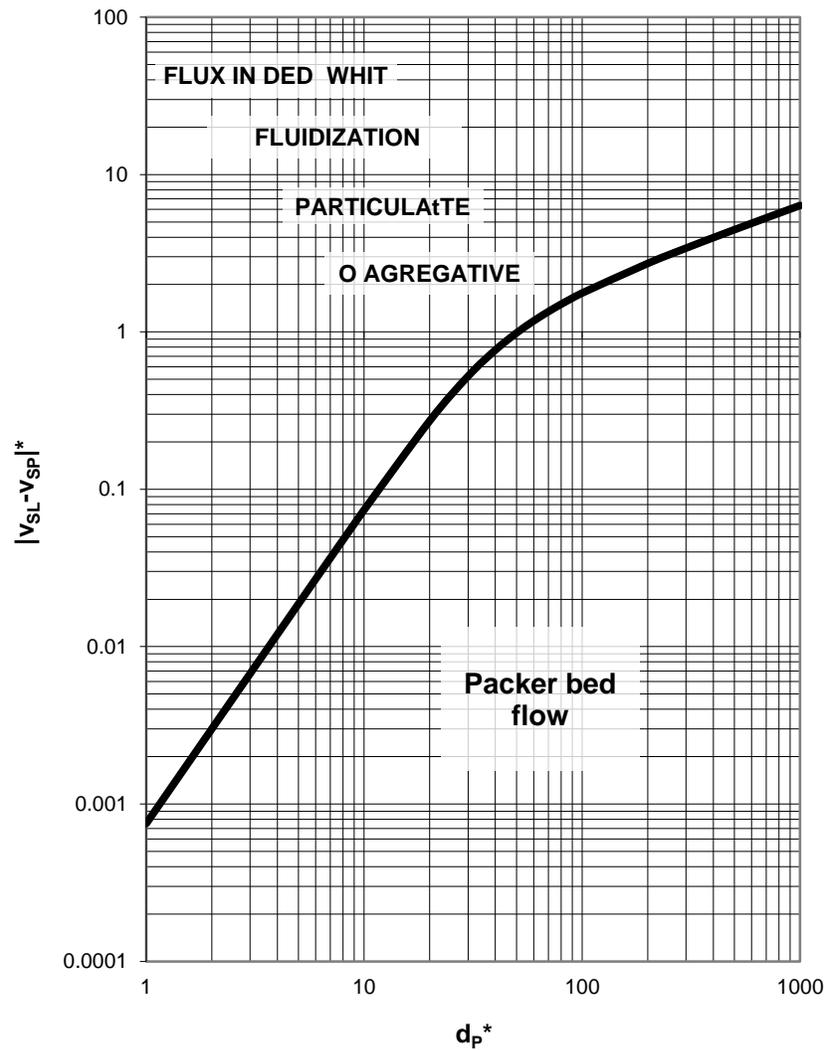
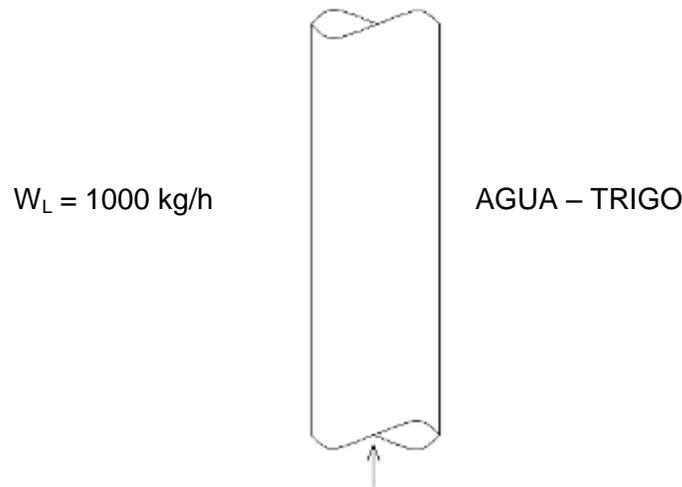


Figure 10.- Generalized pattern map for downstream vertical flow in liquid-solid systems. (2004)

### Example 3

What will be the expected flow pattern in a 4-inch vertical pipe 40 by which 1000 kg/h of water rises through a bed formed by wheat grains? The water temperature is 25°C, the average diameter of the grains is 4.8 mm and the density of these is 750 kg/m<sup>3</sup>.

1.-Translation



2.-Planning.

2.1.-Discussion The flow pattern is determined using the Grace map for liquid-solid systems (Figure 9).

2.2.-Grace coordinates

$$d_p^* = d_p \left[ \frac{\rho_L (\rho_P - \rho_L) g}{\mu_L^2} \right]^{1/3} \quad u^* = v_{SL} \left[ \frac{\rho_L^2}{\mu_L (\rho_P - \rho_L) g} \right]^{1/3}$$

3.-CÁLCULS

3.1.-Surface liquid velocity.

The properties of water at 25°C are:

$$\rho_L = 997.08 \text{ kg/m}^3$$

$$\mu_L = 0.8937 \text{ cp} = 8.937 \times 10^{-4} \text{ kg/(m s)}$$

For a pipe of 4" nominal diameter card 40, its internal diameter is:  $D = 4.026 \text{ in} = 0.1023 \text{ m}$

$$A = 0.008213 \text{ m}^2$$

$$v_{SL} = \frac{1000 \frac{\text{kg}}{\text{h}}}{3600 \frac{\text{s}}{\text{h}} \left( 997.08 \frac{\text{kg}}{\text{m}^3} \right) (0.008213 \text{ m}^2)} = 0.0339 \frac{\text{m}}{\text{s}}$$

3.2.-Flow pattern.



$$d_p^* = (4.8 \times 10^{-3} \text{ m}) \left[ \frac{997.08 \frac{\text{kg}}{\text{m}^3} (997.08 - 750) \frac{\text{kg}}{\text{m}^3} \left(9.81 \frac{\text{m}}{\text{s}^2}\right)}{\left(8.937 \times 10^{-4} \frac{\text{kg}}{\text{ms}}\right)^2} \right]^{\frac{1}{3}} = 69.43$$

$$u^* = \left(0.0339 \frac{\text{m}}{\text{s}}\right) \left[ \frac{\left(997.08 \frac{\text{kg}}{\text{m}^3}\right)^2}{\left(8.937 \times 10^{-4} \frac{\text{kg}}{\text{ms}}\right) (997.08 - 750) \frac{\text{kg}}{\text{m}^3} \left(9.81 \frac{\text{m}}{\text{s}^2}\right)} \right]^{\frac{1}{3}} = 2.61$$

In the Grace map in Figure 9, these coordinates intersect in the region corresponding to the fluidization. In order to determine the type of fluidization present in the wheat bed, the particle sorting Map will then be used (Figure 2):

$$Ar = (69.43)^3 = 334689$$

$$De = \frac{997.08 \frac{\text{kg}}{\text{m}^3}}{750 \frac{\text{kg}}{\text{m}^3}} = 1.33$$

According to the map of Di Felice, the fluidization of the bed is particulate type.

#### 4.-RESULT

The pattern developed in the bed is that of particulate fluidization.

#### Example 4

Determine the flow pattern present in a 6-inch vertical pipe by 40 inches by which 500 kg/h of mineral coal and 300 kg/h of water descend to 25°C. Carbon particles have an average diameter of 12.7 mm and a density of 720 kg/m<sup>3</sup>.



1.-TRANSLATION

$$W_P = 500 \text{ kg/h}$$

$$W_L = 300 \text{ kg/h}$$



Water – Coal

2.-Planning.

2.1.-Discussion

To obtain the flow pattern the generalized pattern map for downstream vertical flow is used (Figure10).

3.-CALCULATIONS

3.1.-Surface speed of the liquid phase

The properties of water at 25°C are:

$$\rho_L = 997.08 \text{ kg/m}^3$$

$$\mu_L = 0.8937 \text{ cp} = 8.937 \times 10^{-4} \text{ kg/(m s)}$$

For a 6" nominal diameter pipe 40, its internal diameter is:

$$D = 6.065 \text{ in} = 0.1541 \text{ m}$$

$$A = 0.0186388 \text{ m}^2$$

$$v_{SL} = \frac{300 \frac{\text{kg}}{\text{h}}}{3600 \frac{\text{s}}{\text{h}} \left( 997.08 \frac{\text{kg}}{\text{m}^3} \right) (0.0186388 \text{ m}^2)} = 0.0045 \frac{\text{m}}{\text{s}}$$

.2.-Solid phase surface velocity.

$$v_{SP} = \frac{500 \frac{\text{kg}}{\text{h}}}{3600 \frac{\text{s}}{\text{h}} \left( 720 \frac{\text{kg}}{\text{m}^3} \right) (0.0186388 \text{ m}^2)} = 0.0103 \frac{\text{m}}{\text{s}}$$



### 3.3.-Flow pattern.

$$d_p^* = (12.7 \times 10^{-3} \text{ m}) \left[ \frac{997.08 \frac{\text{kg}}{\text{m}^3} (997.08 - 720) \frac{\text{kg}}{\text{m}^3} \left( 9.81 \frac{\text{m}}{\text{s}^2} \right)}{\left( 8.937 \times 10^{-4} \frac{\text{kg}}{\text{ms}} \right)^2} \right]^{\frac{1}{3}} = 190.84$$

$$|v_{SL} - v_{SP}|^* = \left| 0.0045 \frac{\text{m}}{\text{s}} - 0.0103 \frac{\text{m}}{\text{s}} \right| \left[ \frac{\left( 997.08 \frac{\text{kg}}{\text{m}^3} \right)^2}{\left( 8.937 \times 10^{-4} \frac{\text{kg}}{\text{ms}} \right) (997.08 - 720) \frac{\text{kg}}{\text{m}^3} \left( 9.81 \frac{\text{m}}{\text{s}^2} \right)} \right]^{\frac{1}{3}} = 0.43 \text{ In}$$

the generalized downstream vertical flow map in Figure 10, these coordinates intersect in the region corresponding to the packed bed flow.

### 4.-RESULT

The pattern is the flow in packed bed.

### 6.- PREDICTION OF PRESSURE DROP IN VERTICAL PIPES

Pressure drop in vertical pipes with flow to two liquid-solid phases, as in the gas-solid flow, depends on the flow pattern. The semi-empirical correlations most commonly used in the design of pipes and equipment will then be exposed, according to the flow pattern. Hydraulic transport In vertical pipes, according to Kopko, Barton and McCormick<sup>[14]</sup>, the total pressure drop is given by the following equation:

$$\Delta P_{2F} = \frac{\varepsilon \rho_L v_L^2}{2g_C} + \frac{(1-\varepsilon)\rho_P v_P^2}{2g_C} + \frac{\varepsilon \rho_L L g \sin\theta}{g_C} + \frac{(1-\varepsilon)\rho_P L g \sin\theta}{g_C} + \frac{f_L v_L^2 \rho_L}{2Dg_C} \left[ \frac{\text{kgf}}{\text{m}^2} \right] \quad (25)$$

Where:

$\varepsilon$  = void fraction or a liquid holdup. ;  $\theta$  = the tilt angle of the pipe.

The first two terms correspond to the acceleration pressure drop, the next two terms are elevation pressure drops, and the last is frictional pressure loss between the liquid phase and the pipe walls. The inclination angle for upstream is 90 degrees and for downflow is -90 degrees or 270 degrees. It should be noted the absence of a term corresponding to the drop in frictional pressure between the solid particles and the walls of the pipe. Newitt and collaborators<sup>[15]</sup> studied total friction pressure losses and concluded that frictional losses are slightly higher than those caused by friction between the liquid and the tube wall, when the liquid speed is low and the terminal velocity of the particles is in transitional or turbulent regime. For very high liquid speeds, the frictional pressure drop between the particles and the pipe wall is identical to the frictional pressure drop between the liquid and the wall

Newitt and his collaborators discovered a migration of particles to the pipe's axis of symmetry when the liquid speed is very high. In this way, a liquid ring is formed which flows over the inner walls of the pipe and, therefore, prevents



direct contact of the particles with the pipe wall. As a result, frictional pressure losses between solids and internal walls of the line are negligible from the total drop in frictional pressure.

The actual speeds of the liquid and solid phases are calculated using the following equations:

$$v_L = \frac{v_{SL}}{\varepsilon} \left[ \frac{m}{s} \right] \quad (26)$$

$$v_P = \frac{v_{SP}}{1 - \varepsilon} \left[ \frac{m}{s} \right] \quad (27)$$

The fraction of gaps or holdup of the liquid phase can be determined by using equation 4:

$$\varepsilon = \frac{Q_L}{Q_L + Q_P} = \frac{\frac{W_L}{\rho_L}}{\frac{W_L}{\rho_L} + \frac{W_P}{\rho_P}} \quad (4)$$

Where:  $Q_L$  and  $Q_P$  - volumetric flows of the liquid and solid phases in  $m^3/h$ .

#### 6.1.- Kopko-Barton-McCormick method

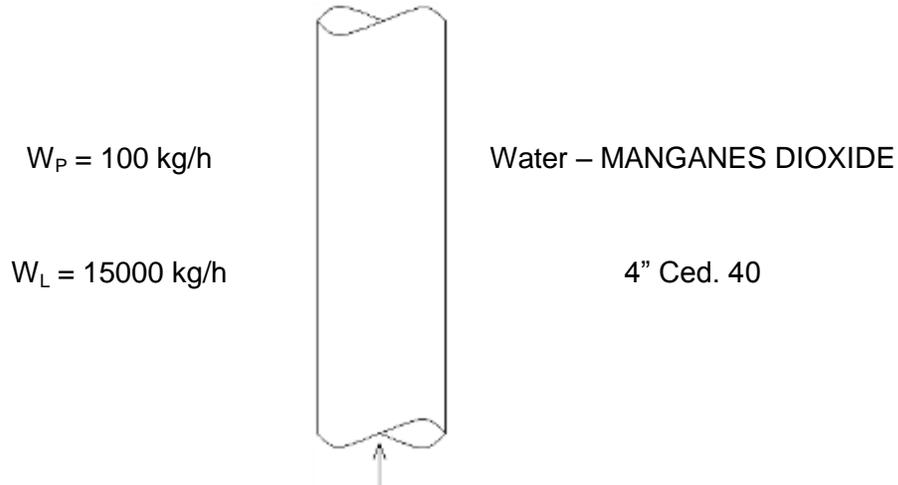
- 1.- Determine the flow pattern using Grace's map (Figure 9). If the flow type determined corresponds to hydraulic transport, the method must be continued.
- 2.- Calculate the fraction of gaps or liquid holdup with equation 4.
- 3.- Calculate the actual speeds of both phases with equations 26 and 27.
- 4.- Calculate the Darcy friction factor of the liquid using the Moody graph or with the Hagen-Poiseuille or Chen equations, depending on the flow rate (laminar or turbulent, respectively).
- 5.- Determine the total pressure drop with equation 25.

#### Example 5

By a vertical pipe of 4 inches ascend 15000 kg/h of water at 30°C, and 100 kg/h of manganese dioxide particles, which have an average diameter of 1.57 mm and a density of 4100 kg/m<sup>3</sup>. Calculate the total pressure drop if the pipe length is 25 m.



## 1.-TRANSLATION



## 2. Planning

### 2.1.-Discussion

To determine the flow pattern, Grace's map for liquid-solid systems (Figure 9) and to calculate the pressure drop on the line will be used, the Kopko-Barton-McCormick method shall be used, provided that the flow pattern corresponds to hydraulic transport.

## 3.-CALCULATIONS

### 3.1.-Flow pattern

The properties of water at 30°C are:

$$\square \rho_L = 995.68 \text{ kg/m}^3$$

$$\square \mu_L = 0.8007 \text{ cp} = 8.007 \times 10^{-4} \text{ kg/(m s)}$$

For a pipe of 4" nominal diameter card 40, its internal diameter is:

$$D = 4.026 \text{ in} = 0.1023 \text{ m}$$

$$A = 0.008213 \text{ m}^2$$

$$v_{SL} = 0.51 \text{ m/s}$$

$$d_p^* = 56.78$$

$$u^* = 17.54$$

On Grace's map in Figure 9, these coordinates indicate the presence of a hydraulic transport inside the pipe.

### 3.2.-Actual velocity of each phase.



$$v_L = \frac{0.51 \frac{m}{s}}{0.9984} = 0.511 \frac{m}{s}$$

$$v_{SP} = \frac{100 \frac{kg}{h}}{3600 \frac{s}{h} \left( 4100 \frac{kg}{m^3} \right) (0.008213 m^2)} = 8.249 \times 10^{-4} \frac{m}{s}$$

$$v_P = \frac{8.249 \times 10^{-4} \frac{m}{s}}{1 - 0.9984} = 0.516 \frac{m}{s}$$

3.3.- Total pressure drop.

$$Re_L = \frac{0.1023 m \left( 0.511 \frac{m}{s} \right) \left( 995.68 \frac{kg}{m^3} \right)}{8.007 \times 10^{-4} \frac{kg}{ms}} = 65005 \quad \text{turbulent flow}$$

From Moody:

$$\varepsilon/D = 0.00045$$

$$f_L = f_D = 0.021$$

$$\Delta P_{2F} = \frac{0.9984 \left( 995.68 \frac{kg}{m^3} \right) \left( 0.511 \frac{m}{s} \right)^2}{2 \left( 9.81 \frac{kgm}{kgf s^2} \right)} + \frac{(1 - 0.9984) \left( 4100 \frac{kg}{m^3} \right) \left( 0.516 \frac{m}{s} \right)^2}{2 \left( 9.81 \frac{kgm}{kgf s^2} \right)}$$

$$+ 0.9984 \left( 995.68 \frac{kg}{m^3} \right) (25m) \text{sen}(90^\circ) + (1 - 0.9984) \left( 4100 \frac{kg}{m^3} \right) (25m) \text{sen}(90^\circ)$$



$$+ \frac{0.021 \left(0.511 \frac{\text{m}}{\text{s}}\right)^2 \left(995.68 \frac{\text{kg}}{\text{m}^3}\right)}{2(0.1023 \text{ m}) \left(9.81 \frac{\text{kg m}}{\text{kgf s}^2}\right)}$$

$$\Delta P_{2F} = 25032.2 \frac{\text{kgf}}{\text{m}^2}$$

#### 4.-RESULT

The total pressure drop is 25032.2 kgf/m<sup>2</sup>.

Although fixed and fluidized beds are beyond the scope of this article, as they do not constitute a true two-phase flow, they will be briefly exposed for the sole purpose of providing greater elements for the design of liquid-solid systems. To delve deeper into the subject of particle beds, the reader is advised to consult the works of Davidson and Harrison<sup>[27]</sup>, of Kunii and Levenspiel<sup>[24]</sup>, by Leva<sup>[23]</sup>, by Valiente Barderas<sup>[22]</sup>, and the two of Rhodes<sup>[28,29]</sup>

### 7.- Fluidization

Similar to gas-solid systems, the total pressure drop for this regime has no acceleration contributions, and is then given by the equation proposed by Foscolo and Gilabaro<sup>[3]</sup>

$$\Delta P_{2F} = \frac{[\varepsilon \rho_L + (1-\varepsilon)\rho_P] g L}{g_c} \left[ \frac{\text{kgf}}{\text{m}^2} \right] \quad (28)$$

The fraction of voids is calculated using the Richardson-Zaki equation<sup>[16]</sup>, as the correlation obtained by these authors is only applicable for fixed and fluidized beds:

$$\varepsilon = \left( \frac{v_{SL}}{v_i} \right)^{1/n} \quad (29)$$

Where: n =exponent of Richardson-Zaki. ; (Vi) terminal speed set to m/s:

$$v_i = v_t 10^{-\frac{d_p}{D}} \left[ \frac{\text{m}}{\text{s}} \right] \quad (30)$$

Rowe<sup>[17]</sup> developed an explicit equation to determine the value of this exponent, which is based on the Reynolds terminal and is given by the equation:

$$n = 2.35 \left[ \frac{2 + 0.175 (\text{Re}_P)_t^{3/4}}{1 + 0.175 (\text{Re}_P)_t^{3/4}} \right] \quad (31)$$

Where: (Re<sub>p</sub>)<sub>t</sub> = terminal particle Reynolds:



$$(\text{Re}_P)_t = \frac{d_P v_t \rho_L}{\mu_L} \quad (32)$$

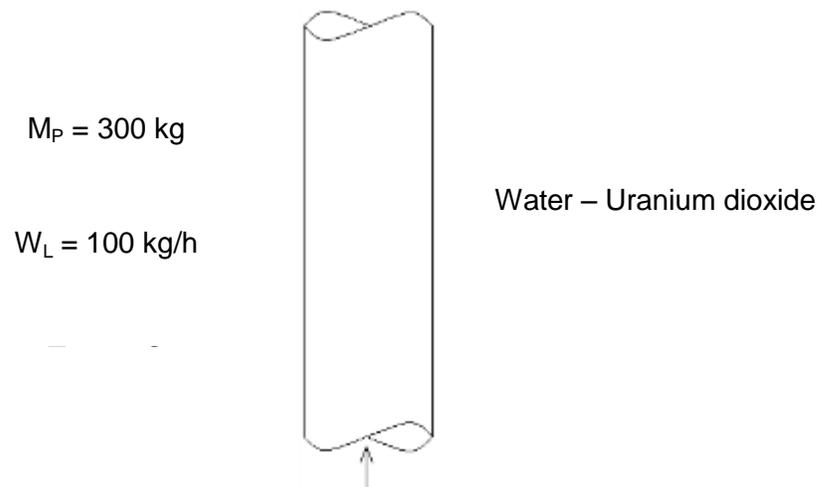
These equations are applicable to particulate and aggregative fluidizations, for upstream flow. In the case of downflow, the fraction of gaps or liquid holdup for bed flows with particulate fluidization and aggregative fluidization, is calculated using equation 4, since they are not actually fluidized beds in which case the equations of Richardson-Zaki and Rowe would be valid:

$$\varepsilon = \frac{Q_L}{Q_L + Q_P} = \frac{\frac{W_L}{\rho_L}}{\frac{W_L}{\rho_L} + \frac{W_P}{\rho_P}} \quad (33)$$

### Example 6

Determine the pressure drop in an 8-inch vertical line 40 by which 100 kg/h of water rises through a bed consisting of 300 kg of uranium dioxide. The water temperature is 25°C, the depth of the bed is 2.5 m, the diameter of the particles is 152  $\mu\text{m}$  and its density is 3520  $\text{kg/m}^3$ .

#### 1.-TRANSLATION



#### 2.-Planning.

##### 2.1.-Discussion

The flow pattern is determined by the Grace chart in Figure 9, and the pressure drop is obtained using equation 28, as long as the pattern corresponds to that of fluidized bed.

#### 3.-CALCULATIONS

##### 3.1.-Flow pattern



The properties of water at 25°C are:

$$\rho_L = 997.08 \text{ kg/m}^3$$

$$\mu_L = 0.8937 \text{ cp} = 8.937 \times 10^{-4} \text{ kg/(m s)}$$

For a pipe of 8" nominal diameter card 40, its internal diameter is:

$$D = 7.981 \text{ in} = 0.2027 \text{ m}$$

$$A = 0.032275 \text{ m}^2$$

$$v_{SL} = 8.632 \times 10^{-4} \text{ m/s}$$

$$d_P^* = 4.77$$

$$u^* = 0.031$$

On Grace's map, these coordinates intersect in the region corresponding to the fluidization. In order to determine the type of fluidization present in the bed of uranium dioxide particles, the particle classification Di Felice map must be used (Figure 2):

$$Ar = 108.5$$

$$De = 0.28$$

According to the latter map, the fluidization of the bed is particulate type.

### 3.2.-Total pressure drop

The terminal speed of the particles is obtained using Figure 5. With  $d_P^* = 4.77$ , the following is observed:

$$u_t^* = 1$$

$$v_t = 0.02813 \text{ m/s}$$

$$(Re_P)_t = \frac{(152 \times 10^{-6} \text{ m}) \left( 0.02813 \frac{\text{m}}{\text{s}} \right) \left( 997.08 \frac{\text{kg}}{\text{m}^3} \right)}{8.937 \times 10^{-4} \frac{\text{kg}}{\text{ms}}} = 4.77$$

$$v_i = \left( 0.02813 \frac{\text{m}}{\text{s}} \right) 10^{-\frac{152 \times 10^{-6} \text{ m}}{0.2027 \text{ m}}} = 0.02808 \frac{\text{m}}{\text{s}}$$

$$n = 2.35 \left[ \frac{2 + 0.175 (4.77)^{3/4}}{1 + 0.175 (4.77)^{3/4}} \right] = 3.85$$



$$\varepsilon = \left( \frac{8.632 \times 10^{-4} \frac{\text{m}}{\text{s}}}{0.02808 \frac{\text{m}}{\text{s}}} \right)^{1/3.85} = 0.4048$$

$$\Delta P_{2F} = \left[ 0.4048 \left( 997.08 \frac{\text{kg}}{\text{m}^3} \right) + (1 - 0.4048) \left( 3520 \frac{\text{kg}}{\text{m}^3} \right) \right] (2.5 \text{ m}) = 6246.81 \frac{\text{kgf}}{\text{m}^2}$$

#### 4.-RESULT

The total pressure drop along the fluidized bed is 6246.81 kgf/m<sup>2</sup>.

### 8.- Fixed bed

Based on theoretical considerations, Gibilaro, Di Felice, Waldram and Foscolo<sup>[18]</sup> modified the Ergun<sup>[19]</sup> equation, to be applicable to liquid-solid systems, remaining as follows:

$$\frac{\Delta P}{L} = \left( \frac{17.3}{\text{Re}_{SP}} + 0.336 \right) \frac{\rho_L v_{SL}^2}{d_P g_C} (1 - \varepsilon) \varepsilon^{-4.8} \left[ \frac{\text{kgf} / \text{m}^2}{\text{m}} \right] \quad (33)$$

Where:  $\varepsilon$  = void fraction. ;  $\text{Re}_{SP}$  = Superficial Particle Reynolds:

$$\text{Re}_{SP} = \frac{d_P v_{SL} \rho_L}{\mu_L} \quad (5)$$

The void fraction is determined by the equations of Richardson-Zaki (equations 29 and 30) and Rowe (equation 31), for fixed bed with gas upflow. The Gibilaro equation and collaborators can be used for downflow (packed bed flow) by replacing the surface velocity of the liquid with the relative or sliding speed between phases:

$$v_{rel} = \left| \frac{v_{SL}}{\varepsilon} - \frac{v_{SP}}{1 - \varepsilon} \right| \left[ \frac{\text{m}}{\text{s}} \right] \quad (34)$$

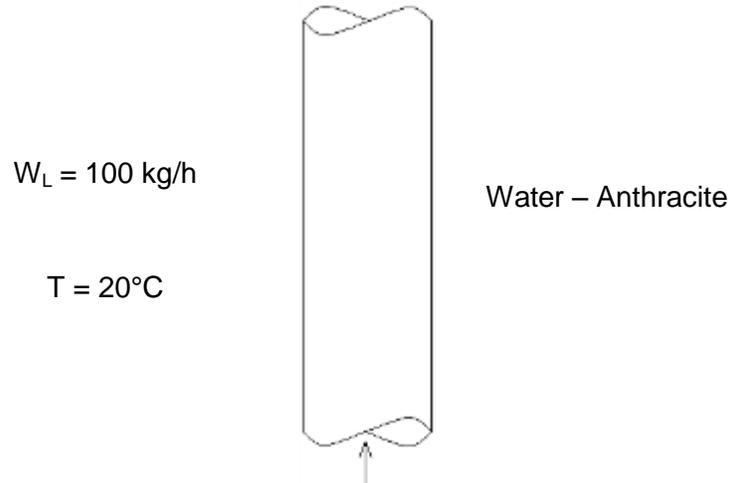
The void fraction for downstream vertical flow is obtained by equation 4, as it is not a true fixed bed:

$$\varepsilon = \frac{Q_L}{Q_L + Q_P} = \frac{\frac{W_L}{\rho_L}}{\frac{W_L}{\rho_L} + \frac{W_P}{\rho_P}} \quad (4)$$

#### Example 7

Get pressure drop in a 6-inch pipe 40, which is a packed bed of anthracite particles, whose depth is 2 m. The average particle diameter is 1.32 mm and its density is 1400 kg/m<sup>3</sup>. For the interstitials of the bed, 100 kg/h of water rises at 20°C.

## 1.-TRANSLATION



## 2.-Planning.

### 2.1.-Discussion

To confirm the existence of a packed bed, the Grace map will be used (Figure 9). The fraction of gaps will be obtained by the equations of Richardson-Zaki and Rowe. The pressure drop will be determined using the Gibilaro-Di Felice-Waldram-Foscolo equation.

## 3.-CALCULATIONS

### 3.1.-Flow pattern

The properties of water at  $20^\circ\text{C}$  are:

$$\rho_L = 998.23 \text{ kg/m}^3$$

$$\mu_L = 1.005 \text{ cp} = 1.005 \times 10^{-3} \text{ kg/(m s)}$$

For a 6" nominal diameter pipe 40, its internal diameter is:

$$D = 6.065 \text{ in} = 0.1541 \text{ m}$$

$$A = 0.0186388 \text{ m}^2$$

$$v_{SL} = 0.001493 \text{ m/s}$$

$$d_p^* = 20.77$$

$$u^* = 0.0942$$

On Grace's map in Figure 9, these coordinates check for the existence of the fixed bed inside the pipe.

### 3.2.-Fraction of gaps

The terminal speed of the particles is obtained using Figure 5. With  $d_p^* = 20.77$ , the following is observed:

$$u_t^* = 5.7$$



$$v_t = 0.0903 \text{ m/s}$$

$$(\text{Re}_P)_t = \frac{(1.32 \times 10^{-3} \text{ m}) \left(0.0903 \frac{\text{m}}{\text{s}}\right) \left(998.23 \frac{\text{kg}}{\text{m}^3}\right)}{1.005 \times 10^{-3} \frac{\text{kg}}{\text{ms}}} = 118.39$$

$$v_i = \left(0.0903 \frac{\text{m}}{\text{s}}\right) 10^{-\frac{1.32 \times 10^{-3} \text{ m}}{0.1541 \text{ m}}} = 0.0885 \frac{\text{m}}{\text{s}}$$

$$n = 2.35 \left[ \frac{2 + 0.175 (118.39)^{3/4}}{1 + 0.175 (118.39)^{3/4}} \right] = 2.67$$

$$\varepsilon = \left( \frac{0.001493 \frac{\text{m}}{\text{s}}}{0.0885 \frac{\text{m}}{\text{s}}} \right)^{1/2.67} = 0.2168$$

3.3.- Total pressure drop.

$$\text{Re}_{SP} = \frac{(1.32 \times 10^{-3} \text{ m}) \left(0.001493 \frac{\text{m}}{\text{s}}\right) \left(998.23 \frac{\text{kg}}{\text{m}^3}\right)}{1.005 \times 10^{-3} \frac{\text{kg}}{\text{ms}}} = 1.96$$

$$\Delta P = \left( \frac{17.3}{1.96} + 0.336 \right) \frac{998.23 \frac{\text{kg}}{\text{m}^3} \left(0.001493 \frac{\text{m}}{\text{s}}\right)^2}{(1.32 \times 10^{-3} \text{ m}) \left(9.81 \frac{\text{kgm}}{\text{kgf s}^2}\right)} (1 - 0.2168)(0.2168)^{-4.8} (2\text{m}) = 3792.63 \frac{\text{kgf}}{\text{m}^2}$$

#### 4.-RESULT

The total pressure drop along the bed is 3792.63 kgf/m<sup>2</sup>.

The Kopko-Barton-McCormick method predicts pressure drops to two liquid-solid phases in vertical pipes with an error of no more than 20%. Gibilaro and collaborators' equation accurately predicts pressure losses in packaged beds.



There are other semi-empirical correlations for the calculation of pressure drops, among which it is recommended to review those of Newitt-Richardson-Gliddon <sup>[15]</sup>, Condolios-Chapus <sup>[9]</sup>, Aude et al. <sup>[20]</sup>, among others.

## GENERAL CONSIDERATIONS

In the design of liquid-solid flow systems, it is important to consider the erosion caused by the relentless collision of solid particles against the internal walls of equipment and lines. This phenomenon represents a great annual cost due to frequent replacement of equipment parts and fittings, such as pumps and valves, and pipe runs damaged by particle flow. Erosion in turn causes the phenomenon of corrosion to appear, due to the contact between the liquid and the metal exposed by erosion.

Erosion can be decreased by properly selecting the liquid velocity, which must be sufficiently higher than the sedimentation rate of the particles, corresponding to the transition rate between heterogeneous horizontal flow patterns and dunes, or at the terminal velocity for vertical pipes. In this way, corrosion on the eroded surface can be avoided. In addition, the flow pattern present in the pipe can be selected in order to set the surface speed of the liquid phase. Generally, a speed between 1 m/s and 2 m/s (4 ft/s and 7 ft/s) per economy is recommended. Erosion occurs at liquid speeds between 2.4 m/s and 3 m/s (8 and 10 ft/s), aggravating at higher speeds. For heterogeneous flow, surface rates of liquid greater than 2 m/s are suggested, but care should be taken with erosion. It is also advisable to transport the solid particles at a concentration of between 10% and 40% by volume.

For the sizing of horizontal pipes homogeneous flows with transverse dunes are recommended, because of their relative stability. Heterogeneous flows with longitudinal dunes should be avoided due to their high tendency to sedimentation, and therefore, because they are very erosive flow patterns. Also, mobile bed flow is not recommended, as it tends to block the lines. For vertical lines, the upstream hydraulic transport pattern and the three downflow patterns do not have major drawbacks.

As for the flow system <sup>[20]</sup>, <sup>[21]</sup>, long and extra-long radius elbows should be used to minimize erosion caused by changes in particle direction. It is recommended to use ball valves, which must be installed together with the necessary connections for draining and cleaning, thus avoiding the accumulation of solid particles in the valve. Pipes and transport lines are usually made of ordinary steel or some special alloy of steel, cast iron, rubber, plastic or rubber-coated steel or some other polymer. The material of the lines where the liquid flows at speeds greater than 4.5 m/s (15 ft/s) must be concrete or plastic, which better withstand erosion.

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# STRATEGIC MANAGEMENT - MANAGING STRATEGY IN A VUCA WORLD

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## INTRODUCTION

Strategic management in a changing environment is one of the challenges that organisations are facing today. New business models are emerging day by day which are disrupting markets and this is a challenge for the organisations being steady and planning to stay ahead in the competition is intense.

In such an unpredictable and fast moving environment, the businesses are striving to maintain operational excellence and making strategic decisions keeping the future in view.

## OBJECTIVES

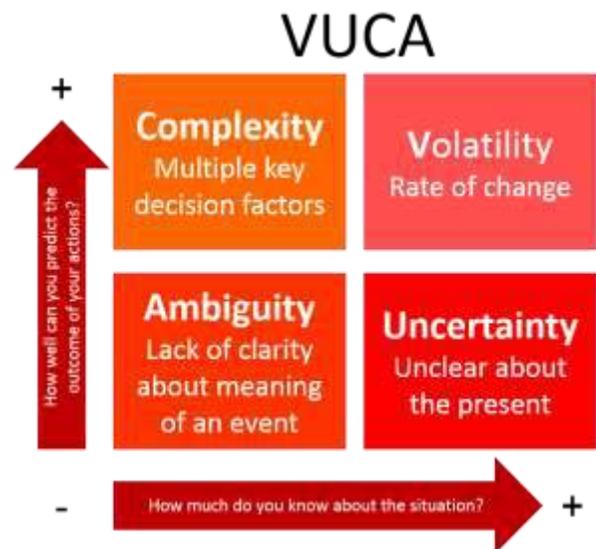
- To relate the strategic management with the VUCA World.
- To determine the impact of VUCA on strategic decisions.

## What is VUCA ?

VUCA is first used in 1987 to describe or to reflect on the terms like volatility, uncertainty, complexity and ambiguity of the present conditions and

situations, drawing on the leadership theories of Warren Bennis and Burt Nanus.

The capacity for VUCA leadership in strategic and operating terms depends on a well-developed mindset for measuring the technical, social, political, market and economic realities of the environment in which people work. Working with the elements of VUCA serves as a base for survival and sustainability in this complicated world.





**Volatility**

This refers to the different situational social-categorization of people due to specific reactions that arise during that specific situation. When people react/act based on a specific situation, the public divides them into different groups.

**Uncertainty**

It refers to situation where the availability or predictability of information in events is unknown. It frequently occurs in volatile environments that are complicated in structure that involves unanticipated interactions that are significant in uncertainty.

**Complexity**

Complexity refers to multiple components that are interlinked in a system. While conducting research, the scholars should consider the complexity. Even though it is a controlled environment, the results are unknown because of non linear interactions with different groups and categories.

**Ambiguity:**

Ambiguity refers to something that is unclear even though the proper information is provided. It is quite similar to uncertainty but they have different factors. Uncertainty is when relevant information is unavailable and unknown, and where as in ambiguity, relevant information is available but the overall meaning is still unknown.

**STRATEGIC MANAGEMENT**

**Strategy**

It is a plan of action get a desired future, such as achievement of a goal or solution to a problem.

**Strategic management**

Strategic management is a continuous process that evaluates and controls the businesses as well as industries in which an organization is involved; It sets goals and strategies to meet all existing and potential competitors; and starts reevaluating strategies regularly to see how it was implemented and checks for replacement.

Strategic Management gives a broader perspective to the employees of an organization so that they can better understand how their job fits in the organizational plan and how it is related to other organizational members. It is the art of managing employees in a way to increase their ability of achieving business objectives. Employees feel satisfied and they get more committed as they can co-relate themselves with each organizational task. They will be

able to understand the reaction of environmental changes on the organization with the help of strategic management. So, the employees can judge the consequences of such changes on their own job and can effectively face them. The people in the organisation must do appropriate things in appropriate manner to be effective as well as efficient.

**Role of Strategic Management:**

One of the major role of strategic management is to inculcate different functional areas in the organization so that these functional areas harmonize well. Another role of strategic management is to keep a continuous eye on the goals and objectives of the organization.

**STRATEGIC MANAGEMENT IN VUCA WORLD:**

Traditionally, strategy is about making long-term plans and implement actions making sure there are appropriate resources that are needed for realizing those plans. These sort of definitions of strategy might have worked for a long time, but it doesn't really work anymore in today's volatile, uncertain, complex and ambiguous (VUCA) world.

To get indulge in this VUCA world we need to combine the emergent and deliberate approaches in a complementary way.

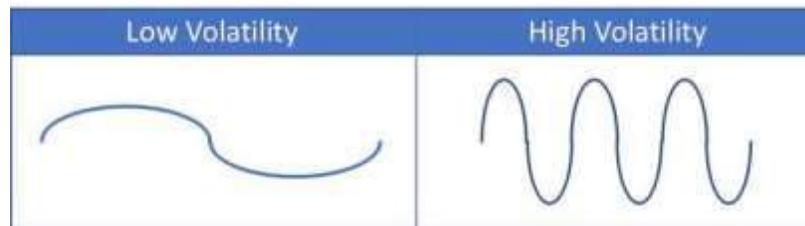
This type of combo is already seen in practices, methodologies and concepts. There are four macro-ideas where the strategic management can be related to VUCA. They are

- Build a solid foundation in a volatile world
- Experiment and decide quickly to face uncertainty
- Collaborate with complexity, promote self-organization
- Draw outlines in an ambiguous world

Each of them doesn't exist in isolation and between them there is no definite boundary.

**BUILD A SOLID FOUNDATION IN A VOLATILE WORLD:**

Volatility refers to the speed of change in an organisation or market or in the world in general. It is associated with fluctuations that are taking place in demand and it is well-documented in the aspect of industry dynamism. The more volatile the world is, the more and faster things change.



A highly volatile environment expects for a strategy approach that allows you to refer through the strategy process in short periods that generates quick results. It means that ideas are quickly tested and that there is a short implementation with the obtained feedback, so that plans can be adjusted as soon as needed. Only in this case, a strategy approach is able to match the pace of an industry. It is this characteristic of the strategy process that is highlighted in approaches that focuses on learning, agility, trial and error, experimentation, temporary advantages and adaptability.

### EXPERIMENT AND DECIDE QUICKLY TO FACE UNCERTAINTY:

The enhancement of uncertainty of economic environment, the way the organisations trying to minimise the risks and to capitalize on the opportunities is getting correspondingly important.

Strategic uncertainty mainly represents the future uncertain trend or the event that can be unpredictable in the real business. Suitable strategic decisions play a key role that helps the strategist in gathering information and analysing it to break the uncertainties in business.

So, in one case it is possible to identify those clear trends such as market demographics that helps in defining the potential demand for future products and services. By doing the right analysis, these can be known. The uncertainty that remains after the best possible analysis is termed as residual uncertainty.

### COLLABORATE WITH COMPLEXITY, PROMOTE SELF ORGANISATION

Companies that operates in this competitive environment that desires to create a benchmark in the business model. It enables the development of systemic thinking, which is the process that involves solving problems, complex sets of concepts and specific theories to seek solutions to complex problems.

It plays a major role in companies while determining strategies to achieve long term goals.

#### Basic strategies to deal complexity

1. Avoidance of Complexity:

Complexity can be avoided by taking some preventive measures and using sort of methods like modularization and standardization of products and services.

2. Mastering Complexity:

Unavoidable complexity can be controlled by appropriate methods like organizationally regulations or flexible processes.

3. Reducing Complexity:

Focused measures should be taken to reduce existing complexities by reducing variety of products.

### DRAW OUTLINES IN AN AMBIGUOUS WORLD

People in organisations confront multiple situational requirements, developing goals and responding them with communicative strategies which do not minimise ambiguity.

Strategic Ambiguity is essential in organisations that

- Promotes unified diversity
- Facilitates organizational change
- Amplifies existing source attributions and preserves privileged positions.

People want to look out for the power of evolutionary process that includes experimenting and testing of many ideas and concepts. But if we don't create outlines and structure, there is no scope for higher levels.

So, free access of information to all kinds of people in the organization helps in contextualization reducing ambiguity and uncertainty.

### CONCLUSION

Strategic management needs to be flexible so that it can respond to the ever-changing VUCA circumstances. It needs to be firmly grounded which serves as a reliable base for building and growing the organization. So that the organization can withstand in the challenging circumstances of VUCA.

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## ISSUES OF AGITATION AND SOCIAL ECOLOGY

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### ANNOTATION

*This article discusses the changes in environmental policy in our country in recent years, its socio-spiritual basis, and the importance of using the views of social scientists on the problem of social ecology in the development of environmental culture in citizens.*

**KEY WORDS AND PHRASES:** ecology, environmental policy, ecological culture, jadids, enlightenment, social ecology, child rearing.

### DISCUSSION

In the proclamation of the republic of Uzbekistan to the supreme court, it is emphasized that being established in 2008, Uzbekistan's ecological action has become a real political power during the last decades. However, it should be admitted that accepting the members of the action in the lower chamber of the parliament based on is deterring it from working effectively and efficiently in some degrees. I think it is time to maintain the equality among all the political movements and stop providing the members of the ecological action with special places in the lower chamber of the parliament. This change will improve the competitive spirit in politics and help the ecological action to be regarded as a political power as a practical result of opinions above mentioned, the establishment congress of the ecological body of Uzbekistan was held on the 8th of January, 2019 and the fifth body came to existence legally. The main function of this newly organized body should be centred on improving the ecological etiquette of the locals, few new and contemporary methods come up with the social-ecological matters in our nation and to draw the government's attention to them. In one of his speeches president Sh. Mirziyoyev pointed out "the most important issue is to improve the ecological etiquette of people. Of course, such problems can not be solved administratively, it can only be achieved by instilling a love and a sense of belonging in the hearts of the younger generation. It is important

to be aware of the creators' views on the problem and to integrate them into the learning process. Below is a glimpse of the ideas of our creators in this regard. In real life, there are pressing issues that are now called social ecology.

At the beginning of the twentieth century, when the term "ecology" came into being, the term "ecology" was not used by Russians. The views of Jadid representatives on social ecology are one of the most important events that revealed new aspects of Jeditism and their enlightenment struggles.

In their socio-cultural life, the Jadids sought to appreciate and preserve the spiritual and enlightenment achievements of humanity and in particular the Turkish peoples as well as identify the reasons behind the lag in the cultural development of our people. Compared to the developed countries, Fitrat wrote that the Jihadists of the new era were intelligent and mature people. The writers who declare that Bukhara is far behind in terms of commerce, ethics, science, arts and crafts, livelihoods do not know. There are no intelligent people in the marketplace, in madrasahs, in ethics who know the rules like one Jew. We do not have to go through the wonders of science such as telephones and telegrams around the world to learn the secrets of this. But even those who declare disbelief of the team out of our goals can not write well not just one Muslim.

This is a quick attempt by the plaintiffs to claim our ill health. Fitrat's "illustrative example"



in his article, published in 1917 by the soviet journal contained a critical critique of the causes, motives, objectives and obstacles facing the jadids.

Importantly saying, according to his remarks, this “Turk o’chog’i” has been organized in order to unite the turkish people under the one main objective to provide them with national spirit, national ideology and national instruction, to develop our education and culture, trade, pilgrimage and the art in accordance with our long-standing tradition, to create a truly glorious turkish culture and strengthen spiritual and physical state of the nation.

In the socio-ecological view of jadids, the central role of the relationship between national language and literature, arts, customs and values, with the positive and some negative aspects the above mentioned factors, is not worthy. In our view, such social and moral issues have always been in the vicinity of jadid’s enlightenment/

Therefore, the nation must be well aware of all its triumphs and failures, its ups and downs, its impartial and unbiased estimation of the past and its present.

To do this well, We must use all the available resources and capabilities; the experience of developed countries, the ways, means and means that will help them move to the path of greater development, and then make a program of action.

He then rejected both capitalist Europe, which moved with its main purpose, admired the world with its science and technology, and Europe, which promised a brighter life than the millennium.

The logic of the author's thinking is that 19th century European culture was built on ancient roman culture. It is a direct sequel. Roman culture collapsed because of its supernatural. What about the "capitalist" who replaced them? Just as the romans did not fill their fish with fish caught in ponds, so Europeans with their children will not be fed the fruits of the whole world, wrote Gaspirnsky.

In his comments, Ismailbek said that European youth who claim to have a new world culture are grown up under these laws, and that their views on justice and justice are nonsensical, and that justice in islam prevails over them. Finally, at the end of these consecutive critical considerations, Europe raises the issue of a new universal culture, which is a co-operation between science and islamic ethics. This culture that adheres to the principles of humanism looks forward to the future.

Fitrat's “Chigatoy gurungi”, founded in 1918, had similar goals. Reformed according to the directions, this cultural and literary organization in a short period of time unanimously recognized the peak of our culture's development as an example of the Alisher Navoi era (the name of the organization is called “Chig`atoy gurungi”).

The question of the national language and its condition, and the very low literacy rate are adequately discussed. The motto is "no changes should be made until the brain changes, scientific, literary, social changes."

The purpose of Fitrat's creation of the family book, written in 1914, was even more noble. According to jadids, the reform of society and mind begins with family. Again, without proper foundation of family and raising the young generation on the right path, it is impossible to speak about the reform of society and direct its development towards prosperity. He writes: “the happiness and honor of every nation depends, of course, on the internal discipline and harmony of this nation.

Peace and harmony are based on the discipline of the families of that nation. Where a family relationship is based on a strong discipline, the country and the nation are as strong and glorious. Family formation, that is, the community of families, in other words, the basis of family culture.

The first part of the work is titled "marriage and marriage" and discusses the issue of marriage or marriage under the aforementioned islamic law. That is, the answer to the question of how marriage is the basis of marriage is settled in islam.

Suppose you gave your land to a farmer. You also give the work equipment and command to sow wheat. If that farmer sows his own land and sows, and sits in his house, he does not sow wheat, if you leave your husband alone for a year, you will certainly not see this as anything other than treachery.

If the unmarried man does not use his sexual power, or if he acts with the people of lot and satisfies his own self, then let him know that he has betrayed the law of allah. and anas (may allah be pleased with him) said, your wives will be your fields. Pilgrimage is effective when sowing seeds. The wife is also a farmer and has children. So be in touch with your wives for the purpose of raising a child and raising them for yourself in the future.

Fitrat's ideas, namely, the role of the woman in the family environment, her role in the field, the need to fulfill the mission of raising children, the natural use of birth and marriage. Considerations about human ecology raise. As the author continues his observations, he uses the phrase "labor of marriage," forcing unmarried people to meet the evil demands of three evil acts, the actions of the people of lot, and the self-gratification of lust. Reminds me of

The author argues that adultery destroys a generation. This is because, as a result of these two senseless actions, the offspring of the child are wasted without losing their place and status.

Both of these are contrary to the laws of god and are contrary to the requirements of nature. Even an animal does not do these things; most of these diseases are contagious



In concluding these considerations, Fitrat lists the consequences of the aforementioned illnesses:

1. Whichever member of the nation is affected by these three plagues, it is likely to die sooner or later.
2. If a nation is not afflicted with this disorder, nature will plague such people with mental and physical harm.
3. Women who refuse to get married are prone to commercial and uterine diseases.

He then rejected both capitalist Europe, which moved with its main purpose, admired the world with its science and technology, and Europe, which promised a brighter life than the millennium.

The logic of the author's thinking is that 19th century European culture was built on ancient roman culture. It is a direct sequel. Roman culture collapsed because of its supernatural. what about the "capitalist" who replaced them? Just as the romans did not fill their fish with fish caught in ponds, so Europeans with their children will not be fed the fruits of the whole world, wrote Gaspirnky.

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The author argues that adultery destroys a generation. This is because, as a result of these two senseless actions, the offspring of the child are wasted without losing their place and status.

Fitrat says that in most developed countries in the "physical training" chapter, it is common for scientific and medical rules to apply for the health of a newborn child, as well as washing, dipping, eating and sleeping. It is unfortunate that our country does

not pay enough attention to this, and therefore, it is necessary to give a brief overview of health regulations:

A) childbirth: "as soon as the baby is born, the umbilical cord is cut off. Then the child is washed with warm soap and boiled water in a clean bowl. The first bath time is one minute. Then slowly. After bathing, the baby wipes the body with a soft, clean towel, and the cleanliness of the towel and the cleanliness of the toilet should be very important as the mother of any illness is dirty and dirty. "boiling water is not clean. It contains eggs of various diseases. boiling water. Use after warm boiling is good. Cold water will dry the skin and dry skin. The baby's body should always be warm and dry.

B) nurturing the baby in the cradle: "as you know, water evaporates in heat and wind and, naturally, cools during evaporation. When the baby's body is wet, wet. The baby wipes the body after it has been dried, and it is clear that he has a cold. You need to keep your body free of natural movement. "

The impact of the environment on human consciousness and perceptions is not limited to physical education. In our mental education for the child, our natural impressions, perception, attention, imagination, memory, and senses are actively involved. In these aspects man is always in constant contact with the nature surrounding him and with the elements of the outside world. The author's character sought to illustrate this complex process of consciousness and perception: "so a person receives information from the outside through his five senses. But we do not know how we get it.

I'll tell you about it. God has created such veins in the human body that are called nerve fibers. These nerve fibers travel from the eyes, to the mouth, to the mouth and to the nose, to our skin, to the brain. When it comes to sound, it comes through the air and affects the fibers of that feeling. This sound effect reaches the brain through the nerve fibers and affects it. As a result, the voices of jadids are also important in relation to cultural ecosystems. It is worth noting that he not only became aware but also encouraged others to be vigilant. We see that for the first time in the work of another great representative of the jadid period, alixonturasaguni's book "Turkistan's grief," the threat of popular culture and its negative impact on our spirituality was first analyzed. Alixontura focuses on European culture and seeks an answer to the question of what the culture itself is: "who knows what the answer to that is, the true culture of the noble if we speak of a culture of prosperity, of course, of irreligiousness, of irreligiousness and of immorality, as a culture, it would be a great mistake. Rather, human beings are sacrificed for these things. "

From these it is clear that the jadids have been trying to understand the positive and negative traits that have emerged from the beginning of the last century in the complex process that western and



oriental cultures have faced, and have been thinking about the consequences.

It is important to enumerate these issues facing jadid's enlightenment, through which they approach and evaluate the rapidly changing events. Take, for example, issue of religion and religious values. Certainly, islam, its holy book, the Quran and hadiths, muslim traditions and customs, and various rituals are embedded in the spiritual life of our people and forms an integral part of our cultural heritage. Without them the turkic people would not be able to imagine and restore the power of islam of the muslim nations by getting rid of the past. However, it was not necessary to accept all religious values as before. From this it was said, 'there is certainly one challenge in many theoretical works of the reformers: the restoration of the former power of islam and of the muslim nations by simplifying rituals and getting rid of all fanaticism and superstition. Similar to the reformers movement in christianity, the movement towards the restoration of spiritual and social values in muslim countries was aimed at the early, democratic traditions of patriarchal islam. The reformers offered to reconsider the socio-philosophical system, culture, science and education of islam and (most importantly the point of view of colonialism). Such ideas of the reformers relate to our research that is reflected in the growth of jadid's social and political revolution in the early twenties century as well as in various newspapers, magazines and books published by reformers and educators of these countries. It was strong enough to 'race the dependent people to unite for the sake of their freedom and justice'. From this point of view, it is possible that the jadid's did not pay much attention to the issue of the national language, which is the main factor that unites the turkic peoples.

Perfect and compelling, logical and well-structured speech is an important criterion for cultural excellence, the spiritual wealth of a particular nation. When speaking of literary language, Behbudi speaks of this logic: "the window of life showing the existence of every nation in the world is the language and the literature. And we are losing. We do not have enough arabic or persian connection in half of our language and stick russian on one end. They said that you should look for your bad home before you get a good neighbor. Our forefathers have a fair share of sacred language and literature. If we search for our own home, we will find what we like when we stop. It is a great shame and shame to wear a European cap, even if it means that it is too narrow for me. Representatives of the jihadist movement have written and published articles on the human and its role in the cultural life of society, the factors that determine the essence of the human phenomenon, its progress towards the perfection, the qualities, capabilities and capabilities of the these brochures and articles, based on the conclusions of the science of the time, show that the jadids are trying to reason

on the laws of the development of world culture, focusing on socio-philosophical issues in their research and using their comparative-historical methods. Naturally, the works of such prominent figures as ismail gaspirali in their studies were programmed in this direction. Examples of this are "a glance at european culture" published in 1985 and a series of articles published under the name "the doctrine of socialism" in turkey in 1906. In his first work, ismailbek comments on the linguistic meaning of the word "culture" in order to reveal the essence of the term "european culture", which includes arabic, "urban, urban", arabic in urban life. It has the meaning of "urban, urban", and the cultural criteria in urban life are more consistent and stable than the bedouin life of the steps.

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## WEAKNESSES OF THE POPULATION IN FERGANA REGION - PROBLEMS OF SOCIAL PROTECTION OF PERSONS WITH DISABILITIES

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### ABSTRACT

*This article analyzes the issues of improving effective social assistance for vulnerable groups. Another topical issue today is the education and upbringing of children with disabilities who are not covered by education, the identification of objective and subjective reasons for their isolation in such a society, and the elimination of problems.*

**KEYWORDS:** *social protection, strategy, pension, person with disabilities, rehabilitation, correction*

### DISCUSSION

Mankind has always encountered people with disabilities, both physically and mentally, throughout its history. Attitudes toward them also varied at different stages of development. According to the Law of the Republic of Uzbekistan «On Social Protection of Persons with Disabilities in the Republic of Uzbekistan», a person with a disability in the manner prescribed by law due to limited physical activity due to physical, mental, mental or sensory (sensory) defects and in need of social assistance and protection. Limitation of a person's life activities means that a person has completely or partially lost the ability or ability to self-serve, move, find a way, communicate, control his behavior, as well as study and work. The word is derived from the Latin word *invalidus*, which means «weak, not strong», i.e. in - «not» + *validus* - «strong», in other words, it is used in the activities of a person with physical, mental, sensory or mental disabilities. indicates an existing obstacle or restriction.

It is known that in the social policy of Uzbekistan, medical and social rehabilitation of persons with disabilities is considered a topical issue. The Action Strategy for the further development of Uzbekistan is also based on the ideas of populism, humanity, tolerance and kindness. It is based on the theory that the harmony of national and universal values is a priority in the assessment and approach to social, political and economic processes [1.9]. As of

January 2020, the number of disabled people in need of general rehabilitation equipment and prosthetic and orthopedic products in Fergana region is 7325 people. To date, 3,914 needy people with disabilities have been provided with rehabilitation equipment and prosthetic and orthopedic products, and the remaining 3,914 are planned to be provided in stages this year.

The importance of social protection can be understood in the Fergana region, although attention is paid to information about war veterans and the disabled in 1941-1945, veterans of frontline labor, old-age pensioners and people with disabilities in need of rehabilitation equipment and prosthetic and orthopedic devices [2].

The head of our state is also working to provide social protection to the needy, to ensure that they are not cut off from social life. «The implementation of the approved program of state support for the elderly and nongrophons should be under special control. Every privilege and measure of social protection must reach its owners» [3.253].

The scientific analysis of the level of health in families and the socio-hygienic situation in the family shows that a lot of work is being done in our country to improve reproductive health, prevent births with birth defects and diseases, strengthen the material and technical base and human resources of medical institutions. If relevant, the health, social and medical-hygienic status of the family raising a



disabled child, rehabilitation, rehabilitation and improvement of correctional and pedagogical work in the family is also the most important task today [4.12]. One of the most pressing issues today is the education and upbringing of children with disabilities who are not covered by education, to identify the objective and subjective reasons for their isolation in such a society, and to address the problems. Today, 84 special schools and boarding schools operate in the country under the Ministry of Public Education. State legislation also addresses the issue of involving children in homeschooling, taking into account the wishes of parents, in particular, children with disabilities are educated on the basis of individual home-based education programs. Also, as of February 2020, there are 3 «Muruvvat» houses and 1 «Sakhovat» houses in Fergana region.

It is known that not all developmental defects and disorders occur in infancy. Most of these changes can be detected at an older age. They are often manifested in the example of defects of the nervous system, auditory and visual organs, as well as speech. Research has shown that the earlier children with physical and mental disabilities are treated, the sooner their deficiencies will be corrected or corrected.

Of course, peace and health in the family is a blessing, if there is a problem with the health of the child in the family, the parent will be in a difficult situation. If the newborn has a clear physiological or mental weakness, the mother is the first person who can create the necessary conditions for him and only with patience, understanding, kindness, love can help him, while directing him to future education and most importantly his «Muruvvat» in good conscience. However, for this it is necessary to work on himself and deeply study the child. When a parent is depressed, he loses interest in any activity, even for a short time. They try to avoid people, to cut ties with their old loved ones. In this case, mothers need help in managing how to communicate with a sick child.

Today, it is very important that families with children with disabilities are supported by members of our community. Because families with children with disabilities have their own psycho-emotional experiences, these families often naturally lose or give up their jobs because of their children with disabilities, unable to take an active part in public affairs, leading to isolation. In addition, many parents try to hide the fact that they have children with disabilities. In some cases, children are not sent to school when they reach school age. As a result, such children are not covered by any education. In everyday life, we also see families who abandon their children with disabilities altogether and send them to «Muruvvat» homes or orphanages. In fact, since a child with a disability has the same right to education as any other child as a full member of society, it is important to keep in mind at all times that parents are

particularly interested in this. Such families should be supported in every way. In particular, if jobs are created for parents with children with disabilities not far from home, we believe that this is the most compassionate assistance provided to such families, and it would be one of the important factors in ensuring that a disabled child does not fall into Muruvvat» house.

As parents are primarily responsible for the education of children with special needs, they must be able to communicate with children with disabilities in a special way, be aware of the methods of raising a child with disabilities, and know the simplest skills to help a child prepare for school.

As part of the study, a survey was conducted among students of the Republican Vocational College for Persons with Disabilities in Fergana. The purpose of the study was to determine the interests of students currently studying in specialized educational institutions for people with disabilities, as well as their focus on specialties within their interests, awareness of information technology. A total of 105 respondents took part in the survey, of which 51 were boys and 54 were girls.

It turned out that 70 students of this vocational college came from different districts and cities of Fergana region, while 35 students came from other regions. In the 2019-2020 academic year, students of the Republican Vocational College for Persons with Disabilities in Fergana are preparing for a career in a total of 7 areas. In particular, students from different regions of the country study at the college in the areas of «Accounting and Auditing», «Sewing», «Computer Technology», «Craftsmanship», «Radio Engineering», «Craftsmanship», «Library». It turned out that the most popular among college students is in the field of "Accounting and Auditing. The college has created favorable conditions for the education of young people, sports grounds for students, laundry and dining rooms are in demand. They also organized clubs in different directions during their extracurricular activities.

During the study, we saw that young people with disabilities who want to study in a specialized college for people with disabilities are forced to be content with the existing directions in the educational institution, as well as their need for training in entrepreneurship. Indeed, teaching small business and private entrepreneurship to people with disabilities is beneficial. In the future, they may become entrepreneurs in various innovative areas. This will ensure their employment, as well as the possibility that the person with the disability will run a business in trade or services on the basis of the specialty in which he is studying.

In our country, in the early detection of disabilities and their preparation for school, special attention should be paid to the placement of children



in preschool institutions. This helps in early detection of defects in children, as noted above. If the number of preschools was further increased on the basis of an inclusive education program, or special groups were established within existing preschools, this would certainly be one of the most successful ways to integrate children with disabilities into healthy children. From the earliest stages of the formation of such children's thinking, they developed the ability to teach and nurture themselves (stigma) not to avoid others and to feel free. By communicating with the parents of such children, it was possible to jointly develop their children's mastery and increase their correctional and pedagogical literacy. Children with disabilities will inevitably develop a desire to attend public school when they reach school age, without being separated from their families like other children.

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# ERICH FROMM'S THEORY: THE NATURE OF HUMAN SOUL, ALIENATION AND ESCAPE FROM FREEDOM

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## ABSTRACT

*The article analyzes the philosophy of Erich Fromm, the human heart, goodness and evil inclinations, sadism, the problems of freedom of worship, human destructiveness, various forms of aggression, contradictory necrophilia and biophilia. In the philosophy of Erich Fromm, the heart of the human soul is shown by the desire for destructive desires and the uplifting desires - love for humanity and freedom. Our goal is to analyze the souls of human minds based on the works of the intellectuals. From the Erich Fromm heart concept, the robotic personality and the character of the stranger are disclosed.*

**KEY WORDS:** *sadism, heart, egoism, violence, weakness, alienation.*

## INTRODUCTION

The indifferent attitude to life in the age of technological advancement forms the question of studying the human heart in the philosophy of Erich Fromm, the well-known 20th-century thinker. In today's world, people are becoming more and more interested in learning the human heart while increasing their hatred for life. Therefore, it is necessary to understand the essence of human beings.

Capitalism has also changed the rules existing in the traditional society. In the general psychology of society, egoism and interest are intensified.

Erich Fromm examines the dangerous forms of human failure. As a result of violence, violence, jeopardy, intoxication, rebellious violence, and thirst for blood. Erich Fromm explores the possibility of corruption in the human heart, describing corruption as a means of escaping a sense of imperfection. An analysis of Fromm's biophilia and necrophilia concepts suggests that Freud has similar and different aspects of life and death instinct. Fromm, in his own eyes, attaches great importance to "narcissism" (self-esteem).

Fromm is suggested that the essence of any neurosis, as well as normal development, is a struggle for freedom and independence.

## RESULTS AND DISCUSSION

Erich Fromm analyzes the essence of evil in the human heart, the issues of goodness and evil, sadism, the problems of freedom of worship, the destruction of man, various forms of aggression, and contradictory biophilia and necrophilia.

From the philosophy of Fromm, the philosophy of human souls is the study of the love for the destructive desires (dead, corpses), the stubborn narcissism and the symbiosis-intentional aspirations and the uplifting desires, and the love of freedom.

Before analyzing the human heart, it is necessary to understand human beings and understand its essence. Fromm is a man created by man's evolutionary development in philosophical anthropology, and the environment surrounding itself goes beyond the previously adapted circle [10.159]. According to Fromm, man is the creature, but not better than the other creatures. Therefore, it is guaranteed that it will satisfy its needs, develop its own tools, and develop its own language. According to Fromm's view, man possesses another spiritual character, which is not found in any other creature. He thinks himself about his past and future. He accepts his own futility and his future. Human beings are in nature. Therefore, it is subject to its verdict and change. He realizes that humanity is involved in tragic conflicts. He is a captive of nature, yet he is



free to think in his own thoughts. The same is true of her being, her own being, lonely and fearful [10.192].

Erich Fromm examines the dangers of man's destruction in his research. Knowing less severe forms of violence helps to better understand the abnormal and dangerous forms of failure. It is therefore important to analyze the forms of violence.

Erich Fromm explores the perversion of human heart and describes corruption as a means of escaping a feeling of inadequacy. As a result of loneliness and weakness, the external world seems to be threatening and causes anxiety in an unseen condition. Also, man feels his emotional, emotional, and intellectual capacities are limited in this situation [12.151].

The issue of corruption and restrictions was initially analyzed by Freud, which stated that sexual orientation would change the behavior of the human being and stimulate his behavior. He later said that there are two basic forces, such as the pursuit of life and the destruction of life, namely the quest for corruption. But in Freud, this process is not biologically interpreted as perfect.

Fromm says that the trend of destructiveness can be formed not only in the individual, but also in different social groups. It follows that Fromm concludes that social factors influence not only the biological factors but also the formation of the sense of corruption. This approach reflects the differences between Freud and Fromm's views.

Fromm looks at the essence of the mischief and concludes. "The more a person's aspiration for life is, the more destructive tendencies it will be; the more likely the pursuit of life will be, the stronger the tendency to corruption. Extortion is the result of a lifeless life. Life-time individual or social life creates passion for corruption"[12.152].

There is a power of human power in power, and it is directed towards a specific goal. If a person is frail, coward, ignorant, unkind, and unknowingly, he will suffer and destroy his inner balance.

Fromm, he analyzed his ability to do good and evil in the human heart, suggesting that humans are inclined to dominate and subordinate to the cubic and behemoth types. Thinker discloses the tendency to seek dominance or obedience to man's dominance by means of the masochistic and sadistic features in them.

Masochistic quality is a desire for human beings to obey the other man, the structure, and God, that is, to get rid of loneliness. Sadist, on the other hand, wants to dominate and redirect his own judgment and will. The obvious manifestation of this unhealthiness leads to admiration, when instead of joining people, to the inner subjective world. Anxiety, fear, and depression are suddenly becoming ignorant and create disorder, that is, a desire to destroy the hostile world. Homosexual traditions are meaningless and unnatural, says Fromm. But in most cases it is acceptable, and the masochistic practices

are realized in love or loyalty mask, the complex of imperfections compensates for the real flaws and the suffering is overwhelming. The opposite side of masochistic tradition is sadistic (cruel). It is strong or weak, fully or partially understood, but it is rarely seen that it is not entirely possible[13.112].

Fromm shows 3 types of sadistic tendencies. Firstly, dependency on other people and their control over them; The second is not to have absolute control over people, but to exploit them. The sense of ownership is not only a material property but also a moral and intellectual character; the third one is seen by torturing other people and suffering from them [10.197].

Masochistic and sadistic tendencies are covered with masks such as anxiety and care for others. If the masochistic dependence is evident, the sadist needs his own, as he feels his strong feelings are based on the fact that he is the master. In fact, people can give everything they can to their subjects - love, respect, and respect, but not just a nova - the right to freedom and independence.

Fromm is questionable as to the magical symptoms of the character and the origin of the disorder. That is, what are the common signs of the masochistic and sadistic tendencies? According to Fromm, magical and sadistic aspirations help the individual to cope with the unbearable suffering of loneliness and weakness. Psychoanalytic observations on the Masochistic indicate that the sense of loneliness and the feeling of their inability are growing stronger. Fromm writes: "In Masochism it is active because of the indefinable sense of indifference and loneliness. He wants to abandon his psychological sense of I; for this he is humiliated, suffers, and drives himself to excessive subsistence "[12.149]. Although sadism and corruption are interconnected, it is not the same thing. An oblivious person seeks to destroy an object, that is to say, the sadist tries to dominate the object and suffers when it loses it.

Fromm believes that thirst for power does not depend on power, but on weakness. When power is dominated one by one, power is the ability to change force. "If man is strong, that is, he is capable of realizing his potential on the basis of the freedom and integrity of his own self, he has no need to rule over humans, and he does not seek power." [12.152]

Fromm, separating authority from inside and outside, emphasizes that the inner power acts as a duty, conscience, and writes about conscience. "Conscience is far more cruel than the external powers, and the content of conscience is often incompatible with the moral norms of human dignity [12.207]. The conscience can be overwhelming with its toughness, because it can not be ruled out by human conscience. How can he go against himself? To this day, "conscience" has lost much of its power. Everyone is absolutely free if they do not violate the legitimate rights of others. "



The human mind, who claims to be inclined to violence, is also inclined to corruption, enmity and envy, analyzes the factors that make the human being destructive.

Historical sequences have developed feelings such as weakness, fear and new character traits - enmity and jealousy have begun with the rise of capitalism. "The element of hostility is that, as a result of competition, or conflict of interest and many other situations, emotional and emotional needs of a person are suppressed and suppressed. It creates a sense of hostility." [12.192]. Enmity and envy have a tendency toward despair and anger toward people. Enmity in humans will be directed against another and against God. The only way to get rid of hostility is self-defeating. The believer who is seen in the people says that his anger and hatred towards him are hidden in him. We can see the self-centered hatred of man as we try to make his distorted and ineffective feelings. Or it is manifested by true humility and commitment. With the sense of duty, we can see real self-esteem in a man. Fromm writes about it. "True humility, the sense of true duty for the people is incompatible with disbelief and hatred of people; but self-condemning and self-denial "conscience" is one aspect of hostility, and the other is hatred and doubts [12.216]. " Fromm believes that manifesting the true conscience of man is driven by hatred and enmity toward him. According to Fromm, "Conscience" is a human observer. It urges us to act in harmony with the wishes and goals that we consider to be ours. Conscience gives human beings the power of judgment and cruelty. He forbids happiness and happiness for him, and his life forces him to mysterious sin.

Capitalism has also changed the rules existing in the traditional society. Newly shaped character and qualities. The powerful force that moves human activity is self-interest and egocentrism. This process has led to individual self-determination. However, self-denial and asceticism appeared in society. In the general psychology of society, egoism and interest are intensified.

According to Fromm, egoism is a form of treachery, and it involves incompetence, like any feverishness. Covetousness is a deep depression that can freeze a person; humanity wants to meet this need because of infinite suffering, whereas it will never be satisfied. Careful observations show that the egoist is never satisfied, even though he is always busy with himself. " Because envy is strong in it. He always thinks that he lives and that he has lost something and that he has something to lose. According to Fromm, such people are not surprised by themselves; they hate themselves at the bottom of their heart. "Egoism is the lack of love for self [12.226]," says Fromm.

The psychological and moral behavior of human beings is that there is not much difference between biophilia and necrophilia. A human being is

not completely biophilic or non-necrophilic. In many people, there are both kinds of biological and neurological disorders. It is noteworthy that one is more likely to manifest in human relationships than in the absence of one of the two beings [14.36].

When analyzing the necrophilic tendency, it is necessary to consider the specific features. Necrophilic features include the desire to kill, mischief, violence, and sadism. In one man, one of the above can be expressed in more ways, and the other can be clearly seen in the other person.

The contradiction of the necrophilic tendency is biophilia, which means love of life. It also has its own attributes. This phenomenon emerges in the biological, emotions, mentality, and social relationships of man. The desire to love life is seen in all living things around us. An attempt to survive, to fight death, and to love life are the most primitive aspects of biophilia. Biophilia is the result of more creativity. Man maintains what he has, but he tries to add and create new ones. He wants to make a human being better, with love, rather than a corrupt attitude, as if looking at an inanimate object [14.45].

Biophilia morality also has its own positive and negative aspects. Goodness is respect for life, development, and openness to the news. Everything that puts life, restraints, and kills life is evil. A person who loves life does not hate himself, nor does he live long in the sense of regret and guilt. Many people have a specific contrast to the desires of mortal and lifelessness, and the importance of which is managing man. Humans, who are more likely to be mortal, are slowly killing themselves.

The most effective way to encourage them to live in a child is to be with those who love life. As the baby grows warm and kindly with others, it feels free, away from threats, trained to communicate through the examples not only through correlation, but also as a guide for living art and a truly lifelike lifestyle [4.50]. The conditions that appear above are the basis for enhancement of the nervous system.

The social conditions that are needed for the strengthening of biophilia are the same as those creating conditions for individual development. The main thing is that the abundance of economic and spiritual needs will increase the eagerness of living. The vast majority of human capacities are to ensure the survival of corruption. Another condition that makes the desire for life to grow is the disappearance of this injustice. It explains the way in which the person creating the injustice is not his own purpose, and that he is used as a tool for the benefit of another person. And finally, it is a freedom that makes life stronger. It is not enough to be free from political barriers that limit people. Having the right to do something to increase the desire to live is more important. You must be active and responsible person to feel that freedom. Fromm emphasizes that the



passion for living will be strong in a society with security, justice, and freedom.

Security: Failure to remain in danger of the fundamental economic conditions essential for a prosperous life; justice: no one should use another person as a tool for their purposes; freedom: everyone has an opportunity to become an active and responsible member of society [14.51]. Indeed, it is crucial that people in the community be safe, free and fair. Social conditions, not just the eagerness to live in, create the conditions for robots to rise, but also the mortality. An analysis of Fromm's biophilia and necrophilia concept suggest that Freud has similar and different aspects of life and death instinct.

Fromm to the social conditions that shaped the necrophilia, the question of why mankind is on the verge of a nuclear strike. In his opinion, there are many wars in history, but the reasons for wars - protection against aggression, economic deficiency, aspiration to freedom, honor and dignity, prosperity - should not be enough for a nuclear strike. The nuclear war in a matter of minutes creates a threat to the extinction of humanity, and claims that there is no meaning in life for countless survivors.

Why is nuclear disarmament being prepared today? Why Does Humanity Unite to Fight Nuclear War? Why do people have a strong desire to live and have enough resources and possibilities to live in such a state? "Fromm says that people are not afraid of the complete disappearance, lack of desire to live, and lack of interest in surviving [14.55]. Fromm, who examines the individual and social perception of one of the evil inclinations of the human heart, analyzes the role of nationalism, ethnic hatred, war and corruption.

Fromm attach great importance to "narcissism" (self-esteem). In his opinion, man's good and evil abilities are manifested by destructive or creative aspirations at the level of unconsciousness. The forces of corruption represent the aspiration to death, self-esteem (narcissism), and enthusiasm to the crowd. The Creator's forces, in contradiction with them, are: to pursue life, to love others, and to be self-reliant. According to Fromm, the state of narcissism is spiritual energy. This causes a person's inner biological power to shock [10.175]. A complete victory over Narcissism is accomplished through the idea of "Be friendly to your enemy." Fromm says, "It is possible only to freeze the believer or the enemy, only when I am inferior to another" [15.89]

Erich Fromm, according to the concept of the heart, constitutes the essence of any neurosis as well as normal development - a struggle for freedom and independence. For many ordinary people, this struggle has fallen: this struggle ended with a complete surrender; they sacrifice their personality, they are well adapted and normal people. Neurotic - it can be understood as an ineffective attempt to resolve the conflict between resistance to complete

obedience and the intrusion of neurosis with its inescapable dependence.

In the 20th century, the problem of alienation has become a major issue. One of the main reasons for this is the loss of affection among the people and the substitution of material interests. In such a society, a person becomes deprived of his dignity and becomes a property. It is customary for all people to look at their possessions and to use their benefits in the family or in the ministry. As a result, says Fromm, the feelings of a person in the inner world are completely ignored. Instead, it is selfish. But selfishness satisfies the deeply rooted feelings of human nature. That is, selfishness can lead to depression and loss of interest in life. When life's interest and emotions disappear, the desire to die under the guilty consciousness of one's mind becomes worse. Hence, in today's developed societies, self-mortality rates are rising. From that point of view, Fromm believed that the rise of love for each other, the emotional uplifting and the further improvement of the spiritual world. A strong man who is in love ensures the continual elevation [10,189].

Man wants to get out of the fear of loneliness and loneliness. He tries to get rid of the burden of self-sufficiency and suffering. For many years, man has been trying to get rid of the craziness.

## CONCLUSIONS

Erich Fromm summarizes the analysis of the individual features of robotics in the concept of the heart. In today's society, human robotics can further anger the average person's weaknesses. Therefore, he comes to believe that he is ready to submit to the new authority, which will give him self-confidence and relief from doubts.

In short, the desire to live in society is decreasing. The struggle for the sake of human upbringing in the society, and the failure to live in peace, have caused unease and tension in the world of forgetting the dangers facing the world. Today's attitude to life has become mechanic. Unfortunately, human beings are not created as lifeless. When it comes to something, it disappears, before the end of the cycle, people are desperate, and they want to live and to destroy life. Fromm modern society has shaped robust desires in humans. That's why today's people have been given names like "factory man", "robot man", "consumer".

It has been revealed that by stopping people from becoming robots, raising their souls, shaping good-natured personalities and protecting the destiny of humanity from degeneration, and, most importantly, creating a social heart is becoming an important issue.

Within the scope of the research, it can be used to draw on its conclusions in expanding the philosophy of social-philosophy, understanding the human mind, and developing methodological



developments for scientific explanation of the desires and inclinations of the heart. Nowadays, it is important to study and analyze various doctrines, to make the right conclusions, and to formulate the spirituality of our youth.

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## THE BOON IN THE BANE: INDIA GOES CLEAN-GREEN AMIDST CORONAVIRUS LOCKDOWN

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### ABSTRACT

*The ongoing Covid-19 pandemic has wreaked havoc all across the world, most importantly claiming lives of over 3 lakh people and blighting the economy of every nations thus sending the entire world into a ramshackle. The effects of Novel Coronavirus has entirely changed the modus vivendi of the people all over the globe and India is no exception. The aftermath of Coronavirus lockdown has left some miserable impacts leaving the world at an impasse. But among these, the lockdown has also bolstered the environmental quality as there has been massive reduction in the amount of pollution something which all the nations in the world have been mulling over the past. Truth to be told, the quarantines imposed following the potential outbreak of the Coronavirus was actually a harbinger of the astounding turnaround in the ambit of environmental sustainability that would soon be achieved. In this context, India, the world's 5<sup>th</sup> most polluted country finally unshackled itself from the stranglehold of pollution, a context in which India found itself mired throughout the years. The current research study aims to bring out how the Coronavirus lockdown propelled the environment quality in India, thereby, achieving the Clean-Green mission.*

**KEYWORDS:** Coronavirus pandemic; Lockdown; India; Pollution; Air and Water

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### INTRODUCTION

Novel Coronavirus has become a household name and every single day it is making broad headlines. Novel Coronavirus is an ongoing pandemic which was first identified in late November, 2019 in Wuhan region in China. The potential outbreak of the disease has thrown the world into a bedlam and the blood-thirsty disease

claimed lives of more than 3 lakh people all over the world. Some of the ugly aftermaths of the Covid-19 pandemic are quarantines, suspension of flights, closure of hotels, restaurants and social hubs, closure of school, colleges and universities, shutting down of manufacturing and retail sectors, suspension of events and programs, urban unemployment, etc. In order to curtail the menacing impact of the deadly

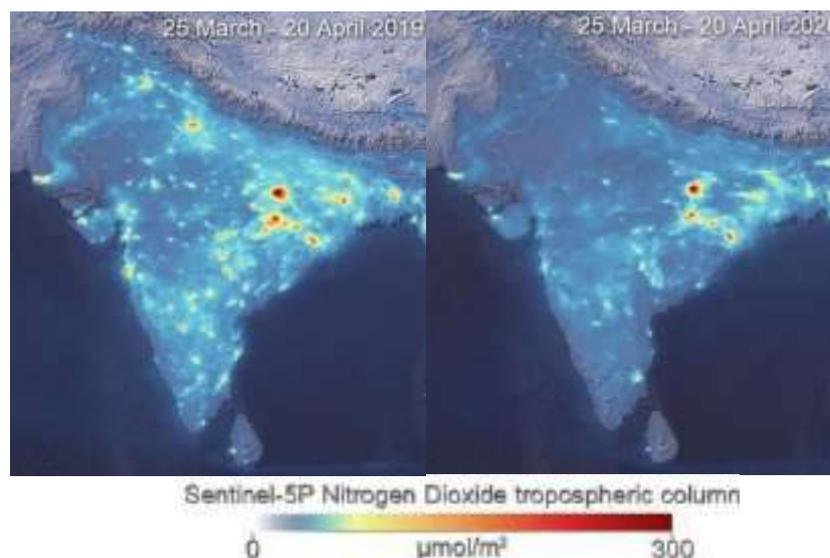


pandemic, governments of every country imposed strict lockdown measures. Everyone in the world has witnessed certain scenarios which has never been witnessed before. Truth to be told, the Coronavirus pandemic gave everyone a glimpse of the previous hundred year old pandemic called 'Spanish Flu' which occurred in the year 1918-1920. If people of that era are still alive, they would better know about the ruffling impact of such boisterous disease which leaves everyone reeling. Albeit the Coronavirus lockdown has brought many negative effects with it, but from the viewpoint of the environment, the pandemic has just brought a much needed stability to the environment. The emissions of carbon footprint and other toxic emissions have witnessed a significant plummet. The toxic effluents discharged into the rivers has also seen a drastic reduction, thus making it cleaner. These days of quarantines has actually been able to pull off a spectacular achievement in making our Planet Earth clean and green. Exploring some of these benefits amidst an excruciating Coronavirus lockdown is our purported endeavor. The present research study focuses on India on a general note.

solar energy has vitiated the demand for and dependence on fossil fuels. Adding to this, the unexpected emergence of a global pandemic calling for an urgent lockdown has reversed the growth trend of India's 37 years old emissions. According to the World Air Quality Report, India is the home to six of the world's most polluted urban areas with Ghaziabad leading the bandwagon in India. Nitrogen Dioxide ( $\text{NO}_2$ ) is emitted into the atmosphere from thermal plants, vehicles and other industrial sectors. But since the beginning of 2019, the demand for thermal power generation has been low, on top of that the lockdown has slowed down the demand for coal. Coal-fired power generation fell by 15% in the month of March, 2020 and 31% in the first three weeks of April, 2020. Oil consumption reduced by 18% in March, 2020 juxtaposed with the previous year while the production of crude oil nosedived by 5.9%. Researchers estimated a fall of 30 metric tons of  $\text{CO}_2$  emissions on the basis of data for coal, oil and gas consumption. In fact several places in India have been told to witness clear blue skies thus a harbinger of a mercurial improvement in air quality. Polluted cities in India like Delhi and Mumbai have reported massive drop in  $\text{NO}_2$  emissions with figures of 40-50 percent in comparison to the previous year.

### EMISSIONS IN INDIA GOES DOWN FOR THE FIRST TIME IN ALMOST 4 DECADES

Emissions in India has witnessed a drastic decline, courtesy of the Coronavirus lockdown which is excruciating yet has been a blessing in disguise. According to the release of data by the Centre for Research on Energy and Clean Air (CREA), decline in electricity consumption and stiff competition from renewable sources of energy like wind energy and



**Exhibit 1: Diagrammatic comparison of  $\text{NO}_2$  levels in India in March-April'19 and March-April'20**  
[Source of Image: SciTechDaily]

But there is still an anomaly remaining over this improvement in air quality as a result of

reduction in carbon footprints and other hazardous emissions. It is still unclear whether India would be

able to sustain the massive improvements which have taken shape amidst the lockdown. If the air quality is left unchecked post lockdown, air pollution will swiftly return continuing its hazardous impact on human health and environment in the long haul. Increased air pollution could be more vulnerable to Coronavirus and other respiratory syndromes leaving the humans subjected to even more grueling times. Analysts have given certain suggestions for keeping the level of carbon footprints low such as reinvigorating renewable energy programs post lockdown and continued decreased electricity demand through eye-twitching and innovative structural changes and bailouts. However, it still remains a mystery that how things will span out post lockdown talking in the context of air quality in India, nevertheless, it is no-brainer that during these lockdown times the emissions in India has seen a significant reduction something which the environmental activists and other associated potential stakeholders have been chuffed about albeit even if it does not have a prolonged effect.

## YAMUNA AND GANGA SEES MAGNIFICENT IMPROVEMENT IN WATER QUALITY

The lockdowns imposed in India has had a profound impact on the health of rivers most noticeably two major rivers of India which are Yamuna and Ganga. The quality of water in River Ganga, India's most sacred river has seen a spectacular improvement. The national lockdown meant no industrial activities therefore no discharge of effluents into water bodies. According to the Central Pollution Control Board's real time water monitoring data, out of the 36 monitoring units placed at various points of river Ganga 27 points were found suitable for bathing and propagation of fisheries and wildlife. While the domestic sewage has not reduced but reduction in industrial discharge has seen a rapid decline. It is not the organic pollution which deteriorates river water quality as organic pollution gets diluted in the river but it is actually the industrial effluents that destroys the river's self-cleansing properties. Experts have told that the quality of river water was checked in Kanpur, Uttar Pradesh and was found to be of much better quality.



**Exhibit 2: River Ganga flowing thorough Varanasi and Haridwar are cleaner than ever before due to lockdown [Source of Image: The Economic Times]**

Not to forget Kanpur is a city which is a source of huge industrial waste generation into rivers. The reports about better quality water in Kanpur speaks volumes about the astounding turnaround in script talking in the light of making water bodies more cleaner.

However, it is not just river Ganga which has seen drastic improvements in water quality, the river Yamuna has also witnessed a significant enhancement in water quality largely due to the

nationwide lockdown meaning no bathing in the river or dumping wastes or discharge of sewage from industrial plants. Adding to this, recent rainfall in the region of Varanasi increased the level of water. As a result, better marine life was found in the river. In fact according to experts there was a 40%-50% amelioration in water quality. It has been reported that there has been a reduction of human excreta by 34% and biochemical oxygen demand by 20% in Haridwar region of Uttarakhand resulting in the

water in 'Har-ki-Pauri Ghat' in Haridwar being stunningly ranked in Class A for the first time in history.



**Exhibit 3: Water in Yamuna looks cleaner due to the lockdown**

**[Source of Image: The Economic Times]**

### **INDIAN ROADS CLEANER THAN EVER BEFORE**

Indian city of Delhi along with 13 other Indian cities feature in the list of the top 20 most polluted places in the world. By 2019, undoubtedly pollution in India had reached catastrophic levels. Too add to the woes, Indian roads were frequently found dirty with the irresponsible and carefree citizens littering the streets thus further exacerbating the problem. However, the Coronavirus lockdown proved to be a healing touch on the streets of India which now seems extremely clean, to be precise cleaner than before. Due to the lockdown there has been a total reduction in traffic in India much more than 98%, an unprecedented change which was not witnessed before. Due to the lockdown, people are staying at home with absolutely no or minimal outdoor activity like emergencies. Archetypal Indian citizens are have been quite famous over the years when it comes to littering the roads by throwing eatables or chewables, throwing packets, spitting, etc. The lockdown has somewhat healed the entire roads of India as there has been no or minimal outdoor activities from the public as a result littering activities has also seen a sharp drop. However, there is still a basic question remaining as to whether the current situation of clean and tidy roads could be continued for a long time even post lockdown. Questions still hovers over the situation once the lockdown is lifted. Nevertheless, the lockdown has brought certain respite albeit even if it is for a short period of time.

### **CONCLUSION**

The unprecedented emergence of Coronavirus has left the world reeling calling for massive lockdowns all over the world. The lockdown imposed in India has had a miserable impact on the Indian economy, left myriad workers unemployed and claimed lives of more than 3000 people. But amidst this, the bane of Coronavirus has actually proven to be a boon for the entire nation and the world in general. Talking in this context about India, one could easily see blissfully clear blue skies and clean fresh water a manifestation of the 'unbearable levels' of air quality in Delhi which regularly records some of the foulest air in the world leaving people gasping for breath has seen a mercurial transformation in its hazardous air quality. Not forgetting, the Haridwar region of Uttarakhand which has long been mired bearing the ignominy of Class B water quality suddenly finds its water in the Class A grade. There has been a bewildering change in the air quality in India as tested over 85 cities as well as the quality of water as the Ganga and Yamuna now looks much cleaner than ever before. The roads of India have also become cleaner somewhat reminiscent of Calgary in Canada. Albeit the astounding turnaround witnessed in the expanse of air and water in India, things are still unclear if the same could be maintained for a better sustainability India and planet Earth in general.



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# LEVELS OF IMPLEMENTATION OF GUIDANCE AND COUNSELLING PROGRAMMES IN SECONDARY SCHOOLS IN ANAMBRA STATE, NIGERIA

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## ABSTRACT

*The study examined the levels of implementation of guidance and counselling programmes in public post-primary schools in Anambra state, Nigeria. Four research questions and four null hypotheses guided the study. The study was conducted using an evaluative research design. The entire population of 129 Professional Counsellors in schools in Anambra was studied due to its small and manageable size. A validated questionnaire with internal consistency reliability coefficient of 0.74 was used for data collection. Data was collected through direct delivery method and analyzed using mean, standard deviation and t-test. The findings of the study revealed that guidance counsellors in public post-primary schools implement orientation, career convention, teachers' forum and leadership training programmes to a great extent. Based on the findings, it was recommended among others that government should formulate and implement policy measures or programmes that could help in seeing that guidance counsellors are always updated, in relations to the fast growing society.*

**KEYWORDS:** *assessment, guidance counsellors, implementation, public post-primary schools, counselling programmes*

## 1. INTRODUCTION

The society today is entwined in so many issues. These issues could vary from urbanization, industrialization, moral debauchery, estrangement, polarity, political precariousness, covetousness, tribalism, stealing, outfitted theft, capturing, wantonness, breakdown of peace, rejection of cultural values, refusal to go to class by young people to high rate of crime. All these have the tendency of destabilizing a nation. However, seeing the extent of possible harm and terrible notoriety this could bring to a nation, the National Policy on Education (FRN, 2013) recommended among other educational services, the services of career officers and counsellors:

In view of the apparent ignorance of many young people about career prospect, and in view of personality adjustment among school children career officers and counsellors will be appointed in post primary institutions (FRN, 2013).

In addition to the career development and training program, other programs such as the orientation program, the leadership forum, the teachers' forum, have also been implemented into the education and training system. These guidance and counseling programs have been implemented in the school system because some educators, such as Ikem (2007), Achebe (2005), have suggested that through

these programmes, counselors would likely have increasing impact on the lives of students, both while they are in school and when they left school. They believed that the future working life of students would be drastically different from the present and the past. They concluded that automation and technological changes and breakthroughs would cause people to change their jobs more often, move more often, update and trade in education models to remain employable, and diversify their practical skills to remain competitive.

In addition, in contributing to the need for guidance and counseling programs in secondary schools, Nwaoba (2012); Ifelunni (2008) and Omeje (2009) made a key recommendation on the need for guidance and counseling programs to be implemented. They found, among other things, that the greatest guidance and related problems faced by secondary school students were in the area of career choice, interpersonal relationships, making appropriate and satisfying career choices, self-understanding, positive self-image, offering to help teachers and school staff to understand positive self-image, helping teachers and school staff to understand the needs and challenges of each individual to mobilize all the resources at their disposal in the school or at home to satisfy their needs.

Despite all this, and the fact that Nigeria has a lot of human and material resources, one would have



thought that the country would have gone out of underdevelopment and other related problems. After all, other nations, in very similar circumstances to Nigeria, have done so (namely, China, Libya, among others). Perhaps school guidance could have helped to develop skills, attitudes, etc. in order to realize their fullest imaginable competencies for national development.

In an attempt to identify the possible causes of high rates of crime and violence among students and graduates, Nwachukwu's (2007) study found that ineffective guidance and counseling programs in today's school system have precipitated an unprecedented rise in crime, student violence, cultism, wrong career choices, and wrong subject combinations. This called for a sound understanding and implementation of guidance and counseling programs in, in particular, post-primary schools in Anambra State.

Guidance and counseling programs are expected to complement the educational and administrative input of students, to develop a sound attitude towards themselves, values, interests, moral beliefs and disciplines, and to contribute to the promotion of student awareness, the ability to gain a good knowledge of the world of work, the possibility of continuing education and the ability to make realistic decisions and promote human efficiency. It is also expected to help the school administration develop a strong and long-term partnership between school heads, teachers, parents and students.

In view of the above, Akpan (2010) described guidance and counseling as an educational service that seeks to provide an opportunity for a school child to develop a comprehensive education that prepares him / her for functional life. As a consequence of these interpretations by these authors, advice and therapy is also a human-oriented program that is focused on helping people to identify and redefine their priorities and expectations in the pursuit of greater success in their lives. However, looking at the current state of society, where many young people and some graduates are virtually non-functional in society, one begins to wonder whether guidance counseling is actually being implemented as a program in the school curriculum of rural and urban post-primary schools, in particular. The researcher in view of the above has decided to make a critical assessment of guidance counseling in post-primary schools, to assess the level of implementation of Guidance and Counselling programmes in secondary schools.

## STATEMENT OF THE PROBLEM

There have been reported cases in some secondary schools in Anambra State where students do not act the way they should, both when they are in school and when they have graduated. Such instances may not have been when there is effective

implementation of guidance and counselling services in the school system, which is intended to help educate and instruct students in making the correct decision and integrating well into a fast-growing world. Students, who are seen to lack some of the benefits of undergoing guidance counseling programs in schools, often object to school rules and regulations. And as students, they find it very difficult to integrate into society, thereby becoming a nuisance to the society, at large.

On the one hand, the teachers who are supposed to help guide these students are not seen to be helping matters. They probably do not understand either the need for guidance counseling programs or the work of a school counsellor. This may be due to the lack of them coming together as teachers; to discuss this and other related issues among themselves. Since similar cases are not far-fetched in Nigerian schools, this has led the researcher to wonder whether guidance and counseling programs such as orientation, career convention, teacher forum, and leadership training programs are actually being implemented in post-primary schools in Anambra State. The goal of this study is therefore to evaluate the extent of implementation of these programs by guidance counselors in rural and urban post-primary schools in Anambra State, Nigeria.

## 2. OBJECTIVES OF THE STUDY

The main purpose of this study is to assess the level of implementation of Guidance and Counselling programmes in secondary schools in Anambra State. Specifically, the study sort to:

1. Assess the level of implementation of orientation programs by rural and urban guidance counselors in public secondary schools in Anambra State.
2. Test the extent of adoption of a career convention by rural and urban counsellors in public secondary schools in Anambra State.
3. Assess the degree to which teachers' forum initiatives are introduced by rural and urban guides in Anambra State public secondary schools.
4. Evaluate the extent of implementation of rural and urban guidance training programs in public secondary schools in Anambra State.

## SIGNIFICANCE OF THE STUDY

The significance of the study is derived from the theoretical and practical basis for the evaluation and implementation of the Guidance and Counseling program in secondary schools. In practice, however, the findings of the study are expected to be of great benefit to students, teachers, parents, school administrators, counselors and future researchers. It would help students to be aware of their basic personal requirements, abilities, assets, liabilities and



potential. It is also expected to help provide them with vocation information. It is expected to help students gain a positive image of themselves through self-understanding. Students are expected to be helped to make appropriate and satisfying personal vocational and educational choices. This will also motivate students to inculcate healthy learning habits. This could be achieved by organizing awareness-raising programs with guidance counselors from different schools.

### Research Questions

The following research questions guided the study:

1. To what degree do rural and urban guidance counselors enforce orientation services in public post-primary schools in Anambra State?
2. To what extent do rural and urban guidance counselors hold a career convention in public post-primary schools in Anambra State?
3. To what degree do rural and urban guidance counselors introduce teacher forum services in public post-primary schools in Anambra State?
4. To what degree do rural and urban guidance counselors offer leadership training programs in public post-primary schools in Anambra State?

### 3. METHODOLOGY

This research used an evaluative method to determine the extent of implementation of instruction and therapy services in post-primary schools in Anambra State. The design according to Obikeze (2017) aims to assess the degree to which a mapped system has been applied in a given setting in order to be able to make a value judgment.

This study was conducted in the state of Anambra. The state is one of the thirty-six states of the Federation and is situated in the south-eastern region of Nigeria. The study population consisted of 129 professional guidance counselors in public secondary schools in Anambra State. The study

sample consisted of 129 Guidance Counselors in public secondary schools in Anambra State. No sampling was carried out as the entire population was studied due to its small and manageable size.

### Sampling and Instrumentation

The Guidance and Counseling Programs questionnaire was used to collect data from respondents (counselors). The questionnaire, organized as a self-report questionnaire, consisted of five sections, Sections A, B, C, D and E. Section A dealt with the demographic data of the respondents. Section B dealt with Orientation Services in Schools; Section C on the Career Conference and Section D on the Teachers' Forum; and Section E on Leadership Development. Twenty-three questionnaire elements were made up of four clusters. The research instrument has been properly checked. Respondent data were analyzed and checked for internal accuracy using Cronbach Alpha. Tests yielded coefficients of 0.73, 0.86, 0.66 and 0.69 for the orientation program, the career convention, the teacher forum and the leadership training.

### Statistical design

The direct delivery method was used to administer and collect the instrument together with six research assistants by the researcher. The research questions were analyzed using mean and standard deviations. When analyzing the data, items with a mean of 1.00-1.49 were considered to be of Very low extent (VLE), 1.50- 2.49 were regarded as Low extent (LE), 2.50- 3.49 were regarded as High extent (HE), and 3.50- 4.00 were regarded as Very high extent (VHE).

### 4. RESULTS

This section presented the data by presenting the demographic details of the sample under analysis. Frequencies and percentages are shown in the table below:

**Table 1: Demographic Information of the Respondents**

Categories	Levels	Frequency	Percentage
Location	Urban	56	45
	Rural	68	55

The data in **Table 1** showed that the sample comprised 56(45%) urban and 68(55%) rural counsellors.

**Research Question 1:** To what extent do rural and urban Guidance Counsellors carry out orientation programme in post-primary schools in Anambra State?



**Table 2: Mean Scores and Standard Deviation on the Extent Guidance Counsellors Carry out Orientation Programmes in Post-primary Schools.**

s/no	Item Description	N	Mean ( $\bar{x}$ )	Std	Decision
1.	Giving students information about history of the school.	124	2.49	0.685	LE
2.	Taking the students round the school compound to understand the environment.	124	2.55	0.685	HEI
3.	Creating awareness about school rules and regulations.	124	2.34	0.573	LE
4.	Introducing the fresh students and those on transfer to the school management team.	124	2.75	0.691	HE
5.	Students are giving information about the existence of legitimate club/societies in the school and the need to join.	124	3.29	0.624	HE
6.	Exposing the students to the existing faculties available in the school e.g. sports.	124	2.64	0.666	HE
7.	The students are given information about study habit.	124	3.35	0.627	HE

The data in **Table 2** revealed that the mean scores of respondents in carrying out orientation programme are items 1 and 3 with 2.49 and 2.34 meaning Low extent, items 2, 4, 5, 6, and 7 with 2.55, 2.75, 3.29, 2.64 and 3.35 are High extent. This implied that guidance counsellors implement some of the

orientation programmes to a low extent while some to a high extent.

**Research Question 2:** To what extent do rural and urban Guidance Counsellors carryout career convention in public post-primary schools in Anambra State?

**Table 3: Mean scores on the extent of implementation of career convention programme in post-primary schools by guidance counsellors.**

S/no	Item Description	N	Minimum Statistics	Mean X	Maximum Statistics	Standard Deviation	Decision
8.	Inviting expert/professionals to talk to the students about their career.	124	3.00	4.00	2.34	0.489	LE
9.	Giving students information on the institutions that offer different career.	124	3.00	4.00	3.00	0.691	HE
10.	Giving students opportunity to ask questions about different careers/ subjects offered in the school.	124	3.00	4.00	2.00	0.480	LE



11.	Counsellors provide Entertainment to all the Participants during Career convention.	124	3.00	4.00	2.40	0.873	LE
12.	Students are educated On the problems and Prospects of each career	124	3.00	4.00	2.63	0.708	HE

The data in **Table 3** showed the mean scores and standard deviation of the extent that guidance counsellors implement career convention in secondary schools. This showed items 8, 10 and 11 with 2.34, 2.00 and 2.40 meaning low extent (LE) while items 9 and 12 with 3.00 and 2.63 meaning High extent (HE).

**Research Question 3:** To what extent do rural and urban Guidance Counsellors implement teachers' forum programmes in public post-primary schools in Anambra State?

**Table 4: Mean Scores and Standard deviation of respondents on the implementation of Teachers' Forum programme in secondary schools.**

S/no	Item Description	N	Mean	Std	Decision
13.	Teachers are reminded of their roles in the school.	124	2.84	0.683	HE
14.	Giving the teachers the opportunity to express their views on issues concerning them.	124	2.38	0.806	LE
15.	Creating room for teachers to exchange experiences and ideas on academic matters.	124	1.49	0.590	VLE
16.	Discussing staff management relationship during teachers' forum.	124	1.38	0.689	VLE
17.	Creating opportunity for staff to discuss their welfare during teachers' forum.	124	2.40	0.962	LE
18.	Erring teachers are reprimanded by their fellow teachers.	124	2.49	0.796	LE

The data in **Table 4** showed the mean scores and the standard deviation of respondents on the degree to which the teachers' forum system was applied in secondary schools. The result showed that items 15 and 16 with 1.49, 1.38 were VLE, items 14, 17 and 18 with 2.38, 2.40 and 2.49 were LE, while items 13 with 2.84 were HE.

**Research Question 4:** To what degree do rural and urban guidance counselors carry out a leadership training program in public post-primary schools in Anambra State?



**Table 5: Mean Scores and Standard deviation of respondents in the carrying out of Leadership Training programme by guidance counsellors.**

S/no	Item Description	N	Mean	Std	Decision
19.	Educating students' leaders on their roles in school.	124	3.41	0.584	HE
20.	The students are told about their rights and privileges.	124	3.29	0.890	HE
21.	The prefects are Informed of their limitations in the exercise of their power.	124	3.58	0.585	VHE
22.	Training the students on the leadership skills of a leader.	124	3.18	0.800	HE
23.	Discussing with the school functionaries on their relationship with the school management, staff and students.	124	3.26	0.699	HE

The data in **Table 5** revealed the mean scores and standard deviation of guidance counsellors in carrying out leadership training programme in secondary schools. The result showed that items 19, 20, 22, and 23 were HE while item 21 was VHE.

## 5. DISCUSSIONS

Results from **Table 2**, which focused on the extent to which guidance counselors carry out an orientation program in secondary schools in Anambra State, revealed that guidance counselors are implementing some of the orientation programs to a low and some to a high degree. They take students around the school compound; but do not make them completely aware of the rules and regulations of the school. While, on the other hand, it applies all areas of the program, such as raising awareness about school rules and regulations; introducing new students and transfer students to the school management team. This is in line with the opinion of Ogbiji, Eyo and Oko (2011), who argue that although the implementation of orientation programs is high in secondary schools, there are still significant differences in the regularity and content of their orientation programs between public and private secondary schools in the State.

**Table three** findings based on the extent of adoption of the career convention system by secondary school counselors in Anambra State. From the table, the mean scores and the standard deviation of the extent of application of the career convention

by secondary school counsellors have been shown to differ. Essentially, it implies that some guidance counselors are implementing a career convention program to a high degree, corroborating the results of Awoyemi & Odeniyi (2014), which argues that a career convention program is being implemented by guidance counselors in secondary schools. On the other hand, some guidance counselors are introducing a career convention, to a low extent.

**Table 4** findings based on the extent of implementation of the Teachers' Forum system through feedback and advice in Anambra State. The outcome has shown that guidance counselors have incorporated some of the teacher forum programs to a high degree, others to a moderate degree, and others to a very low degree. This low level of implementation of the Teachers' Forum system often leads to a low level of student success. This finding is consistent with the result of Omoniyi (2013), who argued that lack of commitment and poor attitude on the part of teachers to work is often due to the poor performance of students in external examinations.

**Table 5** results focused on the extent to which guidance and counselors carry out a Leadership Training program in secondary schools in Anambra State. The findings from the table showed the mean scores and the standard deviation of the counselors in the performance of the high school leadership training programme. It shows that the guidance counselors have implemented most of the leadership training program to a high degree and some to a very high degree. This demonstrates appreciation of the



importance given to the introduction of leadership training programs in schools. This result is consistent with the observations made by Kibui (2013) that awareness occurs in both existing and developing countries, of the significance of schools producing effective leaders if they are to provide the best possible education for their students.

## 6. CONCLUSIONS

Based on the findings of the study, the implementation of guidance and counseling programs in public secondary schools in Anambra State is an enormous task that requires concerted effort on the part of all. In addition to the results of the study, guidance and counseling programs such as orientation, career conventions and leadership training programs are to a large extent implemented in secondary schools in Anambra State.

## 7. IMPLICATION OF FINDINGS

Gaps in the implementation of guidance and counselling services in post-primary schools in Anambra State have been identified as a result of inadequate feedback from rural secondary school counsellors. This would also create difficulties for students who have graduated from rural secondary schools to join a society where they will also meet their counterparts from urban secondary schools; thus creating an inferiority complex among students from rural secondary schools.

## 8. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made:

1. Government should formulate and implement sustainable policy measures that could help to ensure consistency in the implementation of the teachers' forum program in secondary schools. It will go a long way towards ensuring that every secondary school authority is serious about enforcing the programme, thus building a cohesive partnership between teachers and their school managers.
2. The government should devise and enforce policy initiatives or services that could help ensure that guidance counselors in all secondary schools are still up-to-date in ties with a fast-growing population. This could help to maintain their output in secondary school guidance and counseling programs.

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## BASES OF LEGAL REGULATION OF MICROFINANCIAL SERVICES PROVIDING ORGANIZATIONS

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### ABSTRACT

*This article covers the main place of small business and business in today's market economy. Including scientifically analyzed the development of small business and business, and the legal basis, at this time financially support small business and business, the latter is amended and the rules for this branch of national legislation are added.*

**KEY WORDS:** *Small business, businessmen, credit, private property, bank, state, family, economy, money, syllable, debt, physical person.*

### INTRODUCTION

In our country, as in other areas, the door to great opportunities for entrepreneurship has been opened. In particular, great attention is paid to the types of microfinance services. The level of access to financial resources and the state of formation of the financial infrastructure play a special role in the development of the country. Banks, which are the main subjects of this infrastructure, cannot meet all the needs of businesses and the population in financial resources. Therefore, the presence of non-bank structures together with banks in this area of activity is required. In Uzbekistan, such structures are mainly microcredit organizations. Such organizations usually include pawnshops, microcredit organizations, which are formed in various organizational and legal forms. According to the latest amendments to the legislation, banks now provide microcredit and microcredit services, which indicates that banks are also a type of microcredit organizations. In turn, such diversity in the subjective status of microcredit organizations shows that there are certain problems, specific approaches and specific aspects in the legal regulation of their activities.

### METHODS

Microfinance also means that financing is carried out on a smaller scale, and the amount of loans that do not exceed a certain amount or amount is defined by the state as microfinance [1]. The definition of microfinance is given in Article 3 of the Law of the Republic of Uzbekistan dated September 15, 2006 "On microfinance" [2]. is the activity of providing other services in accordance with the contract (hereinafter referred to as the contract).

It is clear from this definition that microfinance is the implementation of the types of financing activities (microcredit, microcredit, microleasing) specified in the legislation in the amount not exceeding the established amount. The maximum amount for each type of microfinance is determined by law. For example, a thousand times the minimum wage for a microcredit, a hundred times the minimum wage for a microloan is the maximum amount of service. In this case, the ongoing funding can not be more than this amount. After all, microfinance is not available in all financial institutions. This type of activity is usually defined by law as being carried out by a financial institution called a microfinance institution.



## RESULTS AND DISCUSSIONS

According to the first part of Article 3 of the Law of the Republic of Uzbekistan dated September 20, 2006 No-53 "On microcredit organizations" [3], a legal entity engaged in the provision of services in the field of microcredit, microcredit, microleasing and other microfinance services in accordance with this Law the person is a microcredit organization.

A microcredit organization is any organization that provides microcredit, microcredit, microleasing and other financial services provided by law, with or without the provision of statutory funds to small businesses and the poor, with the exception of statutory prohibitions. - is understood as a legal entity established in a legal form [4, p.14].

A.V. Chirikov describes a microcredit organization as an entity that lends to citizens and small businesses for a maximum amount limited by law for profit or to achieve a socially useful goal [5, p.7].

Apparently, the microcredit organization is also a legal entity. As a legal entity, a microcredit organization operates for profit. After all, the services provided by him are always paid. For example, according to Article 744 of the Civil Code, the borrower undertakes to repay the loan amount and pay interest on it. The interest received is the profit that the microcredit organization receives on its own. In this regard, the microcredit organization can be included in the category of commercial legal entities.

The first rules related to the activities of microcredit organizations in Uzbekistan were established by the entry into force of the Civil Code of the Republic of Uzbekistan. In particular, Article 289 of the Civil Code sets out the rules for the activities of pawnshops. According to the first part of this article, the pledge of movable property from citizens for personal consumption for the provision of short-term loans can be carried out by specialized organizations - licensed pawnshops as an entrepreneurial activity. Pawnshops can provide short-term (for a period not exceeding three months) loans to citizens under the pledge of real estate for personal use [6, p.258].

In accordance with the list of activities requiring licenses, approved by the Resolution of the Oliy Majlis of the Republic of Uzbekistan No. 222-II of May 12, 2001, the activities of pawnshops must be licensed. Licensing of pawnshops is carried out by the Central Bank of the Republic of Uzbekistan.

The Regulation "On the procedure for licensing the activities of pawnshops" was approved by the Resolution of the Board of the Central Bank of the Republic of Uzbekistan dated September 22, 2003 No. 23/3 (AV registration number 1291 dated 10.12.2003). According to paragraph 8 of this Regulation, the license to carry out the activities of pawnshops, 500 mln. may be transferred to a legal entity registered as a pawnshop in the manner

prescribed by law, with the formation of a minimum authorized fund in the amount of UZS. The authorized fund of a pawnshop is formed from the funds paid by the founders of the pawnshop. It is not allowed to use borrowed and mortgaged funds and other borrowed funds to form the authorized fund of the pawnshop.

The activities of pawnshops are regulated by the "Rules for Activities and Operations by Pawnshops" approved by the Board of the Central Bank of the Republic of Uzbekistan on September 22, 2003 No. 23/4 [Reg. No. 1290, December 10, 2003]. According to paragraph 4 of these Rules, the pawnshop enters into contracts with citizens upon presentation of a passport or other identity document.

With the adoption of the Law of the Republic of Uzbekistan dated September 15, 2006 No.-50 "On microfinance" created a unique legal framework for the activities of microcredit organizations. This law defines the legal definition of the concept of microfinance as the main activity of microcredit organizations. In particular, according to Article 3 of the law, microfinance is the activity of organizations providing microfinance services to provide microcredit, microcredit, microleasing, as well as other services in accordance with the agreement on the provision of microfinance services (hereinafter referred to as the contract).

Analyzing the microfinance activity, T.T. Madumarov highlights the following specific features of this activity:

Specific features of microfinance activities include: first, the activities of microfinance institutions are characterized by a special legal regulation and are not subject to the legislation on banks and banking activities. Second, microfinance services are provided by certain types of legal entities - credit unions, companies, pawnshops, and microfinance organizations established for this purpose and with special legal capacity. Third, microfinance is determined by the normative limitations of the list of services provided [7, p.61].

In addition to this, it can be concluded that microfinance is an activity aimed at providing credit services to customers in the amount specified by the contract and not exceeding the amount provided by law. Because microfinance aims to provide financial support to small businesses and the needy, to direct them to entrepreneurship. Microfinance activities through the provision of non-refundable funds will create new jobs in the country, reduce poverty. Therefore, this law should focus on the acquisition of all-round financial resources by the poor. The Law of the Republic of Uzbekistan dated September 20, 2006 No.-53 "On microcredit organizations" has a special place in the legal regulation of the activities of microcredit organizations. According to Article 5 of this law, a microcredit organization operates on the basis of its constituent documents.



The minimum amount of the charter capital of microcredit organizations is set in paragraph 3 of the Regulation “On the procedure for licensing the activities of microcredit organizations” (registration number 2093, 13.04.2010), according to which from October 1, 2017 the minimum amount of the charter capital of microcredit organizations 2 0 billion soums.

With the adoption of the Resolution of the President of the Republic of Uzbekistan dated July 23, 2019 No PR-4400 “On measures to increase the popularity of microfinance services” began a new stage in the development of microcredit organizations. According to the decision of the Central Bank of the Republic of Uzbekistan and the Ministry of Finance from August 1, 2019:

The maximum amount of microcredit will be increased to 50 million soums, the amount of microcredit - up to 300 million soums and the amount of microleasing - up to 600 million soums;

The period for consideration of an application for a license to conduct activities of microcredit organizations and pawnshops will be reduced from 30 to 15 working days.

## CONCLUSION

In recent years, our country has seen consistent reforms in the economic and financial spheres, as well as practical results. Many of these practical indicators are related to the activities of new financial institutions emerging in our country. This is primarily the result of the development of existing entrepreneurship and small and medium business, improving the living standards of the population, helping low-income people to do business through credit, expanding the ranks of entrepreneurs in rural areas, employment. Today, the result or effect of these ongoing reforms will serve, albeit to a lesser extent, in the prevention of poverty.

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## DID PARENTING JUST BECOME ALL THE MORE CHALLENGING IN POST COVID EPOCH?

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### ABSTRACT

*Looking at the present circumstances, the best tools to protect ourselves from the coronavirus is quarantine and social isolation. This confinement has trans-located into our homes. And we find the impact of this confinement on our mental health. The impact will depend on factors like the physical space of our home, the family members residing, their age and their ability to function independently. Parents have to understand that they are not alone with their problems. And their issues are not one of a kind or peculiar. No matter what the degree of frustration and problems there exists, there is a wide community of parents who are facing these same challenges and issues. This paper has been drafted by explaining the concept of positive parenting. It has focussed on the emotional turmoil the children are facing in their home. The manifestation of the emotion also shared the spotlight in this paper. Lastly, it concluded by recommending the techniques and skills that parents can use to increase their efficiency and equip them to handle challenges that parenting entails. The personal experience, observation and informal discussions have prompted the author to pen down this emerging concern which has mutated just like the virus to become all the more complex to handle in social isolation.*

**KEYWORDS:** Parenting, Positive parenting, Post COVID, social isolation, Lock-down

### INTRODUCTION

Is this the perfect time to give the example of ‘Familiarity breeds contempt’? Parenting, as it is, is a handful job. It can be frustrating and challenging. If you look at, a typical day, the ingredients would be stress, strain, defiant behaviour, with loads of yelling and sprinkle of admonishment. Nobody experiences the same parenthood. For positive parenting certain set of skills, proper knowledge, correct techniques are required which has been proved by a vast plethora of research findings published (Bronstein, 2000; Engels, 2002; Juffer, 2008; Power, 2013; Kerr, 2009; Mandara, 2003; Lonczak, 2020). By using these techniques and skills, parents can increase their efficiencies and equip them to handle anything that is to come. And this would significantly reduce our daily resentment and frustration. The personal experience and the informal discussions have prompted the author to pen down this common concern which has mutated just like the virus to become all the more complex to handle.

Looking at the present circumstances, the best tools to protect ourselves from the coronavirus is

quarantine and social isolation. This confinement has translocated into our homes. And we find the impact of this confinement on our mental health. The impact will depend on factors like the physical space of our homes, the family members residing, their age and their ability to function independently. No matter how much we love our family members, a little time for themselves or privacy is craved by everyone at the end of the day. For couples who are single parents, they face a different set of challenges. Our homes have become the centres of crèche, daycare, schooling, workout, workplace and centre for recreation. No doubt during COVID-19 the complexities of parenting, social isolation and social distancing has reached its peak. Even if people started with hope and manifested good mental health, they are slowly giving way and losing hope to the uncertainty lurking around them.

### POSITIVE PARENTING

Positive parenting applies to all developmental periods. Raising toddlers and teenagers need not be terrible nor terrifying with the positive parenting approach. According to Belsky (1984), he asserted



three principal social-contextual determinants of parenting, namely the parents' personality and other personal psychological resources, the child's individual characteristics, and lastly the contextual stresses and supports.

Positive parenting promotes children's self-esteem, emotional expression, self-efficacy, sense of belonging, social and decision-making skills, and belief in themselves. (Coleman, 2003; Couter, 1999; Engels, 2002). Positive parenting fosters secure attachments and quality relationships with parents; reduced behaviour problems; school adjustment and achievement; depressive symptoms, and risk behaviours; and positive youth development in general (Joussemet, 2008; Lochman, 2000; Maccoby, 1983; Steinberg, 1989). The outcomes associated with positive parenting are long-term and often permanent.

### EMOTIONS TURMOIL

The emotions a child's faces are different than that of an adult. As a result, their responses or the way to handle these emotions will also differ accordingly. The common negative emotions a child faces during post-COVID times are:

- **Sadness**- A child is sad mainly because of loss of social connection, especially his friends. He craves for this connection that he found in school, during recess time, playground etc
- **Fear**- Fear is the most common emotion. The whole abstract concept of 'coronavirus' is hard for him to comprehend and digest. The child fears to contract this virus or his loved ones inflicted by this unseen entity.
- **Angry**- The third common emotion every child will manifest is anger. Anger to why this is happening to him and why is somebody not doing anything about it. Adolescent, on the other hand, will usually be in the grumpy, angry mood because of lack of autonomy, the demand of privacy and some of them are angry with the authorities and public in general for not handling the situation effectively. Children might lose hope and will question regarding their religious beliefs and spiritual self.
- **Guilt**- This emotion is usually common in children who are inclined to offer their service for social welfare. They feel they have something to contribute, but their parents and the authorities are taking that opportunity away from them.

### THE MANIFESTATION OF EMOTIONS

The parents during social isolation have to be extra vigilant. The negative emotions are the most common emotions that every child and adolescents will experience. When they are sad, they might binge watch on Netflix or are addicted to social media sites to be connected with their friends. There may be a sign of excess sugar intake by children who are sad and depressed. (Li Lei, 2007)

Children when they experience fear, it may get translated into 'an irrational fear or phobias' too. The fear of being inflicted by the virus might make them obsessively glued to the internet and news. Fear of their grandparents or parents suffering from this virus will throw them over the edge. And if their parents are going outside for running errands, they might argue, cry or shout at them.

Adolescents or mature children compare themselves with the medical personnel, as to how they are making a big difference where ever they are and helping to save lives. They might be feeling guilty for not helping others and in turn, blaming their parents for not allowing them. (Duineveld, 2017; Laible, 2005)

The anger emotions are manifested when they pick up fights with parents and siblings. Adolescents who are addicted to the internet might use blogs and social media sites like angry Facebook rants and rave to pour all their anger towards the authorities, their never-ending situation and the hopelessness of their situation. Some children might even yell and shout at the news and commentaries on television. (Li Lei, 2007)

### EFFECTIVE STRATEGIES FOR POSITIVE PARENTING DURING SOCIAL ISOLATION

The author has put together and deduced specific strategies which might help the distress parents in parenting and grooming their children effectively and positively.

1. **Avoid Boomerang effect**- As parents and children are living together 24/7, though it may seem to some like time has stood still, and one is suspended in eternal limbo. With children, there will be behavioural problems as their perception of the circumstances will vary from an adults' point of view. So as an adult, we cannot make it worse by scolding, shouting and punishing them. It will have a boomerang effect, and the children, especially the adolescents, will lash out. Don't let the sparks initiate an endless fire. We have to learn to observe, absorb and ignore trivial issues. Positive discipline is an effective, practical, evidence-based approach that should



- neither be punitive nor permissive. (Lonczak, 2020)
- 2. Loosen your reins-** Here we have to shift our priorities. Quarantine might not be the only time in which we prioritize in teaching household chores and good habits. These cannot be forced to learn. Make the activities enjoyable, and a 'family time' for them, eventually they will learn routine activities. Don't set high standards for them to achieve. Let them learn at their own pace and time. Our priorities should reshuffle to maintain amicability in these circumstances for all the family members.
  - 3. Break the Monotony-** We have to break the monotony by changing some routine activities like dinner time, sleeping time. Even changing the place the child studies or where they have food or are engaged in other activities, can be constructive. If possible, rearranging the physical interiors of the house from time to time can also do wonders for the psychological climate of our homes. Cut a slack during weekends, let the children not miss what it feels like on weekends. Strike a balance between those parents who are policing children during this lockdown, and there might be some who have just forgotten what parenting feels like because of their issues.
  - 4. Stress should not be contagious-** As it is we are dealing with the notorious virus which is contagious, we don't have to add more on our plate to make our 'daily stress' to be contagious as well. We have to manage our anxieties to maintain our sanity. Stress which are not regulated at our end is usually dumped on others, especially our children. And this stress will be perpetuated in the children. We cannot ignore the implication of Social Development Theory given by the famous social behaviourist Vygotsky (1978). Adult pedagogy, 'in the form of purposely showing a child what to do', is so common in our everyday lives that it is often taken for granted. Adult modelling and infant imitation are pillars of human culture. Vygotsky's developmental theory has highlighted the critical contribution of social, interpersonal and linguistic factors in facilitating children's mental development. The noncompliance of a child is significantly increased if the child can detect constant irritability in their parent's voice and even through their body language, gestures and facial expression. Now is the best time for the parents to read and educate themselves regarding stress management.
  - 5. Exercise together-** The main objective is to spend time together and, of course, it comes with perks like losing weight, staying fit and release of serotonin hormones. Serotonin boosts our mood and makes us more agreeable and sociable. Lack of it can cause irritability and depression (Gawel, 1979). Even when you are not ambitious in a total workout, simple walking in your driveway, terrace; cycling and playing outdoor games in your courtyard can be light and fun. These bonding activities enhance the positive emotions and in turn, augment the ambience of our homes.
  - 6. Staying Connected-** One of the silver linings of COVID-19 is that it has made all of us tech-savvy in using different apps like ZOOM, Facetime, Webex, IMO, Skype, Whatsapp to name a few. These apps are being extensively used in keeping touch with not only our far-away relatives and friends but also staying connected to anyone in our neighbourhood. We have learnt how to get involved in a group conversation which is fun and exciting. People are attending an online birthday, anniversary celebrations and even small gathering of engagement and marriage ceremonies on these apps. For children, let them connect to their grandparents, distant cousins and friends. Let them revel in other's celebration also. Apps also provide a split-screen, and they can have their meals and watch movies together with their grandparents and cousins. I am sure something we won't have discovered under normal conditions. Of course, this comes with a predicament; that is, a good internet connection can only make this a success. Parents can also ask and encourage the children to write letters and make *Miss you, best wishes, friendship cards* for their friends and relatives.
  - 7. Role model-** In these times, to our children, we are the only role model they are observing and imitating. The way we are handling this social isolation will significantly affect our children's behaviour. Even how we are communicating and complaining to our friends and family is heard silently by our children who are only an earshot away and not to mention that walls are thin also. We have to be flexible in our rules and its implementation. How we are reacting to other's outburst, the language we are using and the means we are adopting for our catharsis, all



these are likely to model something very crucial for our children to experience.

8. **Making a Difference-** One thing that gives a purpose of living in these turmoil conditions is the sense of making a difference. We can teach children how contributing money, clothes, toys and ration is helping the impoverished people. They can also contribute and distribute by making homemade masks. Engage them in packing and if possible in distributing, as long as they are trained to follow social distancing norms. This will sensitize them and built up gratitude for the things they are blessed with. Help them to be thankful to the Almighty and realize His blessings.
9. **Good News-** Always start and end our day with something good to read and hear. During these times our media is splattered with horrid, gruesome news and hopelessness. This has a considerable impact on the psyche of the young mind. As an adult, we have to carefully filter the news and expose them to what is necessary for them to know at that particular age. There are several researches which have proved that a child's anxiety is greatly influenced by his exposure to media (Primack, 2009; Anderson, 2001; Courage, 2009; Reid, 2016).
10. **Reading time-** Reading a pleasant and enjoyable book can spark up and lighten up their mind. Share jokes and laugh. This might be a good time to share our anecdotes with our kids and have a good laugh at it. Make sure our anecdotes are a good source of life skill lessons for them. Even going through old family photographs can be rejuvenating in lifting our mood.
11. **Learning together-** We can select some common interesting topic and learn together. It could be related to a dinosaur, some character in the movie, some scientific facts or a geographical location. The topic should be able to sustain interest for more than a day or two. Then the family can have a discussion on that topic. It is fun to have some creative juices flowing that keeps the family members engaged.
12. **Trying out clothes-** Let go your attire if you are only wearing 'PJs' at your home. Take time and efforts to dress up yourself and the kids in their best comfortable clothes. The colour of our clothes affects our mood, behaviour and stress levels (Birren, 2006). There are researches which support these findings. Colours can significantly affect our moods and the way other people respond to us. Amazingly, colours can even change our heart rate, blood pressure and respiration (Jacob and Hustmyer, 1974). So take your best comfortable clothes that you wear outside and dress up for dinner. Parents could also have a colour theme with their children to spice it up.
13. **Flexible Routine-** Don't regiment your day. It will especially create problems in this lockdown condition though routines do have a calming effect in our life (Arlinghaus, 2018). But these structured moments and activities can be let loose. Give each member privacy and alone time before they start demanding it, especially when you have a teenager at home. It can be constructive for the ambience of the house. To kill boredom for children, engaging them in household and outdoor activities that parents usually don't involve them, like gardening, organizing shelves, cleanliness drive and decluttering the house etc. Praise and reward them for completing the activities successfully that would motivate them extrinsically.
14. **Display Affection-** Social distancing has had an impact on our oxytocin hormone, the 'love' hormone. Oxytocin is released upon physical contact. Oxytocin provides feelings of love and trust, which is why relationships boost our happiness (Jones, 2017). We have to maintain its level by the human touch and should display physical affection to our children by hugging, kissing, holding hands, putting arms around their shoulders, cuddling them etc. Just by sitting next to them, giving high five on their ideas are some of the ways that will trigger the release of oxytocin. This hormone has a soothing effect, and it decreases our stress level.
15. **Observing and Monitoring-** We cannot miss any sign of depression and anxiety in our children. We have to be vigilant enough to notice any slight change in behaviour, their language, gestures or facial expressions and nip the stress in the bud itself before it explodes. Any change in their appetite or sleeping pattern can be a cause of concern. We have to look for departures from the usual patterns. We are stuck in close vicinity and will be influenced by the changes in others. The researchers found that children who had parents who monitored their behaviour, were consistent with rules and were warm and affectionate were more likely to have close relationships with their peers, be more engaged in school, and have better self-esteem. (Engels, 2002; Duinveld, 2017; Laible, 2005)



**16. Minding the age difference/Individual Difference-**

Every child has to be dealt in a different way. Your children might need constant monitoring, but adolescents might demand some alone time. So give them space. They might also want to be in charge of something; as a parent, we can assign them a lead role in any activity. They might also be assigned to formulate rules. Select such activities for them that they feel the power of autonomy and freedom.

**17. Roleplay-** One way for children, especially adolescents, to participate in sharing their negative emotions like worry, sadness, fear and anger, is through sitting with them and striking a conversation just like old friends. Here we have to adopt the role of a confidante, someone they are missing terribly during the lockdown. It's not the quantity of time but the quality of time that is essential. Parents don't have to be judgmental during the conversation, keep the role of parenting aside for some time and think that it is like a therapy for the children. It will help in grasping what is going on in their young minds. Parents have to be empathetic, and they have to show and express their confidence in their child's ability to face and overcome fear and worry.

**18. Worry time-** Children should know that it is fine to have worrisome thought. As a parent, we should be available to listen to them. Adolescents might be more interested in keeping journals and diaries. Encourage them to write down and ask them to share only when they are comfortable. Assign a time for them to think and share about their disturbing thoughts. Gradually reduce the time and with the passage of days, they will reflect and understand that it is only the figment of their imagination, and they have nothing else to elaborate or fret. Eventually, these thoughts will phase out. (Kerr, 2009). Lonczak (2020) notes the importance of respecting a child's fears and not punishing her/him for them, as well as talking to the child in a way that shows empathy and helps him/her to verbalize feelings.

**19. Practising Mindfulness-** Paying attention to the present moment in a non-judgmental manner is mindfulness. By training and supporting children in practising mindfulness, the parents can help them to redirect their focus to the 'here & now' rather than getting swept up in the "what if". This technique is especially helpful in

tolerating uncertainty and enabling kids to focus on one thing at a time.

Another aspect which is observed regarding parenting is that the maternal parenting is most consistently associated with developmental and health outcomes in children (Parke, 2002; Crouter et al., 1999; Maccoby & Martin, 1983). Mother's role in parenting is crucial and has a deep impact on the psyche of a child. Parenting has a far-reaching effect as Kerr (2009) explained in his study that if we control a child with anger and threats, he will learn to deal in this very same way with his peers, teachers, and eventually later in future with his children. He further pointed out that. "We see now that changes in parenting can have an effect not just on children but even on grandchildren."

## CONCLUSION

Parents have to understand that they are not alone with their problem. And their problem is not one of a kind. No matter what the degree of frustration and difficulties there exists, there is a wide community of parents who are facing these same challenges and issues. Parents have to be vigilant and observant regarding their child's behaviour. If one does not know how to teach their child life skills to successful living, others will take over their job of teaching him about the world. But those lessons may involve a lifestyle that is not compatible with becoming a positive parent. The more attention as a parent we give, the more increase and enhancement is seen in the behaviour of the child. Parental attention and care are the most effective tools we have in shaping adaptive child behaviour. Even though parents include both mother and father, but our society dictates that it is the mother who is ultimately responsible for their young children's lives and health.

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## CRITICAL DISCOURSE ANALYSIS IN MEDICINE

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### ABSTRACT

*This article explores the anthropological significance of medical discourse—a high-stakes topic with clear applied relevance (Cooper et al. 2003, Maynard & Heritage 2005, Roberts et al. 2005) that is also rich ground for developing anthropological theory. Studying discourse (language in its fullness) and medicine together brings us to encounter culture as discursively constituted. As historically situated practices, forms of medical discourse play a role in cultural production and reproduction.*

**KEY WORDS:** *discourse analysis, medical discourse, anthropological theory, cultural production and reproduction*

### INTRODUCTION

Discourse analysis at this level involves not only the examination of text and the social uses of language but also the study of the ways in which the very existence of specific institutions and of roles for individuals to play are made possible by ways of thinking and speaking.

Discourse plays an important role in medicine, and medical discourse in the broadest sense (discourse in and about healing, curing, or therapy; expressions of suffering; and relevant language ideologies) has profound anthropological significance. As modes of social action, writing and speaking help constitute medical institutions, curative practices, and relations of authority in and beyond particular healing encounters.

### MATERIALS AND METHODS

Construing the relationship between medicine and discourse broadly in this review makes anthropological sense, although many facets of the relationship may only be mentioned, such as the intersection of music, discourse, and healing (Roseman 1991); disability discourse (Hadder 2007); “laughter as a patient’s resource” (Haakana 2001); the iconicity between a sufferer’s voice quality and denotative expressions of pain (Wilce 1998, p. 123); and the representation of talk itself as a symptom (of mental illness; Ribeiro 1994; Desjarlais 1997; Wilce 2004a,b). Recognizing the vast potential scope of anthropological work on the role of communication in health, illness, and healing follows from

understanding the difficulty of cordoning off a domain of medicine from the rest of life.

For example, people visit diviners to seek both causes and remedies for various problems, such as a sick child (Nuckolls 1991). But lost cows are also diviner-eligible topics (Wilce 2001). An analytic distinction between medicine and, say, ritual, though analytically useful, should not be confused with reality. Forms of discourse do not mind the boundaries between the domains we conceive or conform completely to institutional norms. Medical discourse itself may have as its “effect ... the creation and maintenance of the interests of certain hegemonic groups” (MacDonald 2002, p. 464), and ideologies of language per se that surface in discourse on health and illness also appear elsewhere.

Grasping the import of medical discourse in particular requires a general understanding of the functions of language, which in turn helps us avoid essentializing the medical. What any bit of language is apparently about is only the beginning of its signifying activity. Reference and predication—targeting something to which a linguistic expression corresponds (referring), and saying something (predicating) about it—are only the most salient of linguistic functions. Dominant “referentialist” ideologies (Hill 2008), representing language’s prime function as clear, realistic, or sincere reference, rather than performing social acts, help undermine the sociopolitical agency of patients in therapeutic programs (Carr 2006, Desjarlais 1997). Note, however, that referring is social action, for example directing a doctor’s attention toward, or mutually



constructing, the object of a clinical encounter (Engestrom 1995). Talking about sickness may point to apparently nonmedical topics such as speaker traits (other than illness), relationships, family resources, and the moral order.

For many close analyses of medical discourse (Mishler 1984). CA highlights emergent coconstruction of meaning, denying for instance that doctors unilaterally impose diagnoses or therapies (Engestrom 1999, Maynard & Frankel 2003). Like all interlocutors, doctors and patients are accountable to each other, i.e., they have an "obligation to index the grounds on which their conclusions are formed" (Heritage 2005, p. 92). News deliveries follow the same rules in the clinic as in conversation (Gillotti et al. 2002, Perakyl & a 1998, Wittenberg-Lyles et al. 2008), particularly a preference for foreshadowing revelations. Bluntness, however, is another strategy medical personnel may follow in certain circumstances, not to assert power but for immediate interactional reasons, e.g., to break through resistance (Maynard 2003). A rare example of raw power may be the case of company doctors urging workers complaining of illness back to their jobs, downplaying the seriousness of complaints (Mishler 1984, Waitzkin 1991). More universal is the healer's power to "name the world" (Heritage 2005, p. 99). Yet clients also have some authority (regarding their own experience) and influence. Parents sometimes demand antibiotics for their children (Stivers 2002), leading doctors to push back or negotiate (Stivers 2005). Physicians in other circumstances may secure patient agreement by offerings grounds, early on, for diagnoses announced later.

## RESULTS AND DISCUSSIONS

Studies of medical discourse have contributed to broader anthropological projects including the analysis of ideologies that empower some communicators and stigmatize others as pre-modern (Briggs 2005). Rooted in close analysis of dyadic clinical encounters and other forms of medical discourse, recent studies trace interactions between globally circulating discourse forms and local traditions that have constituted medical relationships, broadly construed.

Finally, given that some studies consistently uncover patient-practitioner collaboration and a degree of agency on the part of patients, whereas others find in somewhat similar settings a straightforward reproduction of power relations, both empirical and theoretical work to illuminate this contradiction are needed. Such studies stand to contribute to critical medical anthropology and to help those seeking not only to describe but to change medical worlds.

Researchers in cultural studies, sociology, and philosophy use the term critical discourse analysis to encompass an even wider sphere that

includes all of the social practices, individuals, and institutions that make it possible or legitimate to understand phenomena in a particular way, and to make certain statements about what is "true." Critical discourse analysis is particularly concerned with power and is rooted in "constructivism." Thus the discourse analyses of Michel Foucault, for example, illustrated how particular discourses "systematically construct versions of the social world." Foucault's study of madness, for example, uncovered three distinct discourses that have constructed what madness is in different historical periods and in different places: madness as spiritual possession, madness as social deviancy, and madness as mental illness. In a similarly oriented study, Speed showed how different discourses about mental health service in use today construct individuals' identities as "patients," "consumers," or "survivors" and are made possible by specific institutional practices and ways for individuals to "be." In a different context, Stone contrasted the specific discourses used in the education literature for diabetes patients ("patient self-care" and "autonomy") with the medical literature's use of doctor centred discourses ("compliance" and "adherence"). Stone related the resulting tension (and the important implications for patients' behaviours) to the ways in which the roles that physicians and patients play are historically determined by different and conflicting models of what disease and healing are.

Finally, Shaw and colleagues used a discourse analysis to illustrate the many ways in which research itself can be defined (for example, by a lay person, a medical editor, the World Medical Association, a hospital, the taxman) and how these various definitions are linked to the power and objectives of particular institutions. In these examples of critical discourse analysis, the language and practices of healthcare professionals and institutions are examined with the aim of understanding how these practices shape and limit the ways that individuals and institutions can think, speak, and conduct themselves.

The researchers conducted in-depth interviews with medical students and faculty members. Pairs of researchers also observed 16 oral case presentations as well as the teaching exchanges that surrounded them. All of these encounters were tape recorded and transcribed (for a total of 555 pages of text); the transcriptions were iteratively analyzed. The analysis was structured to allow themes to emerge from the data (that is, as indicated by multiple examples of such themes throughout the data). However, it particularly focused on themes that helped to illuminate the rules around certain modes of case presentation and on the role of these rules in teaching and learning. The study showed a pronounced tension between the educational ("schooling") uses and clinical ("workplace")



functions of case presentations. For example, students saw the case presentation as a school mode and emphasized that they wanted to get through their presentations without being asked any questions. Faculty, on the other hand, understood the case presentation as a way for professionals to jointly create shared knowledge. Their cross-purposes affected the effectiveness of faculty feedback to the students about their case presentations.

Given the wide variety of approaches to discourse analysis, the elements that constitute a high quality study vary. Rogers has argued that some discourse analysis research suffers from scanty explanation of the analytical method used. Thus one should expect clear documentation of the sources of information used and delimitation of data sources (including a description of decisions made with regard to selection of groups or individuals for interviews, focus groups, or observation) and, importantly, a description of the context of the study. The method of analysis should be clearly explained, including assumptions made and methods used to code and synthesize data. Finally, given that the goal of critical discourse analysis is to illuminate and critique structures of power, it is especially important that researchers describe the ways in which their own individual sociocultural roles may influence their perspectives.

## CONCLUSION

Discourse analysis is an effective method to approach a wide range of research questions in health care and the health professions. What underpins all variants of discourse analysis is the idea of examining segments, or frames of communication, and using this to understand meaning at a “meta” level, rather than simply at the level of actual semantic meaning. In this way, all of the various methods of discourse analysis provide rigorous and powerful approaches to understanding complex phenomena, ranging from the nature of on-the-ground human communication to the inner workings of systems of power that construct what is “true” about health and health care. While these methods are gaining popularity, much remains to be done to develop a widespread appreciation for the use, funding, and publication of discourse analyses. As a start, we hope this article will help readers who encounter these approaches to understand the basic premises of discourse analysis.

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# THE ROLE OF A TEACHER IN FOREIGN LANGUAGE TEACHING SYSTEM

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## ABSTRACT

*In contemporary society, new priorities for training students in this rapidly changing world are identified. Utilization of information and communication technologies (ICTs) belongs to the list of these priorities, which, inter alia, imply the study of foreign languages using visual technologies: online lessons, video clips, training videos. The application of new methods simplifies the work of a teacher, but does not replace him or her in foreign language teaching system. The role of a teacher is extremely important when it concerns selecting visual aids and defining the method of their adaptation. The educator should build a task framework that would mobilize the activity of students while watching, control the perception process and require their mental effort.*

**KEY WORDS:** *role of a teacher, integration of visual materials, foreign languages.*

## INTRODUCTION

The Concept of Modernization of Russian Education sets out new priorities. The principal aspect is the socialization of the younger generation in a rapidly changing information-oriented society, in a world with ongoing need for new professions, continuous proficiency enhancement and study of foreign languages. There is a smooth transition from the classical system of studying a foreign language through textbooks to methods that include utilization of ICTs- with the use of authentic video materials in foreign language teaching system.

## MATERIALS AND METHODS

Video materials, like no other means, are capable of creating powerful images and concrete representations of the material being studied. It may be said without exaggeration that visibility can be characterized as an important feature of video materials, thus the use of this resource is so important for the methodology of learning a foreign language through video clips.

Visual aids are extremely useful for those who study foreign languages - especially at an advanced level of language proficiency. The implementation of the principle of visibility in learning is based on the mechanisms of human memory. It was experimentally proved that demonstration of objects or their images is accompanied by more productive recognition. It also enables the teacher to organize a better

memorization through establishing the connection between the verbal and the visual and sensual images of reality.

Television, cinema, video, they provide a constant flow of information through two sensory channels, audio and visual, which increases information density of the material and thus allows us to learn bigger volume of information per unit of time. This means that the viewer (the student) has to consider both channels and bring them into correlation in order to understand the meaning of the message.

The peculiarities of the pedagogical process with the use of new information technologies make it necessary to approach the evaluation of the role of a teacher in a classroom in a different way.

“With increasing frequency, they say now about the shift of the teacher's role towards the "consultant", who would set a student on the right track in learning, who would distance himself or herself as a person from the educational process. The teacher would minimize his or her role to recommendations of educational materials and to displaying of video clips, tables, diagrams, etc.”[4, p. 44].

It is difficult to agree with this kind of statements. Within the framework of our research, relying on the principle of domestic pedagogy - the principle of the teacher's dominance, we believe that "the full replacement of the traditional system of allocation of roles will never happen. In



accordance with the new concept and in conditions of using information technology and video clips with the ready material the role of a teacher is not to explain, but to give a clue and help to find the optimal ways of studying.

However, particular importance is given to the process of knowledge acquiring: the emphasis is shifted to cognitive components in learning, while the role of a teacher is connected with mental activity of the trainees" [4, p. 30].

New technologies do not exclude and do not replace the teacher. Teacher's role is important when it concerns selecting visual aids, determining the method of their adaptation for classroom work, building up a system of tasks that mobilize the activity of students during viewing, controlling the process of perception and requiring mental effort from them, etc.

In addition, during any development in information systems with the use of video materials, the question of creation of new information educational resources appears, and only teachers are capable of creating these resources.

New methods of using video materials in the study of a foreign language significantly increase opportunities of the teacher and students; nevertheless, they cannot totally replace the teacher. Relationship with the students; finding the best way to teach a foreign language; students' work management during the lesson; organization of students' active work while watching video are the key elements of the teaching process.

The idea of the autonomy's conception should be understood as an educational feature, that should include the formation of students' learning skills in mastering a foreign language, the ability to independently / autonomously manage learning activity, evaluate the results achieved both in a specific learning situation, as well as in the context of further continuous learning of the language.

At the same time, the best way to achieve "autonomy" in learning the language using visual aids is to organize classroom studies using various games, accompanied by individual and group work on the basis of specially developed educational materials.

## RESULTS AND DISCUSSIONS

There is great deal of advantages using games in the classrooms. "They are welcome break from the usual routine of the language class, and also are motivating and challenging, games procure language practice in the various skills - speaking, writing, listening and reading. They construct a meaningful context for the language use. "Taking into consideration the definition above it can be said games encourage, entertain, teach, and promote fluency. By their help students see the beauty in a

foreign language and not just problems of the foreign language itself. A game in language learning is hard work. The responsibility will pursue someone who will take effort, which is required to understand and manipulate the language that can be used by many learners.

Games aid the teacher to form context in which the language learning is useful and meaningful. A helpful interpretation of meaningfulness is that the learners respond to the context in a distinct way. Their amusement, anger, intrigue or surprises present the fact that the context is clearly meaningful to them. It is inevitable that every teacher wants their learners take part and understand what the teacher means. Ersoz said that language learning is hard task which can sometimes be frustrating. He also said well - chosen games are invaluable as they give students a break and at the same time allow students to practice language skill [4]. Games are hyper inspiring because they are amusing and interesting. Games can be applied as a diagnostic tool for the teacher, who can note areas of difficulty and take appropriate remedial action. Jill Hadfield states that the games make use of variety of technique [1]. Diversity is important in language learning and teaching and a succession of games based on the same principle. For instance such techniques like information gap, collecting, combining, role play, and simulation. Based on the explanation above, it seems clear that games provide an opportunity for intensive language practice, offer a context in which language is used meaningfully. Games are also as a tool for teacher to diagnose the area of difficulty in tubing and learning process. Although games use many sorts of techniques, the important reason for using games is simple, that they are immensely enjoyable for both teacher and students. Games are available to play in class, individual, pair and group work. These grouping, pair and group work are very important if each learner is to have sufficient oral practice in the use of language. In class work it is simple to demonstrate that learners say only one or two sentences in a lesson.

Pair work is easy and fast to organize. It gives an opportunity for intensive listening and speaking practice. Group work is significant in that case if some games require four to six players. According to Wright pair work is better than group work if there are discipline problems. He also said that for all the reason we often prefer to organize games in pair or general class work, rather than in group work [2]. One of the measures to solve this is to get learners to talk about the problem and agree on a solution. Games also can be used to supply the learners with possibilities to use language rather than simply practice it. With the help of the usage of games in the classroom, the learners will have the opportunity to present their ideas, feelings, and thought orally. By using games, we encourage students to interact and



communicate, as the writer said the goal of teaching speaking is communicative efficiency. Learners have to be the person to make themselves understood, using their current proficiency to the fullest. Furthermore they should observe the social and cultural rules that are dynamic in each communication situations.

There are a lot of teaching methods one of them is games. Games have a targeted aim beyond the production of proper speech, serves as a good communicative activity. The intention of all language games for students is to use the language.

In contrast, during the game play learners also use the target language to convince and negotiate their way to desire the result. Games suggest students a fun and relaxing learning atmosphere. After students join in games, anxiety is reduced and speech fluency is generated, so communicative competence has activated. The activities in games are excellent way of motivating learners to speak. The atmosphere which becomes competitive also makes learners concentrate and think intensively during the learning process. Much of our mother tongue competence is achieved via using language in play. Jill Hadfield claims that a game is an activity with rules, a goal and an element of fun. He also clarifies that there are two kinds of games: competitive games and co-operative games. A competitive game is games in which the player or teams race to be the first to reach the goal. And co-operative games are games in which players or teams work together towards a common goal [1].

## CONCLUSION

As a conclusion, we can say that the benefits of using games in language learning are promote communicative competence, create a meaningful context for language use, increase learning motivation, reduce learning anxiety, encourage creative and spontaneous use of language. Games must have start point and end point. It must be easy for the player and the teacher to know who is about to reach the purpose.

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# AN INTERACTIVE APPROACH TO TEACHING ENGLISH AS A SECOND LANGUAGE IN THE PRESCHOOL EDUCATION SYSTEM

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## ANNOTATION

*This article presents important pedagogical foundations for teaching English language to kindergarten-age children, with various interactive perspectives and solutions that may be encountered. Important social foundations for participation in language teaching with preschoolers are provided.*

**KEYWORDS AND EXPRESSIONS:** *independent thinking, critical thinking, self-expression, self-assessment, exchange, re-management*

## Аннотация

*В этой статье представлены важные педагогические основы для обучения английскому языку детей детского сада, с различными интерактивными перспективами и решениями, которые могут возникнуть. Предоставляются важные социальные основы для участия в обучении языку с дошкольниками.*

**Ключевые слова и выражения:** самостоятельное мышление, критическое мышление, самовыражение, самооценка, обмен, ре-менеджмент.

## INTRODUCTION

Today, learning English is becoming a modern requirement not only for adults, but also for young children. Teaching English in the field of preschool education leads to the early development of children's deep understanding of the language, its vocabulary, speaking skills. Of course, this process requires real skill and pedagogical tact from the teacher.

The concept of developing children's intellectual activity reflects the principles of the theory of intellectual socialization of the individual, based on changing the intellectual experience necessary to effectively address the challenges of increasing the intellectual potential of community members and the rational organization of professional activities in market relations.

The development of modern science and technology does not only affect the production process, but also the training system. Improvement of

the education system, in particular, bringing it to the international standards is one of the most important issues of today. Therefore, the role of independent work in developing young learners' independent thinking and freedom of thought is invaluable. In particular, intellectual activity provides the basis for the kindergarten children's personality to develop such thinking qualities as independence, rigidity, critical thinking and analytical approach. In this context, the main emphasis is placed on increasing the intellectual activity of students in higher education institutions. It is worth noting that justifying the role of reflective learning environments in the intellectual activity of students creates a completely new approach. When children start kindergarten, they are expected to learn many things in just one year. They will begin learning phonemic and phonological awareness, which involves listening to different sounds in a word and eventually how to identify those sounds when reading. Students in



kindergarten will learn the basics of writing and reading fluency, learn how to write their name, read consonant-vowel-consonant words, answer questions about a story and hopefully read grade-level books independently.

When a child is learning to do all of these things in addition to being in school for the first time and having to adapt to a totally new environment, adding another language on top of that can not only be academically difficult for the child but stressful emotionally and mentally. Learning literacy in your own language (or in one language) can take several years. Once children master that, then they can apply what they know about language to learning another.

Accordingly, there are different definitions of the phenomenon of reflection as:

- be aware of their level of knowledge and take a critical approach to the cognitive processes;
- the principles of personality thinking and the orientation of the person to understand his or her goals and self;
- expressing the meaning of "reflexio" - in Latin language be able to reflect on the contradictions, to analyze their own mental state;
- self-awareness of the person, proper understanding of self and other's activity [1].

It is clear that, reflexivity is the basic basis of competences. Reflection is a comprehensive multidisciplinary education that is one of the most important aspects of personality traits, mental processes and occupations. Through reflection, the individual assesses himself and his activity. As a result, he designs his own personality and activities.

In the modern system of education it is necessary to create a reflexive learning environment for the development of intellectual activity of students. This is because the process of professional self-expression, which is important in the understanding of professional self-expression and personal professionalism [3].

If kindergarten is not the best time to learn a second language, then when is the best time? Some studies have reported that if children pick up a language when they are young and become bilingual, they may actually be "double semilingual," which means they'll never fully perfect either of the two languages they speak.

While there are many benefits to teaching children to speak another language when they are young, there are disadvantages of learning a second language at an early age. If the time passes, and the child has not learned a foreign language by around kindergarten age, then the next-best time to try is between 11 and 13 years old. At this age, children have mastered one language completely, and they can use what they know about language to more easily understand the structure of the new language. Studies have proven this as well. It should be noted that, according to scholars and practitioners studying the

problems of modernizing the educational process, the development of a reflexive culture in learners is important.

As another method, the problem-based method plays a very good role in teaching English as a second language in the preschool education system. This method helps both young children to develop both mental development and vocabulary and, most importantly, to be able to communicate freely with those around them. [2].

Reflexive training is manifested in the refinement and generalization of mechanisms of self-awareness, self-development and self-expression. An indicator of reflexive readiness is the activity of the individual under any circumstances. The components that make up reflexive training by S.Y. Stepanov include emotional, intellectual, motivational and behavioral. In this context, reflexive abilities create conditions for self-development. It also contributes to self-control of professional development and creative approach to the chosen profession. They have an impact on the development of the individual as a person and in improving their relationships with the environment. In particular, the development of reflexive abilities enables the individual to develop adequate self-esteem, high self-control, and ability to control their behavior [5].

Reflexive creative ability is manifested in the ability to solve problems in non-traditional ways. This is evident in the highest form of creativity. According to I.N. Semenov, creative abilities contribute to the development of self-improvement of a person's ability to retrain and acquire new professions. The emergence, manifestation and development of creative abilities are directly related to reflexive abilities [4].

Conclusion. Reflective and innovative techniques improve children's motivation for learning as well as their ability to think. As a result, it contributes to the effective use of their creative potential for self-development [6].

Based on the comments, we can draw the following conclusions:

- self-awareness, management, self-education and control of students are important in the learning process;
- assignments to the learning system should enhance kindergarten children's thinking, cognitive activity, and learning motivations;
- introduction of innovative and pedagogical technologies in the system of education is the main criterion for increasing the intellectual activity of students.



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# PRAGMATISM AS AN EPISTEMOLOGICAL DOCTRINE

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## ABSTRACT

*This article discusses Pragmatism, one of the basic teachings of philosophy. Pragmatists put forward a program of "repairing philosophy." They believe that philosophy should not consist only of understanding the basic principles of existence and knowledge, but also of solving the various life situations and problems that people face in the course of their activities. Pragmatism promotes the idea that in practice, what is most beneficial to a person should be given more importance. The article provides an extensive analysis of this doctrine.*

**KEYWORDS:** *philosophy, philosophical teachings, pragmatism, principles, pragmatic thinking, worldview*

## DISCUSSION

Pragmatism is a philosophical current, based on practice as criteria of truth and semantic significance. His origin is associated with the name of the American philosopher of the XIX century, Charles Pierce, who first formulated the "maximum" of pragmatism. Further pragmatism developed in the works of William James, John Dewey and George Santayana. Among the main directions of pragmatism are instrumentalism, fallibilism, anti-realism, radical empiricism, verificationism, etc.

The philosophy of pragmatism denies the meaningfulness of metaphysics and redefines the truth in some area of knowledge as a temporary consensus between people who are exploring this area.

Attention to pragmatism grew substantially in the second half of the 20th century with the emergence of a new philosophical school, which focused on criticizing logical positivism, relying on its own version of pragmatism. They were representatives of analytical philosophy Willard Quine, Wilfrid Sellars and others. Their concept was then developed by Richard Rorty, who later switched to the position of continental philosophy and criticized for relativism. Modern philosophical pragmatism after that was divided into analytical and relativistic directions. In addition, there is also a neoclassical direction, in particular, presented by the works of Susan Haak (Eng.).

Pragmatism in historical science is a term used with quite different meanings. For the first time, the adjective "pragmatic" applied to the history of

Polybius, which called a pragmatic history such an image of the past that relates to state events, the latter being considered in connection with their causes, their circumstances and their consequences, and the very image of events is intended to teach a certain lesson.

Pragmatist - a follower, a supporter of pragmatism, as a philosophical system. In the everyday sense, a pragmatist is a person who builds up his system of actions and views on life in terms of obtaining practically useful results. "What is better for us to believe is true," said William James, the founder of pragmatism.

As a philosophical trend, pragmatism arose in the last decades of the nineteenth century. The foundations of the philosophical concept of pragmatism were laid by Charles Pierce.

Pragmatism has become popular since 1906, when Pierce's follower William James read a course of public lectures that were published under this title.

The third most prominent representative of pragmatism was John Dewey, who developed his own version of pragmatism, called instrumentalism.

Early pragmatism was strongly influenced by Darwinism. Schopenhauer previously held a similar way of thinking: the idealistic concept of reality, useful to the organism, can differ greatly from reality itself. Pragmatism, however, departs from this idealistic conception, dividing cognition and other actions into two independent spheres of activity. Therefore, pragmatism recognizes the existence of an absolute and transcendental truth over cognitive activity, which is behind the actions of the body to



maintain its life. Thus, an ecological component of cognition appears: the organism must have an idea of its environment. The concepts "real" and "true" in this aspect are considered terms of the process of cognition and have no meaning outside this process. Pragmatism, therefore, recognizes the existence of an objective reality, although not in the ordinary strict sense of the word (which was called Pathnam metaphysical).

Although some of William James's statements have given rise to consider pragmatism as one of the theories of subjective idealism, the view that beliefs make reality true has not been widely supported by pragmatic philosophers. In pragmatism, nothing useful or practical is necessarily true, as well as the fact that at some short time the body helps to survive. For example, the belief that a deceiving spouse remains true helps her deceived husband to feel better at the moment, but definitely will not help him in the long run, if that belief does not correspond to the truth.

When one talks about pragmatic history, one usually has in mind or is particularly pushing forward one of the three: either the purely political content of history (state affairs), or the way of historical exposition (the establishment of causality), or, finally, the goal of the historical image (teaching). That is why the term Pragmatism suffers from some uncertainty.

The central point of Pragmatism can be regarded as the image of human actions in history, even if not exclusively political and not for the sake of teaching, but in which their causes and effects are primarily sought, that is, the motives and goals of the actors. In this sense, the pragmatic history differs from the cultural one, which deals not with events consisting of human actions (*res gestae*), but with states of society in material, mental, moral and social relations, and links individual facts not as causes and consequences, but as different phases in the development of one form or another. From this point of view, historical facts can be divided into pragmatic (events and human actions, their components) and cultural (the state of society and forms of life), and the historical connection can be either pragmatic (causal) or evolutionary.

According to this understanding, pragmatism in history should be called research or the depiction of the causal relationship that exists between the individual actions of individual historical figures or between whole events in which not just individuals but also entire groups are acting persons, for example, political parties, social classes, whole states, etc. Such an understanding will not contradict the definition given by Polybius and the majority of historians who used the term pragmatism.

In any case, pragmatism is interested in the person acting in history, her motives and intentions, her character and passions, in a word, her

psychology, which should explain her actions: this is the psychological motivation of historical events. Causality, reigning in the world of phenomena, manifests itself in different areas of this world in various ways, as a result of which the need for special studies of causality (eg, causality in criminal law) appears. In the field of history, this question has been developed very little (see N. Kareyev, "The Essence of the Historical Process and the Role of the Person in History", St. Petersburg, 1890).

The theory of pragmatic history should explore how certain events are engendered by others, resulting in different changes in the willed sphere of the actors under the influence of the actions on them of those or other events, which themselves, in the last analysis, are only some actions. Pragmatic history differs from a consistent penetration into the inner world of people, with the aim not only to tell the event, but also to present its immediate effect on the thoughts and feelings of contemporaries, and also to show how it itself became necessary because of the existence of people who committed it, other motives and intentions. Cf. E. Bernheim, "Lehrbuch der historischen Methode" (1894).

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# FORMATION OF LEARNING AND EDUCATIONAL COMPETENCES OF STUDENTS IN PRIMARY CLASSES

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## ANNOTATION

*This article deals with didactic, intellectual games, as well as interactive methods in the formation of educational and cognitive competencies of primary school students, their types and methods of conducting.*

**KEYWORDS:** education, knowledge, skills, pedagogical technology, competence, plot, game, role, phone, ball, telegraph, element, rule, relay race, exercise, time, movement, method, technique, psychological, pedagogical, form, means and etc.

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**Аннотация.** В данной статье речь идёт о дидактических, интеллектуальных играх, а также интерактивных методах в формировании учебно-познавательных компетенции учащихся начальных классов, их видах и методах проведения.

**Ключевые слова:** образования, знания, умения, педагогическая технология, компетенция, сюжет, игра, рол, телефон, мяч, телеграф, элемент, правило, эстафета, упражнение, время, движение, метод, методика, психологический, педагогический, форма, средство и. др.

## INTRODUCTION

The famous philosopher Confucius said that what a person forgets to hear and what he sees, what he does, what he does understanding is close to the truth. Therefore, competence-based approach helps to develop students' practical skills. For this purpose, the use of methods that require students to be active in the learning process is most effective. One of these methods is game technique.

Didactic games help to shape students' emotions, especially the activation of their sensory organs (sense, sight, listening). Teaches the brain to "exercise", deepen one's thinking. Perception, intelligence, memory, will, desire and need for knowledge are strengthened. Increased ingenuity, voluntary attention, ingenuity and initiative. The student's talent and creative abilities begin to manifest and he or she is given the opportunity to test what they have learned in their work, work and play. Games should be widely used in order to build effectively students' competencies.

During the game, students will learn to live together, be organized, collaborate, collaborate and think independently. Students form moral qualities, understanding of nature and society, human qualities.

They learn to adhere to the rules of the game, discipline, develop friendships, friendships, solidarity, increase their interest in different professions, and develop their worldview and thinking skills. Didactic games are subdivided into plot and exercise types. The plot games are linked to a familiar plot where roles are shared. These include games such as "Phone", "Who to carry the ball", "Telegraph". In the game, however, only the elements of the game are incorporated into the game, which requires more conditional adoption. This includes a game rule action. Examples of such games include "Jim" and "Mathematical Relay". Exercise games require less time and effort, but plot-based games are more appealing.

Organizing didactic games during the classroom helps students to communicate, focus, and, in turn, develop responsiveness, and the use of these games creates a natural environment for learning. This will encourage students to work freely throughout the classroom. The use of the game effectively and in accordance with the content of the lessons will help the student to independently absorb the information provided during the lesson and develop his or her creative thinking. The game



reveals students' hidden abilities and their interest in science.

Didactic materials are prepared by the teacher individually for each lesson, which should be used to fully reflect the content of the lesson and to help students better understand the content of the lesson. These include various visual aids, devices for creating different situations, toys. Didactic materials are created according to didactic principles. It should be noted that it is important that the didactic game used during the lesson be chosen according to the theme of the lesson. The use of didactic games in math speech development in elementary school students is effective. It is also desirable to use didactic games to enhance the vocabulary of students and to pronounce numbers and numbers correctly. So in our lessons, we need to teach students to think independently, to increase their mental and speech activity.

**Review.** This requires effective use of interactive techniques and intellectual games. Through their effective use, students' knowledge is enhanced, ideas for independent thinking are formed and activity is increased.

One of the most pressing issues of our time is to bring up a fully developed, fully developed, fully developed, fully educated person, which is largely the responsibility of teachers. Unlike other disciplines, it is given more attention in the lessons of mother tongue and literature. Because every book in the textbook, excerpts from the works, poems, and texts of the exercises in the native language are the perfect characters, and they serve as examples for the students.

A person must be able to think independently in order to be perfect. People who are able to think independently become creative.

Therefore, the teacher's main task is to develop students' independent thinking skills [1].

## RESULT AND ANALYSIS

Starting with a "Wisdom Lesson" or "Wisdom of the Day" lesson is a good idea. In this case, the teacher may ask the students to give examples and quotes, using proverbs or proverbs, hadiths, examples of well-known people, related to the subject matter.

For example, commenting on the hadith of the virtue of science will increase students' interest in science as well as increase their oral speech. The proverbs, respect, friendships, and diligence of parents are also important factors in the formation of students' human qualities.

One of the ways that motivates students to think creatively and independently is to keep the mind going.

For example, it is desirable to create text in native language classes and use it when working on the text. For example, a teacher instructs her to write a related text, independently of the topic

"Homeland": The first reader says, "Homeland is a land where our navel is shed." the second student says, "Everyone loves and cherishes their country." The third reader says, "For, in the hadith," Loving one's motherland is an act of faith. In this way, all students are required to give their opinion on the topic. This method positively influences them to think independently, to think quickly and to expand their expression.

The game "Yes and No" will be held to better understand the past and new topics. This game also encourages students to be active and resourceful. To do this, the class is divided into three groups and each group is asked the following questions, for example: questions for the first group: Are the numbers 1, 12, 10, 7 fractional? (No). Is the number dividing the number of items called a distribution number? (Yes)... Questions for the second group: Is 0.5 0.5? (Yes.) Do the integer numbers appear in the sentence as a determinant? (Yes.) Questions for Group Three: Can the number of decimal places be read as half as well? (Yes.) Are the numbers five, the number hundreds? (No). Memory Exercise teaches students to think, to think clearly and to speak fluently. Before applying this method, students are grouped into small groups and are told that a competition will be held, which requires speed, memory and knowledge. The teacher then tells the students, for example, 10 words in their native language or literature (for example, poems, ghazals, ruboi, lyrics, tragedies, stories, novels).

Pupils write down their memorized words on a blackboard, fill in the forgotten words with group members and give them examples and examples. Whichever group members have good memories and answers that group wins.

## DISCUSSION

We will talk about the content and methods of preparing students for text creation. For example, in the class 1 Mother tongue, in Exercise 3, there is a picture of a winter scene and a winter children's game. Based on this exercise, the instructor will do the following: Provide assignments for follow-up: Identify winter signs, change in nature. Observe sharp cold weather, snowfall, freezing water, shortening of days and keep a note in your notebook; exercise based on the image given to the exercise: watch the picture. What did the artist want to tell us? Why did you think that the artist described the cold winter days when looking at the picture? (It was snowing heavily. Trees were bare. Children wore coats, boots, hats and scarves); Why are children happy? What did the artist want to draw your attention to? (The artist wants to show the joy of children through winter games, winter activities) find a title that clearly and completely illustrates the content of the picture (Winter Games, Snowy Hill, Winter on the Hill); speech preparation. Find words



describing snow (white, soft, sticky, cold, icy, glossy); find words describing the appearance of trees (bare, leafless, snow-horned, body with brown); find words describing the sky (cloudy, dark clouds, clear, blue); find words describing snowball (white, nose red, eyebrows and eyes, round head); What words can describe the movement and condition of children? (running, building, flying, shooting, sliding, cheering, rejoicing); find words that represent the colors of children's clothing; find words of greeting, appeals, gratitude that the children in the picture can use in their conversation; identify, summarize, and describe the links between what students observe and what they see in the picture [2]

This step-by-step method allows students to form a speech culture. Work on painting is complicated by the following queries: Task 1. Follow the picture. What time did the artist describe it? What can you learn by looking at the picture ?. Task 2 Why is the classroom and course process described?. Task 3 Use sentences to describe the student's behavior and position in the lesson. The more didactic the game is, the better it will be, the didactic purpose is so cleverly concealed. The knowledge that is embedded in the game is absorbed by the learner, unknowingly and unwittingly, while playing.

"I will investigate." When conducting such games, a small amount of dictation text is selected, which is arranged at the beginning of the lesson. The teacher writes to students a small dictation. When all the students had finished writing, the teacher wrote the dictation on the blackboard. If the dictator first wrote the letter on the blackboard and covered it, the teacher would open the curtain. Students will look at the dictator who wrote it. Such dictation can be used even in alphabetical terms, when the teacher writes dictation in the following variants, consisting only of letters, then of syllables (after introducing consonants), students' cognitive competences are formed. Option 1: O, o, I, i, U, u, A, a, u, u. Option 2: -Lo, -no, -to, -mi, -un, -in. Option 3: Baby, tulip, mother, dice, par. Option 4: Today it's hot.

"The Crows." The teacher asks a question based on a mark. Pupils name the items on which this symbol is displayed. The students who have the most correct answers are the winners. The students who have the most correct answers are the winners. Conducting this game facilitates the process of providing students with basic information about word constituents. It also shapes responsiveness, independence, discernment, and creativity. Q: What is white? Answer: paper, notebook, cloud, curtain, snow, grandmother's hair.

"Wrong sentence." This game is based on pictures. The teacher also uses words that are not relevant to the picture during the image description. "Students should be careful to find the phrase. "Students should be careful to find the phrase. They are required to be careful, attentive, observant and

attentive throughout the game. As well as carefully observing the picture, they listen to the teacher's story. Finding every wrong phrase will increase their self-confidence and interest in the lesson. This game can be used for all lessons.

"Find the letters". This game can also be played with colored rectangles that can be used for verbal or image tests. It takes two colored sheets of paper. The teacher reads the words. Pupils show the same sound location that they need to find independently, and the rest of the volume with a different sheet of paper. This game can be used by the teacher as an effective way of promoting students' literacy. The game can also be conducted orally to develop students' speech. For example: The word "a" should be replaced by the word "school". The word "a" in the word "school" is followed by "m" in the first syllable, and the second in the second syllable after "t".

"Go ahead." In this game the teacher starts the story. Students will continue it independently. They will develop creativity, independent thinking, develop writing skills, such as an essay or essay, and increase their vocabulary. They also develop a sense of self-confidence. This game can be used for native language, reading lessons or extracurricular activities. For example: "Today, when I get to school early."

"Travel". Pupils are asked to describe the road from school or home to a specific location. They observe the object for several days and describe it verbally. This game, which requires calmness, discernment, observation, and attention to the environment, can instill a sense of faith and love for the country. This game, which requires calmness, discernment, observation, and attention to the environment, can instill a sense of faith and love for the country. In addition, pupils' speech develops, vocabulary increases, and independent thinking skills are formed. It is also possible to determine how well they know the traffic rules. This game can be used for strengthening lessons or extracurricular activities. For example: the road from home to a sports complex. I go to the wrestling club after the lesson. To get there, I leave the house and walk to the left of the lake. To cross the highway, I will go along the sidewalk and cross the special lane when the green light of the traffic light is on. It looks like a sports complex.

## CONCLUSION

If the didactic games we cited above meet all the rules and principles, there will be no doubt that an effective approach to teaching students' thinking will be effective.

Problems of teaching, discussion, didactic games, special creative assignments, combining tasks of different age, team, group and group, which encourage students to learn independently, should all



be appropriate in the pedagogical process.

The teacher should be fully aware of what method the teacher will use in the course of each lesson, what methods and techniques will be used to implement it, and the tools and forms of the learning process.

Here are some of the elements that make the teacher an interesting and scientific conversation in a teacher's career, conveying information effectively and persuasively to students, effectively using visual aids or techniques, and using their own and others' experiences in a logical and aesthetic manner. it is permissible.

At the same time, teacher opportunities should also depend on students' level of knowledge, level of knowledge and skills, interest in the classroom, emotional level, and more. Otherwise a good method, the intended method, may not work. For example, if a teacher wants to use a problem-based method of teaching, but the students' scientific knowledge, perception, thinking, and reasoning abilities do not respond, the teacher cannot achieve the goal. Therefore, the choice of methods and techniques for each lesson should be of benefit of the forms and means, in short, the teacher's structure and scheme should be well thought out by the teacher. With this in mind, we found it necessary to outline the "Fast" and "Commentary" techniques that Sh.J.Yusupova [4] implemented and tested in the implementation of non-traditional education, which play an important role in increasing the effectiveness of the lesson. Any method is manifested in various forms. For example, the information method consists of lectures, demonstration films, reading textbooks. In the form of a reproductive method, interviews, questions and answers are used. Below we will focus on creating a simple, fast-moving method of reproduction that is based on the question-and-answer method.

"Walking fast" Theoretical and practical innovations in these lessons are always stamped on the students' memory as they are repeated. Students should always strive to ensure that the learning material they attend is long-term. Students should always strive to ensure that the learning material they attend is long-term. The mental activity of restoring an event or situation reflected in the mind of a person, after a certain period of time, is to reinforce and preserve the item. The strength of memory depends on the methods of memory and its repetition. In addition, the long-term storage of learning material depends on the student's full understanding of the learning material and its implementation. In this method, the learner determines his own knowledge, self-assessment. That is, they will be diagnosed with knowledge, and they will be given knowledge in the next new topic debate. Students are asked to

conduct this method: be clear and concise; be short, demanding a clear answer; the answer is "yes" and "no"; questions have come from practice without a book; preparation of new and old topics; provide students with observational feedback.

"Walking fast" Another psychological significance of this method is the repetition of theoretical and practical knowledge of students as a result of repetition. Once a specific topic has been crossed, the student must fully understand the subject in order to answer 10-15 questions.

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# ARCHITECTURAL ENSEMBLES IN THE HISTORICAL PART OF THE CITY OF SAMARKAND

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## ANNOTATION

*This article discusses the regeneration of architecture in Samarkand*

**KEYWORDS:** *Building, regeneration, Samarkand, architecture, history, restoration*

**Аннотация:** В данной статье рассматривается возрождение архитектуры в Самарканде.

**Ключевые слова:** строительство, регенерация, Самарканд, архитектура, история, реставрация.

## DISCUSSION

Speaking about the protection of historic cities, first of all, we need to pay attention to the restoration of the architectural environment of the ancient cities. We know of any environment, in addition to being accepted by its inhabitants, at a rapid pace. Man chooses elements from the surrounding environment that only fit into his inner need and intellect. In the process of living it integrates various fragments of the environment and creates an entire environment around it.

Naturally, it is more complex than any of the same boring scenes, and it has more opportunities to create a rich environment. Various contrasting and interconnected environments, based on rich landscapes, create a multidimensional and cross-sectional layer. Such a complex environment can be observed, for example, in the center of the old town. In such an environment, it is impossible to reconstruct several different environments in any project operation. Therefore, environmental protection concerns not only the water, the air and the animal world, but also the old towns that are important and not reconstructed for humanity. The habitat of human beings is defined as this developmental system. The concept of the evolutionary process requires the understanding of the natural concealment of the developing object and the process that drives the process. In order to be able to effectively target a dynamic object, it is necessary to be able to use the objects of the object objectively, without turning them into objections. For example, many talk about the incompatibility of the modern

function of old city centers in its traditional environment.

Today, buildings built in this environment cannot be overthrown, so it will be necessary to move people living in these areas for a certain period of time. It creates a long, social and economic dimension, and this problem can be different. This can be accomplished by rebuilding the existing buildings, by repairing their façade facades in accordance with our national architecture and by organizing new ones. This is a known path to the problem.

However, such a solution is economically more efficient than a projected shrub building. Thus, the design should learn to manage disaster-affected objects. In particular, it should control the internal contradiction that it works in an optimal state, does not rise above the permissible level and does not diminish from the lowest. Perhaps the design process should be capable of contradicting objects in the environment, and should be able to demonstrate it by some special means. But now, the design works only with projects. It can create real contradictions between projects. But this is a very ridiculous modeling of the current situation.

Any created environment project should not be limited to one industry perspective. At present, the involvement of representatives of various spheres in the field of environmental problems is envisaged. Historians, sociologists, archeologists, geographers, ecologists and architects directly participate in the research to establish the "living environment". But in the future it is necessary to expand the sphere of



representatives of this sphere. Because every sphere looks at the environment from its point of view. The problem of ancient urban centers is as old as the problem of cities. Today, however, the problem is particularly acute because of the rapid growth of cities. Centers in the historic cities are one of the main values of society. Therefore, it is natural that this cultural heritage, which is expressed in a material sense, is an attempt to preserve this cultural heritage. But we understood the value of the traditional city center after the construction of foreign buildings around it. After the emergence of a volatile, volumetrically cosmic atmosphere, which degrades the historical city and deforms the existing environment, we have realized that we are losing the historic environment. Here, we come up with another problem that is being branded in a new way – the developer's personal development problem. The modification of the design method allows you to look at the existing environment through the adoption of various suggestions through the use of information technology, modeling the designer. Not only the external, but also the internal dialogue, the ability to see a subject in different angles - all of which enters the art of designing and enhances the ability of the designer to work with complex, delicate objects.

After the independence of our Republic, such as the rest of the society, as well as the study of the traditional habitat of historic cities, such as the restoration, study, identification, implementation of our historical traditions and their coordination with contemporary world practices, if it is.

The subject of this research corresponds to the priorities of research in the Republic. In particular, it corresponds to seismology, seismic safety and construction of buildings and structures, effective architectural and design solutions of settlements, included in the state program of priority scientific researches. Scientists have studied the history of traditional settlement, in particular the history of architecture and town planning in Samarkand, architectural environments of historic cities, but nowadays there are not enough information on regeneration of historic cities in Uzbekistan.

In the historic part of Samarkand, the main purpose of studying the environment and studying the traditional habitat is to regenerate their historical and cultural values and architectural setting, taking into account modern engineering and cultural conditions.

The mathematical model of algorithms allows solving regeneration problems taking into account historical architectural traditions and provides the development of urban planning, taking into account the further planning of historical cities.

Urbanism protection of historical and cultural monuments of Samarkand is based on the restoration of buildings and structures of architectural and cultural value, modernization of existing facilities,

complete overhaul, construction of new buildings, oblasts, and use of underground width should be solved through the ways to create favorable living conditions in the historic city and to maintain a more moral, material and full utilization of the architecture.

Preservation and restoration of historical and cultural monuments rests on current legislation on the use and protection of historical and cultural monuments. The town-planning protection of historical and cultural monuments at all stages of designing of architecture and town-planning should be resolved in the long-term cultural heritage recovery program.

In the complex restoration of historical cities, it is necessary to develop a program of social reforms in historical regions, reflecting the interests of the people living in these regions, their aspirations for the preservation and development of the spiritual and material values of the national culture.

It is necessary to restore the historical and cultural significance of small towns and settlements where they have been building centuries-old relationships with the center they have sought, the historical toposyncies of the town and their communication carcasses. The multi-storied townscape culture includes the architecture and town-planning art of the antique era, the colonial era, and the source of the historical heritage of every nation. It is important to highlight the boundaries of each urban planning layer and to highlight its borderline, its planning and stylistic peculiarities. Designing of green tree plantings in the historic city streets of Samarkand, planning city streets and addressing all the architectural and planning issues of construction projects, while addressing the issues of landscaping of the surrounding and urban streets must be done in the normal manner.

Traditional urban environment should not alter the structure of the city, while preserving the local population's habitat. It is not permitted to change the traditional open space, ie to expand the streets and build new buildings. The centers of mahalla functions as public centers, preserving their original appearance.

The main directions of preservation of the cultural heritage of the centers of historic cities, on the one hand, the monuments of historical and archaeological, architectural and architectural value, on the other - modern economic opportunities in development.

Taking into account the modern circumstances of the historical development of the historical city, it is characteristic that the historical heritage of the historical heritage is inherent in this classification, but it does not differentiate between urban and rural populations, in contrast to the classification of the heritage. However, despite the conditionality of this classification, which reflects only the widespread relationships of historic cities, historic cities show a



complex set of factors affecting the destiny of historical cities of Uzbekistan. At present, the historic value of cities is being emphasized by the advantages of identifying, studying and evaluating their historical, artistic and urban value. Therefore, the method of determining the value of the historical complexes of the city is interesting. To objectively evaluate complex cosmic composition, first of all, it is necessary to individually assess the historical center of the city on the basis of the developed system of criteria, namely:

- Consistency of the elements of an elementary, volumetric environment and architectural planning;
- Artistic value of individual objects or their complexes;
- Architectural, artistic and aesthetic values of the complexes;
- Presentation of the complex as a material document, stages of development of the city spatial forms;
- The uniqueness or magnitude of the facility in the historic center or city;
- The value of historical traditions related to the Republic;
- Determine zones of protection zone, separate zones and strict regulation zones around architectural monuments.

These criteria are not the same, but their impact on the overall assessment is different. Therefore, it is necessary to establish a separate system of classification and to create a system for comparing them. Additionally, the additional sequence in the form of digital evaluations determining the boundaries of the protected area, depending on the extent to which the structure (system) to which it is to meet the requirements of each criterion, will be met. The perfect classification begins after the initial investigation of the city's space station, first of all defining the boundaries of historically valuable areas. It is recommended to evaluate the degree of preservation of the historical cosmopolitan object by elements taking into consideration the residential and public buildings with separate historical solutions.

Because the changes in the center of the city center are very diverse, distracting them from the ancient site, and distracting them to the enriches. The intensive process of activating the historic part of Samarkand city, which acts as a logistics and administrative and cultural center in the tourism sector, is accompanied by an increase in the total volume of the old city construction, where most of the monuments are concentrated. Formation and organization of modern tourist centers, expansion of their structure, development of architecture, promotion of historically formed old city and development of adjacent zones. The architectural scheme of the city is to find a consistent transition

from the historical structure to the modern structure through the active use of all valuable historical elements and the careful preservation of them, by establishing a harmonious unity of ancient and new buildings. The complexity of this task is that in the center of historic cities, typically, the height of buildings does not exceed 1-2 floors, while the modern construction is mainly oriented to high-rise buildings and large sized buildings.

In recent years, the public, social and scientific organizations addressing this issue have demonstrated the relevance of international conferences, negotiations, symposiums, and problems. Special attention is paid to these issues as an important part of various complex subjects in scientific research institutes.

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## DEVELOPMENT OF A MODERNIZED WORKING CAMERA OF SAW JIN

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### ABSTRACT

*this article covers the development of a modernized working chamber for saw gin.*

**KEYWORDS:** *modernization, development, camera.*

## РАЗРАБОТКА МОДЕРНИЗИРОВАННОЙ РАБОЧЕЙ КАМЕРЫ ПИЛЬНОГО ДЖИНА

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Аннотация: В данной статье освещено разработка модернизированной рабочей камеры пильного джина.

Ключевые слова: модернизация, разработка, камера.

При создании рабочей камеры пильных джинов повышенной производительности, удовлетворяющих требования компоновки машинных агрегатов по сопрягаемости и габаритам, необходимо разрешить множество вопросов. Они касаются определения конструктивных и режимных параметров нового джина и, прежде всего, таких как оптимальное значение междупильного промежутка, размерные

характеристики рабочих органов рабочей камеры и их взаимная координация, скоростные режимы подвижных рабочих органов, производительные и качественные характеристики работы джина.

Используя формулу, предложенную Г.И.Болдинским [1, с. 450], построим график изменения производительности одной пилы на кг волокна в час (рисунок 1).

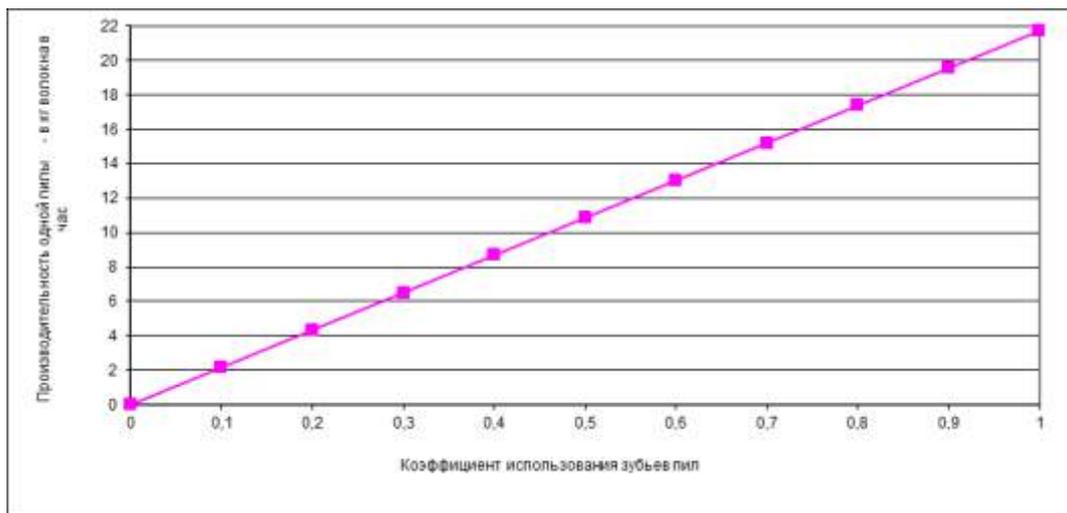


Рисунок 1. Изменение производительности одной пилы по волокну в кг/час

Наибольшая производительность джина по формуле составляет 21,7 кг волокна на пилу в час. Следовательно, производительность джина зависит от скорости пильных дисков, геометрии зуба, изменением которых в определенных допустимых границах можно достичь повышения производительности джина. Кроме того, выявлено, что основным влияющим фактором на производительность джина является коэффициент использования зубьев пил, который зависит от скорости сырцового валика. Таким образом, чем больше скорость вращения сырцового валика, тем более интенсивно используются зубья пильных дисков.

По данным А.Максудова [2, с. 169] теоретически производительность пильного джина определяется как:

$$Q_t = Q_o + 1,35 \cdot (v - v_o) + 7,1 \cdot (v_b - v_{bo}) + 0,5 \cdot (G - G_o) \quad (1)$$

Здесь - для серийного джина 5ДП-130:

$Q_o = 15$  кг волокна на пилу в час – паспортная производительность джина [50];

$v_o = 12,31$  м/с – окружная скорость пильного цилиндра;

$v_{bo} = 2,6$  м/с – окружная скорость сырцового валика;

$G_o = 98,47$  кг – масса сырцового валика при его плотности  $\rho = 350$  кг/м<sup>3</sup>,  $V_{об} = 0,2813565$  м<sup>3</sup> – объем и  $l = 2,358$  м – длина рабочей камеры.

- для разрабатываемого джина:

$v = 12,31$  м/с – предлагаемая окружная скорость пильного цилиндра;

$v_b = w_b \cdot r = 2,6$  м/с – предлагаемая окружная скорость сырцового валика;

$w_b = v_b / r = 16,25$  рад/с – угловая скорость сырцового валика;

$r = 0,135$  м – радиус стенки лобового бруса от центра рабочей камеры;

$G = \rho \cdot (V_{об} - \pi R^2 \cdot l)$  кг – масса сырцового валика при его плотности  $\rho = 350$  кг/м<sup>3</sup>,  $V_{об} = 0,17749$  м<sup>3</sup> – объем и  $l = 2,358$  м – длина рабочей камеры;

$R$  – радиус семяотводящей трубы.

Из уравнения (1) видно, что для повышения производительности пильного джина необходимо повысить окружную скорость пильного цилиндра и сырцового валика, а также массу сырцового валика, а с точки зрения модернизации серийного пильного джина 5ДП-130 – скорость и массу сырцового валика. Это осуществимо при установке внутри рабочей камеры семяотводящей трубы.

В частности Н.К.Сафаровым предложен пильный джин с семяотводящим устройством со следующими конструктивными параметрами трубы:

- диаметр трубы  $\varnothing 165$  мм, с живым сечением – 9,5%;

- частота вращения – 290 мин<sup>-1</sup>;

- ориентация отверстий (овал 10x20) на поверхности трубы 44,5x43,1 мм.

Данная конструкция позволила довести оптимальную производительность джина до 12 кг на пилу в час и шнека по семенам до 380 кг/час. Установлено влияние производительности джина, частота вращения семяотводящего устройства и вывод дженированных семян с семявыводящим устройством на процесс дженирования.

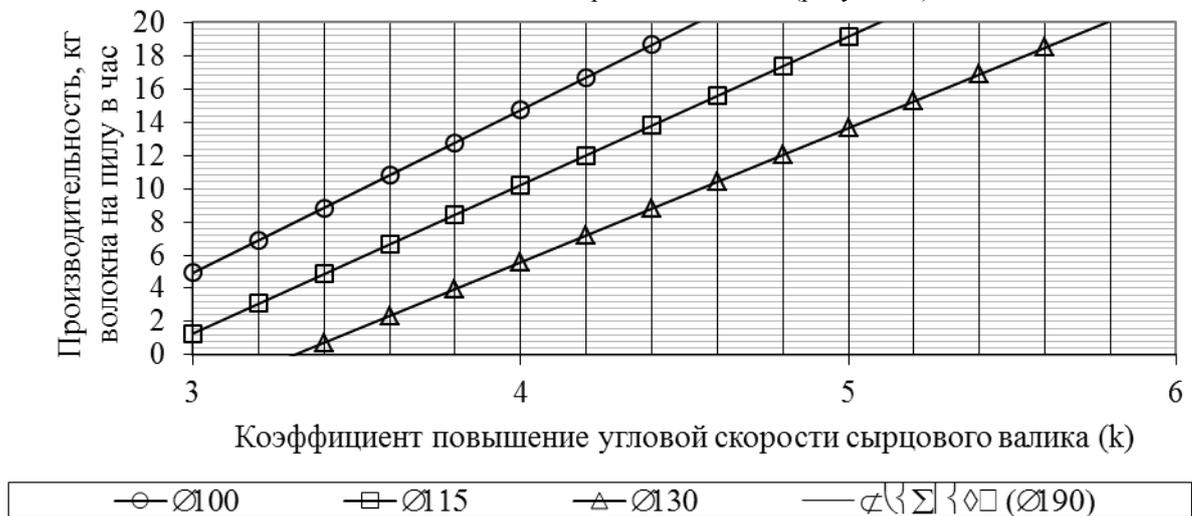
Установление семяотводящей трубы с радиусом  $R$  обеспечивает уменьшение объема рабочей камеры ( $V_{об} = \pi R^2 \cdot l$ ), при этом масса сырцового валика равна  $G$ . Расстояние по радиусу рабочей камеры от стенки трубы до лобового бруса составляет  $r - R$  и с увеличением  $R$  уменьшается.

Тогда равенство (3.1) получит следующий вид:

$$Q_i = Q_o + 1,35 \cdot (\nu - \nu_o) + 7,1 \cdot [k \cdot w_b \cdot (r - R) - \nu_{bo}] + 0,5 \cdot [\rho \cdot (V_{об} - \pi \cdot R^2 \cdot l) - G_o], \quad (2)$$

где  $k$  – коэффициент, учитывающий увеличение частоты вращения сырцового валика.

Используя уравнение (2), построим график изменения расчетной производительности пильного джина с семяотводящей системой от диаметра трубы  $2 \cdot R$  и коэффициента, учитывающего повышение угловой скорости сырцового валика  $k$  (рисунок 2).



**Рисунок 2. Изменение расчетной производительности пильного джина с семяотводящей системой в зависимости от коэффициента увеличения угловой скорости сырцового валика при различных диаметрах трубы**

Для повышения производительности пильного джина до 20 кг волокна на пилу в час с семяотводящей трубой при изменении её диаметра от 100 до 130 мм необходимо увеличить частоту вращения сырцового валика от 3,0 до 5,8 раз (см. рисунок 3.2). При этом объем рабочей камеры уменьшается с 6,5 до 20%. Кроме того, зазор между трубой и лапками колосников, необходимый для проведения замены или ликвидации забоев в колосниках, уменьшается с 85 до 70 мм.

Установлено, что длина волокна с уменьшением междупильного расстояния с 20,64 до 14,59 мм при дженировании хлопка-сырца разновидности 108Ф уменьшается на 0,1-0,2 мм.

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# THE SPIRITUAL LIFE AND CONFLICT PROBLEMS OF THE ERA OF MIRZO ULUGBEK

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## ANNOTATION

*The article provides a detailed analysis of the events and processes of the Temurid Sultan and the period of the world-famous scientist Mirzo Ulugbek, social contradictions in his activities, the possibilities of the new period.*

**KEYWORDS:** Middle Ages, Temurids, Mirzo Ulugbek, social contradictions, Peace, good and evil, freedom and captivity.

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**Аннотация:** В статье дается подробный анализ событий и процессов темуридского султана и периода всемирно известного ученого Мирзо Улугбека, социальных противоречий в его деятельности, возможностей нового периода.

**Ключевые слова:** Средневековье, Темуриды, Мирзо Улугбек, социальные противоречия, Мир, добро и зло, свобода и плен.

## DISCUSSION

The development of human civilization is due to many factors and fateful discoveries in the field of science and technology. The medieval East was characterized by a complex of political, economic and cultural transformations, which ensured its special place in the development of world civilization. The basic principles of education and training developed by thinkers are a powerful incentive in the formation of a national culture, the improvement of education and upbringing, and the development of science. It is obvious that the formation of consciousness of the young generation without taking into account the national and cultural heritage of the people can have the opposite effect on this process.

The way of life, the personal example of great people, has not been evaluated in the same way during and after the period in which he lived. Some liked it, others criticized it, it is clear that life belongs to either greatness or misguidance. The life of Mirzo Ulugbek is a clear example of this.

Mirzo Ulugbek's centuries-long distance from us in space and time encourages him to better understand and study. Today, the opportunities of the new era in our country are the basis for a more

accurate assessment and analysis of an event or incident.

In the works of great scientists and academicians of the last century (we see examples of ideological order in the assessment of the personality, scientific heritage, social activity of Mirzo Ulugbek. In the following period, especially in the sources written at the beginning of the XXI century, the disease of scientific and philosophical weakness continued. The main reason for this is the lack of knowledge of Arabic and Persian languages and scripts, especially the inability to read the behavior.

As mentioned above, there is a lot of literature about the period, activities and social contradictions of Mirzo Ulugbek, but we know the names of many of them, we do not know their texts and meanings. For this reason, we try to consider the ideas of the article using the work of the great historian Abdurrazaq Samarkandi "Matlai sa'dayn va majmai bahrayn". After all, Abdurazzaq Samarkandi lived at the same time as Ulugbek and Abdullatif and was one of the officials of Sultan Shahrukh.

Those who have studied the period of Mirzo Ulugbek admit that all social earthquakes and catastrophes were resolved as peacefully as possible. "The word peace is a matter of mutual consultation and reform so that the country is not destroyed and



the people are not disturbed." (source above -202 pages). If the peace process is a weakness in politics, if reprimands and compromises do not work, "... the flags that will conquer the world will be raised high" will act like fierce lions and terrible elephants.

At the end of the battle, torches were lit on the walls of the fortress, and the victors received "precious ornaments, cash treasures, delicate ornaments of women, delicate vessels, beautiful vases, exquisite fabrics and magnificent goods." the blessing of his hangover flew away and ... closed the gate of need in his memory".

During the reign of Mirzo Ulugbek, as in the case of the Temurids, a truce was first proposed to resolve social conflicts, and if this policy did not materialize, war broke out. It is known who fought for justice and who else fought for prey.

In the political sphere, the movement for independence, in particular, has been taken seriously. In this regard, despite the rules of brotherhood, kinship, kinship, specific measures have been taken against those who betrayed and betrayed the authority. According to the source, when he was defeated, "... blood shows brotherly obedience, and those who hoped that he would not be indifferent to the consequences of brotherhood, but gathered the iron rod (heated) in the eye of the traitor, and pulled it by force".

It is written in the source that among the Temurids there are many who have risen to prominence in intellect and ingenuity. Particular attention was paid to the stability of the state, the definition of the rank of civil servants, the strengthening of borders, the care of the people, the maintenance of order in the state.

In the time of Mirzo Ulugbek, in the management of internal and external affairs of the country, based on the requirements of Islamic philosophy, faith, intelligence, entrepreneurship, unraveling the shackles of injustice, playing the drums of justice, taking into account the enemies of the country, identifying rebellious youth ... Assign spies (agents) to the east and west of the world... "

According to the sources, the state affairs include the management of the treasury, the debts of the Timurids, its repayment, and the cleaning of expenditures. It is stated that Sayyid Fakhruddin became the Pharaoh in the chapter on the law and honor of his time when he was a minister. He said that he had misappropriated the devon's money, and that the inspection of his activities had revealed "an undesirable picture of his life and the quality of his life, Muslims, a taste for his property and misappropriation of the devon's money, and all his treachery".

Abdurrazzaq Samarkandi, who once again proved in the example of Sayyid Fakhruddin that sooner or later former officials who could not draw the right conclusions from the lessons of history will

be held accountable for their sins, writes: suffered from contraindications... heart palpitations, shortness of breath, jaundice color... could not win; July 15, 1417 moved the burden of life to the place of death. First, the culture of rejoicing in the death of the deceased is still a burden in Islamic teaching and practice, but celebrities in Khorasan and Iraq, all gathered in condolence, greeted each other with a symbolic gesture.

We all know that Mirzo Ulugbek was famous as a ruler and a scientist. Another of his great deeds is that he protected those who walked openly for the truth, the source said. Abdurrazzok Samarkandi writes, "... Mirzo Ulugbek was a wise king, a glorious ruler. During the reign of his state and the days of his reign, the people of Movarounnahir and the country of Turkestan, from the oppression of the country, reached the fountain of justice... Mirzo Ulugbek was superior to the kings of the world in paying attention to the people of truth.

In conclusion, it should be noted that the great compatriots, thinkers of the East, the role and significance of the legacy of philosophical thought in the development of modern civilization, the spiritual basis for deciding on an ideology of independence can be achieved by:

- Scientific knowledge and conclusions about the socio-economic, ideological, spiritual and moral foundations of the formation of the first philosophical knowledge in the region will be strengthened;

- New data, sources, training manuals are created by studying and analyzing historical sources;

- The combination of national and universal values determines the global weight of our national and spiritual values;

- The role and contribution of the historical heritage of our great ancestors to the development of modern science and culture is determined;

- It is emphasized that the invaluable legacy of religious and secular knowledge left by our ancestors today is recognized by the world scientific community;

- The importance of our historical heritage will be studied in large-scale reforms carried out in our country over the years of independence;

- The historical heritage, wisdom and wisdom of scientists of the East are determined by the fact that they are an exemplary school for the education of a harmoniously developed generation.

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# THE PSYCHOLOGICAL INFLUENCE OF INDIVIDUAL'S RELIGION ON FAMILY STRENGTH

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## ABSTRACT

*The article empirically studies and analyses psychological influence of religion to the individuals, on the basis of which the role of a person's religious orientation in family relations is scientifically based.*

**KEY WORDS:** *religion, religious belief, religious consciousness, religious orientation, family stability.*

## DISCUSSION

Even though the essence of religion is depicted differently, belief and sense of faith lie on the basis of it. Indeed, religion is a sense of belief. The sense of belief is one of the deepest and most spiritual needs of mankind [2: 6]. In the annotated dictionary in Uzbek Language **religion** – faith comes in the sense of belief and indicates the collection of customs, rituals, imagination, worldview that are based on Divine power and belief in God [4: 621].

If we analyze from the psychological point of view, religion is considered as a specific field of human psyche illustration, and is one of the forms of social consciousness (social life) of social groups and individuals. In many cases people address to religion in order to fulfill the spiritual, psychological and ideological gap, to find themselves in these directions, and when they can not solve their daily problems independently. Believers themselves associate their first religious inclinations with "miracles," with unexpected understanding and enlightenment, and with communication with God [3].

If the **faith** is the factor that unites the individual, group, and community, making people active members of social life, **religious faith** is the collection of religious imagery, characters in the minds of forces that believe in divine powers. Religious faith is the belief and application of religious beliefs, guidelines and instructions without any hesitation as the main element of religious consciousness. Accordingly, at the heart of any religious consciousness lies a religious belief.

It is well known that **religious consciousness** is the awareness of religious people and is an important factor in the consistency of

religious beliefs. However, it should be noted that not any belief can be considered as a religious belief. After all, religious faith requires the existence of a special persistent belief in individual's psychology. F.Abdurahmanov and Z.Abdurahmonova indicate religious psychology, religious experience, religious sentiment, love, fear, joy, and religious ideology, dogmatics, apologetics, religious norms to the elements of religious consciousness [1: 36].

It should be stated that the high level of consciousness determines the need for willpower and trust associated with faith. This is enrooted in young people through the family, neighborhood, educational institutions, and it requires their mutual harmony. Moreover, it requires further development of the spiritual foundations of our society, preservation and strengthening of ancient national values, creation of a high spiritual environment in our society, increasing the role and importance of the family to counteract various harmful influences that are completely unfamiliar to the Uzbek national mentality.

Consequently, religion plays an important role in the family, along with the socio-political, spiritual and cultural spheres, as well as interethnic relations. Nevertheless, religion sanctifies people's lifestyles, thoughts, and behaviors, bestows nobility to them, or disapproves them as a sin. In this way, religion directly has impact on family.

In general, the precise and perfect meaning of human life is embodied in the family. In our society, the concept of family is glorified and the sanctity of the couple is protected. In particular, the issues of strengthening and developing the family, improving the spiritual and moral environment in families, preserving and promoting the most exemplary family

traditions in society are among the most actual matters today.

Uzbeks family relations have deep historical roots in Islamic and national values. There is a great attention paid to family in Islam religion - how to organize it, the rights of family members, the upbringing of children, the treatment of family disagreements, in general, all the concerns of family life can be answered in Islam. All aspects of family life and marital relations, such as how to treat one's spouse, how to treat parents and children, and how to show respect to family members, are illuminated in the Qur'an, hadiths, and Sharia laws, which are considered as the main sources of Islam.

As Allah mentions in Qur'an: "*And of His signs is that He created for you from yourselves mates that you may find tranquillity in them; and He placed between you affection and mercy. Indeed in that are signs for a people who give thought*" (Surah "Ar-Rum", verse-21). The Qur'an defines the role of the husband and wife in the family, and particularly emphasizes the responsibilities of the husband. That is, the husband has a social, physical, and financial duty to his wife. In the Qur'an, the husband is entrusted with certain responsibilities as the head of the family, and Islam places men who treat their wives well amongst the best people. In general, there are many verses from the Qur'an that refer to the relationships of family and husband-wife bonds [5].

As the role of Islam is crucial in Uzbek families, not only the *role of religious values*, but also the *religious orientation* of the individual is of great importance in ensuring the stability of the family, and upbringing developed people.

In order to study the psychological impact of religious orientation on family strength, we

conducted a special study in Tashkent. The research covered 50 families. In this regard, we referred to the methodology "*Scale of religious orientation*" developed by G. Allport and D. Ross and the methodology of "*Determination of marital satisfaction level*" developed by V.V. Stolin, T. L. Romanova, G. P. Butenko.

The method of "*religious orientation scale*" serves to determine which type of religious orientation is dominant in a person – the predominance of external or internal orientation. The survey consisted of 20 verdicts, of which 9 sentences were sub-scales of internal orientation and 11 sentences were sub-scales of external orientation. 4 different response options can be used to respond to each item. The questionnaire provides some of the most common religious and social views that appear among people.

It cannot be denied that G. Allport's typology of personality religious orientation is one of the most popular typologies. According to him, religious feelings and religious orientation are different in people: some are superficial; some are in very deep essence. In this regard he says: "*I am convinced that internal religious orientation, not external, plays an important role in a person's mental health. If the religious orientation is deeply internalized, the person's psyche is healthy, and peace will remain in his relations with others. That is my guess*" [6:376-409].

According to the results of the survey, it was known that 65 percent of respondents are oriented internally, and 35 percent are oriented externally (Figure 1).

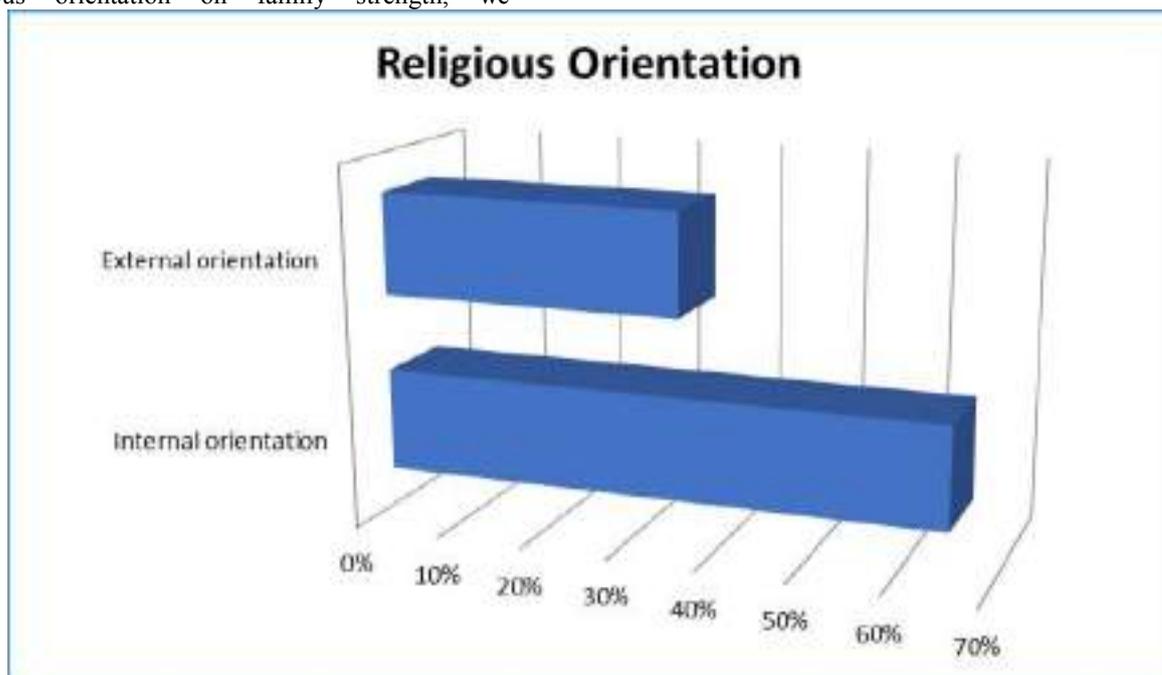


Figure-1. The results of "Scale of religious orientation"

When it was compared according to gender differences, it was found that 70 percent of women and 60 percent of men belong to the internal orientation scale, while 30 percent of women and 40

percent of men belong to the external orientation scale (Figure 2). At the same time, it can be seen that women are more likely to seek religious support and comfort than men.

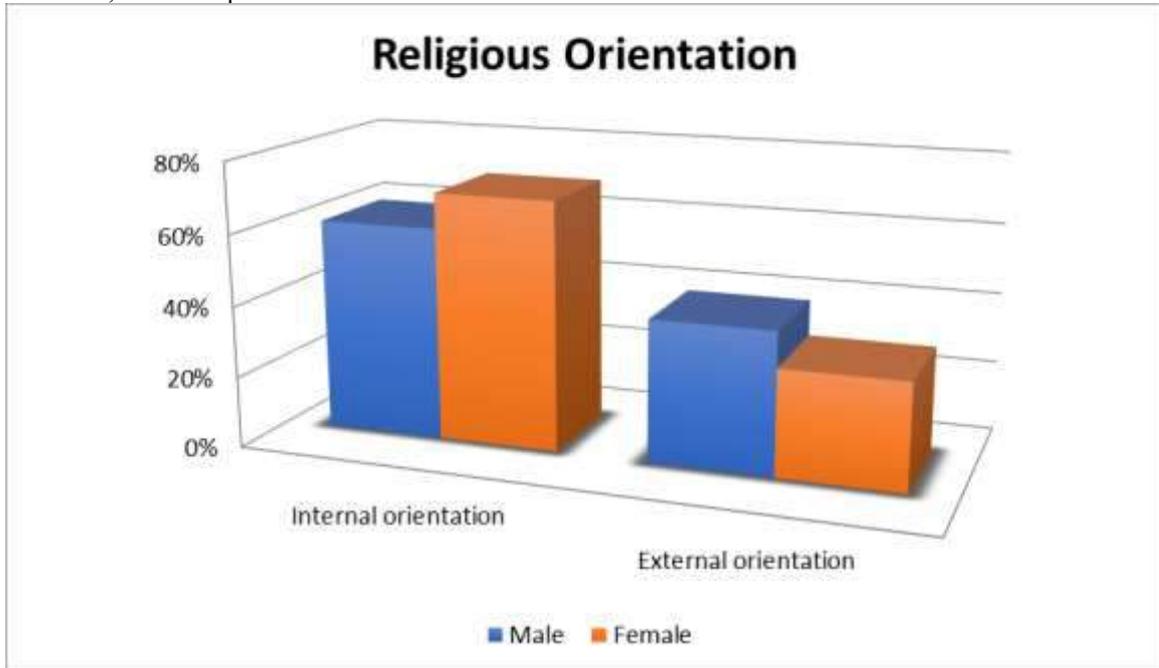


Figure-2: "Religious Orientation Scale" method results according to gender variation

According to the results of the "Determination of marital satisfaction" method, marital satisfaction was high in 25 percent of male respondents,

moderate in 35 percent and low in 40 percent, while women's result illustrated high in 45 percent, moderate in 50 percent and low in 5% (Figure 3).

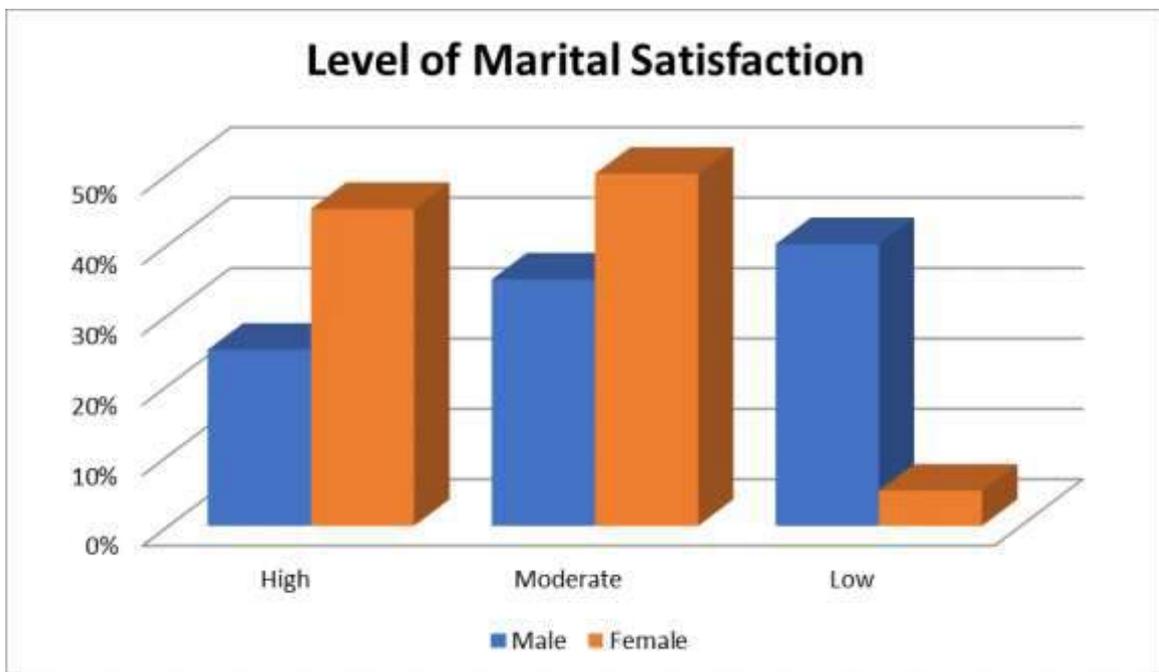


Figure-3: the results of "Determination of marital satisfaction" methodology

In order to determine the relationship between the results of the methodologies of "Scale of religious orientation" and "Determination of marital

satisfaction", we have analyzed the correlation between the results, and obtained the following results (Table 1):



**Table-1: The results of the correlation between a person's religious orientation and marital satisfaction**

	<i>External orientation</i>	<i>Internal orientation</i>	<i>Level of Marital satisfaction (High)</i>	<i>Level of Marital satisfaction (Moderate)</i>	<i>Level of Marital satisfaction (Low)</i>
<b>External orientation</b>	1				
<b>Internal orientation</b>	0,10	1			
<b>Level of Marital satisfaction (High)</b>	0,12	0,56**	1		
<b>Level of Marital satisfaction (Moderate)</b>	0,23	0,34*	0,28	1	
<b>Level of Marital satisfaction (Low)</b>	0,44*	0,10	0,12	0,26	1

**Comment: \* p ≤ 0,05, \*\* p ≤ 0,01**

These correlative associations were observed with moderate to high correlation between an individual's religious orientation and level of marital satisfaction indicators. These correlative relationships were correlated between the following units: there is a moderate link (0.44 \*) between a person's external religious orientation and a low level of marital satisfaction. It showed the results that there was a moderate correlation between an individual's internal religious orientation and a moderate level of marital satisfaction (0.34 \*), and with a high level of marital satisfaction (0.56 \*\*).

The correlative associations' results taken from the survey confirmed the points we have stated above. While the majority of externally religious oriented individuals expressed dissatisfaction with their marriages, the majority of internally religious oriented respondents were known to have high to moderate satisfaction from their marriages respectively.

Therefore, initially, the religious orientation of the person plays crucial role on ensuring the stability of the family, and upbringing competent individuals. After all, a person's religious orientation has a direct impact on how children will receive religious education, how religious values will play a role and how will they be implemented in the family. If we consider the fact that Islam, along with Sharia laws, plays an important role in the regulation of public life in the Uzbek nation, this factor is of great importance.

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## PRINCIPLE OF DIVISION OF AUTHORITIES AS ONE OF THE CRITERIA LEGAL STATE

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### ПРИНЦИП РАЗДЕЛЕНИЯ ВЛАСТЕЙ КАК ОДИН ИЗ КРИТЕРИЕВ ПРАВОВОГО ГОСУДАРСТВА

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**Аннотация.** В данной статье рассматривается принцип разделения властей как один из критериев правового государства. Отмечается, что система государственной власти Республики Узбекистан основывается на принципе разделения властей на законодательную, исполнительную и судебную. Подчеркивается, что пятый раздел Конституции Республики Узбекистан посвящен принципам организации и деятельности органов законодательной, исполнительной и судебной властей, а также органов прокуратуры, призванных осуществлять надзор за точным и единообразным исполнением законодательства на всей территории страны.

**Ключевые слова:** правовое государство; принцип разделения властей; законодательная, исполнительная и судебная ветви власти; две модели формирования государственных институтов власти; Олий Мажлис Республики Узбекистан; Конституция Республики Узбекистан; конституционный суд; Законодательная палата и Сенат Олий Мажлиса; независимость судов.

Одним из критериев правового государства является принцип разделения властей. Профессор С.В.Решетников в своем учебном пособии «Политология» отмечает, что «Проекты разделения единой государственной власти на несколько независимых, но взаимосвязанных властей, которые могли бы сотрудничать и контролировать друг друга, появились в XVII веке. Первый проект такого рода принадлежал

Дж.Локку (середина XVII в.), разделившему власть на законодательную, исполнительную (она же и судебная) и федеративную, ведающую международными отношениями. Далее он пишет, что впоследствии Ш.Монтескье уже в XVIII веке создал теорию разделения властей в ее современном виде: на законодательную, исполнительную и судебную» [1.с.112].



По мнению М.Ю.Зеленкова, «Принцип разделения властей предполагает относительно самостоятельное функционирование трех ветвей государственной власти - законодательной, исполнительной и судебной, и опирающихся на систему сдержек и противовесов. Действие этого принципа нацелено на то, чтобы ни одна из ветвей власти не смогла узурпировать власть в государстве. Для этого существует система сдержек и проти-вовесов. Однако разделение властей не абсолютно: оно предполагает единство ветвей власти, их согласованное действие на основе общих принципов» [2.с.102].

Государственная власть, согласно своим задачам и функциям, делится на законодательную, исполнительную и судебную власти. Все виды власти переплетаются между собой. Но, тем не менее, каждая власть имеет свои специфические черты.

Известные исследователи М.Н.Нишанов и К.В.Джавакова дают следующее определение ветвям государственной власти: «Законодательная власть — это орган, выражающий в законах волю социальных слоёв, наций, групп и индивидов общества.

Исполнительная власть — это орган, выполняющий волю социальных слоев, групп, наций и индивидов, выраженную в законах.

Судебная власть — это орган, который контролирует выполнение воли социальных слоёв, групп, нации и индивидов общества» [3.с.71].

Л.Д.Козырева и А.Е.Хренов выделяют две модели формирования государственных институтов власти. Они пишут, что: «Согласно первой модели, для отстаивания всеобщих интересов любому сообществу нужны четыре типа институтов. Для того чтобы регулировать общие интересы — институты законодательной власти. Для воплощения в жизнь принятых решений — институты исполнительной власти. Для разрешения возникающих конфликтов и интерпретации правил — институты судебной власти. Для применения негативных санкций по отношению к нарушителям норм — институты принуждения.

Далее вышеназванные исследователи отмечают, что вторая модель исходит из доминирования одной социальной группы в обществе (элиты, олигархии, правящего класса, клана и т. д.). Для утверждения своего господства эта правящая группировка создает четыре типа институтов. Законодательные институты — для обеспечения легитимности над подданными, исполнительные — для реализации принятых решений, судебные — для разрешения конфликтов между властвующими и подвластными, институты принуждения — для

репрессивного подавления тех, кто оказывает власти сопротивление» [4.с.137].

Принцип разделения властей закреплен в статье 11 Конституции Республики Узбекистан. В ней отмечается: «Система государственной власти Республики Узбекистан основывается на принципе разделения властей на законодательную, исполнительную и судебную» [5.с.6].

Пятый раздел Основного Закона («Организация государственной власти») посвящен принципам организации и деятельности органов законодательной, исполнительной и судебной властей, а также органов прокуратуры, призванных осуществлять надзор за точным и единообразным исполнением законодательства на всей территории страны. В этом же разделе содержатся принципы организации избирательной системы Узбекистана, бюджетной системы, а также обеспечения безопасности и обороны государства. Вопросы организации государственной власти Республики Узбекистан конкретизированы в специальных актах законодательства (например, в законах «О судах», «О прокуратуре» и др.)

Следует особо отметить круг исключительных полномочий Олий Мажлиса Республики Узбекистан. Согласно ст.78 Конституции Законодательная палата и Сенат Олий Мажлиса уполномочены совместно решать вопросы принятия Конституции, законов Республики Узбекистан, внесения в них изменений и дополнений; определения основных направлений внутренней и внешней политики Республики Узбекистан и принятия стратегических государственных программ; определения системы и полномочий органов законодательной, исполнительной и судебной властей Республики Узбекистан; принятия в состав Республики Узбекистан новых государственных образований и утверждения решений о выходе их из состава Республики Узбекистан, а также принимать решения по ряду других вопросов.

В статье 106 Конституции Республики Узбекистан говорится: «Судебная власть в Республике Узбекистан действует независимо от законодательной и исполнительной власти, политических партий, иных общественных объединений» [6.с.62].

Важное значение в системе разделения власти имеет выделение в сфере судебной власти конституционного суда, который рассматривает дела о конституционности актов законодательной и исполнительной власти.

Так, Президент Республики Узбекистан Ш.Мирзиёев отметил: «Должностным лицам государственных органов следует твердо уяснить себе: вопрос обеспечения независимости судов и



впредь будет находиться под строгим личным контролем Президента.....В Узбекистане судьи призваны быть непримиримыми защитниками закона, прочной опорой справедливости» [7.с.3].

Таким образом, принцип разделения властей составляет основу государственно-правовой теории. Основная цель разделения властей – избежать злоупотребления властью. Взаимное сдерживание властей – необходимое условие их правомерного и согласованного функционирования в законно очерченных границах.

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# THE ROLE OF AMIR TEMUR'S LEGACY AND MODERNITY

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## ABSTRACT

*The article deals with the role and legacy of the great statesman and active ruler Amir Temur, who attached special importance to the socio-political and economic orientation of reforming outdated and "building" new foundations of statehood. The article notes that Sahibkiran Amir Temur left a huge mark in the world history not only as a great statesman and commander, but also as a patron of art, culture, literature and architecture.*

**KEY WORDS:** *historical heritage, ruler Amir Temur, creator, patron of science and culture, the work "Laws of Temur".*

## DISCUSSION

One of the most outstanding periods in the history of Uzbekistan's statehood is associated with the name and outstanding transformations of the great ancestor of the Uzbek people, Amir Temur (1336-1405), a world - famous statesman and commander. The period of Amir Temur and the Temurids occupies a special place in world history. Researchers have long known the presence of many historical works that are primary sources in the coverage of the history of Central Asia and the Middle East of the times of Temur and Temurids, Dating back to the XIV-XV centuries.

The main merit of Amir Temur to the peoples of Central Asia was that he put an end to feudal fragmentation and internecine wars in the country, freed Movarounnahr from the oppression of the Mongols and, uniting its population, laid the Foundation of a centralized strong feudal state, established peace and made every effort for the further development of the country. The state created by Amir Temur was based on all social strata that existed at that time and was governed on the basis of legality. Temur ensured the rule of law in the country. In his time, everyone - the vizier, the Amir, the merchant, and the common man-were equal before the law.

The peace and order established in the country created the basis for the development of agriculture, Handicrafts, trade, science and culture. In a short time, Movarounnahr and Turkestan became a country with a developed science and culture. [1] The historical legacy left as an edification to descendants

by Amir Temur, its study and the possibility of practical application, serve as a guiding star and moral support, helping to withstand the difficulties of reforming the economy and socio-political life that have occurred in Uzbekistan in recent years.

Amir Temur remained in history as a great Creator, patron of science and culture. He showed great initiative and dedication in restoring the economy destroyed as a result of years of feudal fragmentation and turmoil, in rebuilding cities and improving the country. History, not only in written sources, but also in architectural monuments, has preserved numerous evidences of the great creative activity of this outstanding personality, which, in the words of academician I.Muminov, was a need of the time [2]. Famous historian A. Yu. Yakubovsky wrote that Temur, who knew the Turkic language and Farsi from childhood, gave the impression of an educated person. He especially liked to listen to the reading of history works performed by the "story readers" and valued all knowledge, especially if it could be of practical use - mathematics, astronomy, medicine, but most of all he was interested in architecture.

Contemporaries describe Amir Temur as a wise statesman who loved history, literature, science and art, did everything for their development and prosperity, coordinated all his actions with scientists and sages. He left behind a magnificent spiritual legacy. The work "Regulations of Temur" ("Temur tuzuklari"), authored by Amir Temur himself, a set of rules, which is a valuable historical document, is a political will that he leaves to his children. Appreciating the significance of this historical



monument, the historian Liangle says: "Temur passed on to his successor along with the Empire a gift even more precious - the art of preserving it."

The translation of the "code of Conduct " into Russian was carried out in 1892 by teachers of the Tashkent women's gymnasium A. G. Zayonchakovskaya and S.A.Pronevsky (the first part) and students of the men's gymnasium D. Roitman and V. Stepanov under the guidance of A. F. Pronevsky. In Russian, it was first published in the magazine "Orthodox interlocutor" by the publisher N. Ostroumov. This translation into Russian was made from French (the original was written in Turkic, then translated into Farsi) [3].

The "laws of Temur" consist of two parts:

I. "laws of Temur";

II. "The Charter Of Temur. Plans and enterprises".

In the "Regulations", Temur sets out 12 rules that guided him both in behavior and in the management of the state. Temur wrote about these rules: "Nothing better proves their importance than what I have learned from them: they have helped me to achieve power, to conquer States, to consolidate my conquests, and to make me worthy of the throne." In the "Laws of Temur" there are a number of "Regulations"(or rules) that should guide the ruler in the management of the state." The second part of the "Code" - "Temur's Charter" begins with Temur's reasoning about what should be guided in order to properly manage the state, the army and the people. In the last years of Amir Temur's rule, the vast Empire he formed included Movarounnahr, Khorezm, Afghanistan, part of India, the Caspian regions, Iran, Iraq, Transcaucasia, and a number of countries in Western Asia. His state, created as a result of numerous campaigns and conquests, formed a single whole not only because of the strong military power, but because of his wise activities aimed at centralizing the state and economic policy.

Historians write that Temur was the ruler of a great Empire, he was called the ruler of the world, but he himself was deeply aware of the truth that "power is not in force, but in justice." According to foreign researchers, " Amir Temur went down in history as a great statesman, diplomat and philanthropist. The personality of this outstanding son of the Uzbek people continues to arouse great interest among historians to this day. Undoubtedly, this is a great historical figure." In a number of publications, in particular, it is noted that " a great impression was left by his legacy as a patron of the arts and architecture. His quote "If you doubt our power, look at our buildings" after several hundred years continues to be reflected on the walls of remarkable architectural structures built in the era of Amir Temur and his descendants."

The activity of Temur and the Temurids in the XIV-XV centuries in Central Asia was the second

stage of the era of national and cultural revival. The merits of the great Amir Temur in the world history of Turkestan are truly huge. Amir Temur, as a great statesman, managed to put an end to the growing strife, unite the people under his banner, and created the conditions for building a centralized state.

The fact that UNESCO has repeatedly recognized the great culture created in the era of Temur and Temurids as the epoch of the Temurid Renaissance testifies to the world recognition. It is not surprising that the Director-General of UNESCO, Federico Mayor, received impressions from the work of the Spanish Ambassador Clavijo about the created in those about architecture, architecture, literature, technical and scientific discoveries, he spoke very highly about the influence of the legendary Amir Temur on world culture. At the same time, cities such as Samarkand, Bukhara, and Shakhrisabz flourished. Much attention was paid to science, trade development, and craft. The widely known Code of Amir Temur testifies to the wisdom of the ruler, the principles of state management, and its development.

A. Temur was careful when choosing officials. He combined severity and gentleness, but maintained that the very soft-hearted would be swallowed up by grafters, and the very strict would be shunned.

Every researcher of A. Temur's activity recognized him as an extraordinary person, the owner of divine power and mind. His talent was combined with the patronage of progress, justice, concern for the people, and absolute discipline. Considering it an honor to be the support of his people, A. Temur raised the banner of justice high and took a worthy place in the history of universal values. During his reign, Amir Temur paid special attention to the development of science. In the capital city of Samarkand, he gathered the most famous doctors, thinkers, poets, scientists at that time, helping them in their activities both materially and spiritually, thereby contributing to the development of religious and secular Sciences.

Temur's Palace was once a center of science and enlightenment. As writes X.Vamberi in his book "History of Bukhara or Movaraunnahr", Amir Temur obliged to transport the books of city libraries of other cities to the city of Samarkand on camels and other animals. Amir Temur paid special attention to the development of such branches as literature, history, music, astronomy, architecture and mathematics. Created by A.Temur and his contemporaries, such works as "the Code of Temur", "The book of victories", "Autobiography", "Testament", and others, show him as a great ruler, an expert in Sufism, a jurist, and the founder of a new military strategy.

The great commander, statesman, and legislator Amir Temur paid attention to the construction of madrassas, mosques, tombs, and



many other structures throughout the entire period of government. The Gur Emir tomb, the Bibihonim mosque, the tomb of Ahmad Yassaviy in Turkestan, the Oksaroy in Karshi and a number of other Architectural monuments built at that time in Samarkand are now shrines. The characteristic feature of these buildings was the result of the fusion of Eastern and Western architectural art of masters who came from different parts of the world.

Amir Temur devoted all his life and strength to creating a single strong state, a well-ordered and fair life on the Turan land. In his last wills to his children and grandchildren, he stressed that the common people should be loved and helped.

Thus, Amir Temur not only created a centralized state, but also promoted the development of culture, science, economy, literature and art. The celebration of the jubilee celebrations devoted to Amir Temur in the years of independence, the Nations of Central Asia with the world community recognizes great merit in the development of world culture and science, as well as invaluable contribution to human values.

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# SPIRITUAL EDUCATION OF STUDENTS OF PEDAGOGICAL UNIVERSITIES ON THE BASIS OF CULTURAL AND HUMANISTIC APPROACH

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## ABSTRACT

*The article reveals the theoretical foundations and practical implementation of the idea of spiritual education of students on the basis of a cultural and humanistic approach in the context of modern trends in the state policy of the Republic of Uzbekistan to introduce young people to the art and culture of reading.*

**KEYWORDS:** *spiritual education, students, national and universal values, cultural and humanistic approach, system, activities, technologies, pedagogical conditions.*

## DISCUSSION

Uzbekistan's entry into the world educational space, the new conditions of market economy, democratization, and dynamism of social change has had an impact on education, where, along with the requirements of a high level of professional competence, compliance with international educational standards has further developed the problem of spiritually-moral education of students on the basis of national and universal values, achievements of national culture and national features of students, principles of democratization, humanization and humanitarization of education.

The decree of the President of the Republic of Uzbekistan "About measures on increase of efficiency of the state youth policy and support the activities of the Union of youth of Uzbekistan" № 411-5106 of July 5, 2017, states that "In the years of independence, our country carried out some work on the education of youth in spirit of patriotism, respect for national traditions and values, formation of a spiritually developed and physically healthy generation, protection of rights and interests of youth. At the same time, the analysis of the situation and the measures taken in the sphere shows that the ongoing work to address topical issues concerning a wide range of young people, especially to create decent conditions for unorganized youth to find their place in life, to provide youth with all possible support, to ensure their professional orientation and employment, to stimulate their initiatives, is not organized at the required level" [2].

Strategy five priority directions of development of the Republic of Uzbekistan in the years 2017-2021 defined a number of important new tasks to increase the activity of youth in building a democratic state, the most important of which is her "education in the spirit of respect for national and universal values, the statement in her mind feelings of devotion to ideas of independence, national identity, love for the Homeland and belonging to her fate, dedication, fencing it from various ideological threats" [1].

University education is an essential stage of personal education that affects the direction of professionalization, the formation of a worldview, life goals and attitudes, the style of personal and social communication, and the socialization of the future specialist. At the same time, the main "core" of the spiritual and moral sphere of the individual is being formed.

At a joint session of the International press club and the Centre "Oila" - "the Role of family in spiritual and moral education of children and youth" stressed the idea that spiritual and moral development is an important component of personal (family) and public life of the Uzbek people, the main value of which - respect for elders, care for juniors, kindness and humanity, compassion and generosity, devotion to the Homeland and its people [4].

A special role in this process plays the young generation to the book, the culture of reading, on the basis of 12 January 2017 orders of the President "About creation of the Commission on development of system of the publication and distribution of



books, improvement and promotion of a culture of reading."

The Decree of the President of the Republic of Uzbekistan dated 12.05.2018 N PP-3721 "on organizing competitions among young people for book lovers in order to widely study and promote the creative heritage of our great scientists, poets and thinkers" indicates the need for a broad statement of the values of humanism and kindness in society, increasing the intellectual and cultural level of the population, especially young people, expanding their horizons, educating a harmoniously developed younger generation [3].

Among the five important initiatives put forward by the Head of our state to establish a new system of work in the social, spiritual and educational spheres, the most important are:

- introducing and increasing the interest of young people in music, fiction, theater and other genres of art, showing the young generation of their talent and talents;

- organization of systematic work to improve the spirituality of young people and their love of reading.

We have developed a system of spiritual education of students of pedagogical universities through a cultural and humanistic approach to education and the integral process of training specialists-future teachers as carriers of high spirituality and morality.

The value orientation of the cultural-humanistic approach encourages turning to methodological directions related to expanding the cultural experience and Outlook of students based on the activity of students themselves and using creative, heuristic forms of learning.

The system of spiritual education of students of a pedagogical University based on a cultural and humanistic approach is aimed at expanding spiritual and cultural knowledge and experience based on the material of pedagogical disciplines, using the features and opportunities of a cultural and humanistic approach to the professional education of future teachers. Based on the identification of modern needs of society and students in a comprehensive, all-round developing process of entering the society and specialty, we have developed a system of comprehensive introduction of students to cultural and spiritual values on the basis of interdisciplinary modules in special disciplines. A comprehensive approach was to isolate the material of a cultural-humanistic, spiritual-moral, artistic-aesthetic nature, taken from the content of a specific subject and its Association on a chronological, semantic, historical and cultural principle. The main directions chosen for the spiritual education of students were formed in the blocks "Pedagogical ethics and culture", "History and culture", "Outstanding figures of history and culture of Uzbekistan".

The application of this system in the practice of pedagogical universities in Uzbekistan has shown that personal appropriation (internalization) of spiritual and professional-pedagogical values was facilitated by such activities, methods, intellectual operations, verbal and written methods of educational work and communication as:

- preparation for classes (study of sources);
- search (literature, information) ;
- independent acquisition of knowledge;
- selection, systematization;
- generalization, synthesis (concepts, artifacts, phenomena of artistic and spiritual culture) ;
- comparison, comparison, analysis;
- oral presentation;
- written essay;
- performance of tasks;
- answers to problematic questions;
- individual work;
- working in a group;
- study of pedagogical concepts and ideas with determination of their place in the General system of professional activity;
- discovering the connection of pedagogical concepts and theories with the General system of culture;
- ability to Express independent opinions, exchange opinions;
- definition of the meaning of the studied concepts as a value - for yourself and for your profession;
- attracting literature on cultural studies, art history, art forms, religion, outstanding personalities and teachers, works of fiction - prose, poetry.

All seminars and interviews had a reflexive (assessment of their own qualities and capabilities, the formation of the "I-concept" - self-evaluation, self-criticism, self-projection), moral and pedagogical (moral and pedagogical assessment of phenomena) orientation.

It was also concluded that the pedagogical conditions for achieving positive changes in the spiritual development of students is to follow a complex that includes the parameters "types of activities", "methodological directions", "technologies":

TA (types of activities) - cultural activities in accordance with interests;

- constant communication with art;
- artistic and aesthetic creative activity - Amateur classes, participation in Amateur activities, expansion of readers ' interests, participation in humanitarian seminars, quizzes, cultural trips;
- playing out pedagogical situations;
- aesthetic activities of communication with nature.

MD (methodological directions) - showing students cultural phenomena, social events,



outstanding personalities, artistic images in their value value;

- using the cultural influence of the family;
- correction of the cultural influence of peers and society.

T (technology) - game, role-playing, artistic and creative training on the analysis of emotions and their management in their lives and teaching activities.

The positive dynamics of professional, spiritual, cultural and social development of bachelors of pedagogical universities recorded from the first to the fourth year showed:

The cultural-humanistic approach plays a significant, formative, educational role, equipping students with skills:

- culture of teaching and reading through the need for careful study of several sources, their comparison, analysis, generalization; analysis of polar points of view, the choice of the necessary knowledge from the arrays of facts;
- self-knowledge, self-formation and self-realization;
- mastering the culture of your people, your country and the world.

One of the main principles of the cultural-humanistic approach - participation of students in various types of activities - not only contributes to their more flexible socialization, but also provides them with a base of social and psychological-adaptive stability in the future - the ability to have many "points of inclusion" of their knowledge and abilities, depending on changing social and life circumstances.

The cultural-humanistic approach and the principles, forms, methods, technologies and other methods of professional-personal and socially-oriented pedagogical education selected in accordance with it create wide opportunities for cultural and creative activities, professional and practical development and formation of students.

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# GETTING THE RIGHT TO MAKE A NEW SHEPHERD TO USE THE OPPORTUNITIES OF THE MECHANISM OF MODERN CREATIVE TECHNOLOGIES

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## ABSTRACT

*In the article we have developed a method for creating new patterns and designs of Sarja, Satin (Atlas) T-shirts based on existing theory of welding techniques with the use of modern computerized cordless weaving machines. The peculiarity of this method of obtaining a knitting pattern is that under a certain law, a knitting Sarja, a torn-type Sarja, is chosen as a base. It is possible to obtain a new rotation pattern by placing the base axis in the coordinate arrows and diagonal arrows that are in between them. When creating a new knitting pattern, the base is formed by shifting the direction of movement of the joints, body, rope coatings in the base braiding cells. The base rotation placed in the center of the coordinate axis cannot be changed. The base around the obtissa and the ordinate and the diagonal axes are altered according to a specific law, until the design of the pattern is well polished. The base at the center of the coordinate axis indicates that the base bracket is reinforced once for all axes around the axis.*

*In the second variant of the method, the rotation pattern is adjusted by rotating the rotation sliding or coating clockwise or to the right of the base around the center. It is shown that different patterns can be obtained using the methods mentioned above. There is also a formula for defining the pattern of body and weave braiding patterns in the formation of these joints.*

**KEYWORDS:** *body twine, rope, weaving, texture, knitting, wrapping, satin knitting, satin weaving, standard, weaving loom, rapport, roll, coating, knitting pattern, coordinate axis, diagonal, glossy texture, foundation, method, candle, seamless machine.*

## DISCUSSION

Rational use of dressing modes is important in enhancing consumer properties of new textured shirts and other fabrics. Tissue joints are divided into four types. These consist of fundamental clusters [1], [2], and the ability to form infinitely more complex braiding patterns depending on the type of tissue they produce. Nowadays, there is a small amount of joy in the work of shaping different weaving textures. Up to 28 horns can be incorporated in modern sewing machines [3]. Increasing the number of rhizomes in the production will increase the design and attractiveness of the fabric. The competitiveness of the textile appearance depends on the design of the knitting.

Only one type of headgear, for example, the Sarja 1/4 weave, can be mixed with the stranded Sarge 4/1, or by using the number of shifts, it can be formed from the same number of strands of different shapes and colors in a different texture.

The possibilities of the knitting machines of the modern weaving machines are much greater, with the body twisting rate up to  $R_t = 28$ , with the wheel  $R(a) = 6400$ . Increase of the R and displacement C of these folds has a positive effect on their appearance and hygiene.

The dependence of the slope  $S = 1$  and rapport R on the theory of spin-folding is expressed as follows:

$$Rt = Ra, S = \pm 1$$

The minimum build-up rate should be three or more times in the Sarja Rocks,

$$3 \leq Rt = Ra$$

In this case it is necessary to have R 3 otherwise it will not be possible to arrange the sowing.

With the use of modern equipment, it is also possible to create new regularities of the Sargean winding.

Development of  $R_t(t) > R_a$  as type of weaving on the basis of changing the ratio of body and rope ropes in construction.



Making patterns based on the first coating roll across the Rapport. Arrange the axes in the direction of the axes passing through the selected center of formation to create an optimal pattern. Increase the body and rope rope rackage by more than 12 current rivets.

The combination of the above methods 3 and 4 is formed as follows. First of all, its pattern for the pattern of re-creation is drawn (Figure 1 a) and b)). Figure 1. a)). Figure 1 a) Preparation of its pattern for the creation of a new pattern of rotation in the presence of nine bases of rotation and Fig. 1. b) Provides preparation of the pattern for the twenty-five basic rehearsals for the newly created method of knitting pattern.

Depending on the number of threads in the base weaving, the templates will continue to increase with respect to the first one. The number of cells in the first drawing is always nine. If the pattern is to be increased after drawing a pattern, that is, to obtain a larger pattern design than in the previous one, the number of base brackets in the nine cells is increased once. As a result, the number of cells is twenty-five. Thus, in this method, the pattern can be calculated by combining the base joints with unlimited reinforcement when necessary, and by combining the base rotation with the need for combing.

When preparing (drawing) a pattern of construction patterns, the number of knobs, multicolored tool, the basis of the knitting rack and the pattern pattern are taken into account. Selected baseline drawings are drawn (for example, Sarja 1/4, 4-wrap capsule in Figure 1) (Figure 2). Then coordinate systems are used. From the center of the coordinates, the coordinate axes are drawn and the diagonal lines passing through the center of the coordinate axes are drawn, ie the base of the coordinate system is laid (Fig. 3).

In this method, the pattern pattern is placed on each side of the coordinate and diagonal axes, as shown in Figure 1 a). On the basis of the sparse and elongated Sarja curves, the pattern is created on the basis of the joint arrows and diagonal arrows, mixed tweezers, tandoor, arched.

The pattern is generated as follows. First, the base is placed in the center of the axis of the axial coordinate. At the end of the base Sarja's 1/4 rotation rack, the Slave Sarge 4/1 bends are placed on either side of the obtissa axis. Arrange the Srja 4/1 curve to the right and left of the obtissa axis from the center of gravity chosen by the pattern pattern (Figure 4).

Then the two-axis 4/1 torsion bends on both sides of the axis of the ordinate are arranged in such a way that the symmetry of the pattern is outlined. Place the Srja 4/1 bracket at the top and bottom of the ordinate at the center of the ordinate, selected from the center of rotation (Fig. 5). The pattern according to the pattern is shown in Fig. 6, where the obverse 4/1 twisting obverse and the axis of the ordinate are

fully positioned on both sides. Figure 7 shows a pattern drawn on the diagonal axis passing the center of the coil 1/4 of the base in accordance with the pattern pattern.

Figure 8 shows a pattern drawn on the diagonal axis passing the center of the coil 1/4 of the base in accordance with the pattern pattern. Figure 9 shows a pattern drawn by two diagonal arrows that pass through the center of the coordinate axes of the base Sarge 1/4.

This pattern will continue if there is a need to increase the size of the pattern. Using the regularity of this method, it is possible to obtain different patterns in the texture, making the texture attractive and attractive. Using the same method, we present the Satin (Atlas) 5/3 curves (Fig. 11) by rotating the center axis and rotating along the diagonal axes. Figure 12 shows a copy of the shirt embroidery Dorne weaved in modern reproduction by placing the base on the coordinate and diagonal arrows according to the pattern.

In this case, the first base line is drawn, and the second one is drawn from the end of the rebound. Then the counterclockwise axes are positioned along the arrows in the direction indicated by the S<sub>-</sub> (alternating) shift sequence. The same method can be used in another way. In this case, the rotation axes are placed first on the diagonal arrows of the base and then on the coordinate axes in the alternating motion. At the same time, the general rate of rotation can be determined as follows.

**Example-1:** Spinner 1/4 rotation is selected. The shift is assumed to be a variable  $S = \pm 1$ . Baseline Cutting Rope Ras = 5 The best weaving pattern on the body and the rope is defined as follows:

$$R_{T.H.} = R_{a.H.} = \sum_{R_{ac}=1}^n R_{ac} / R_{ac} \cdot 2 = (R_{ac} + 2 \text{ Robц.ас} + 2 \text{ Rорд.ас} + 4 \text{ Rдиог.ас}) / (R_{ac} - 2) = (5 + 2 \cdot 5 + 2 \cdot 5 + 4 \cdot 5) / (5 - 2) = 15 \text{ ип.}$$

See: Baseline Rapport, Rdiog.as. - Reversal of base joints found in diagonal arrows, Robts.as - Reversal rods located on obtissa axis, Rord.as - rudder repositioning on axinatin axis.

**Example 2:** Fix the base brackets twice. At the same time, the first amplification of the body and rope raises is  $K = 1$  and the second increase is  $K = 2$ , and so on. will be examined separately.

1. Based on the fact that the first amplification is considered above, we determine the rapport.

$$R_{T.H.} = R_{a.H.} = (K \cdot 2R_{ac}) + R_{ac} = (1 \cdot 2 \cdot 5) + 5 = 15 \text{ thread.}$$

Where  $K = 1$

2. Define the second reinforcement

$$R_{T.H.} = R_{a.H.} = (K \cdot 2R_{ac}) + R_{ac} = (2 \cdot 2 \cdot 5) + 5 = 25 \text{ thread}$$

Where  $K = 2$ . There is an opportunity to increase  $K$  by the number of threads on the reel. In our example, if we make a tertiary loop increase, then



K: 3: the pattern reversal is  $Rt.n. = Ra.n. = 35$  threads. So the formula has proof.

Where: Number that indicates how many times it has been enhanced.

This method is simple and easy to use, without the need for a separate formula for each amplification of the more comfortable folding detection.

See: Baseline Rapport, Rdiogas. - Reversal of base joints found in diagonal arrows, Robts.as -

Reversal rods located on obtsissa axis, Rord.as - rudder repositioning on axinatin axis.

As can be seen from the above formula, this method has the law of rotation. The number determined by the pattern reversal is equal to the number of body and weft threads in the joints in Figures 10 and 11. This method is useful for designing and retrieving the cutting pattern.


**Figure 1. a) Prepare a model for the creation of a new pattern of spinning in the presence of a nine-base welding rack.**


**Figure 1b) Prepare the model for the twenty-five baseline rip-offs to create a rotation pattern in the newly created method.**

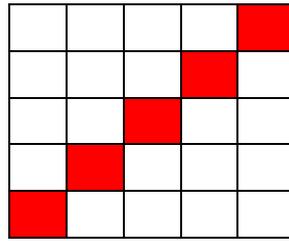


Figure 2. The basis for the method being created is choosing the backend.

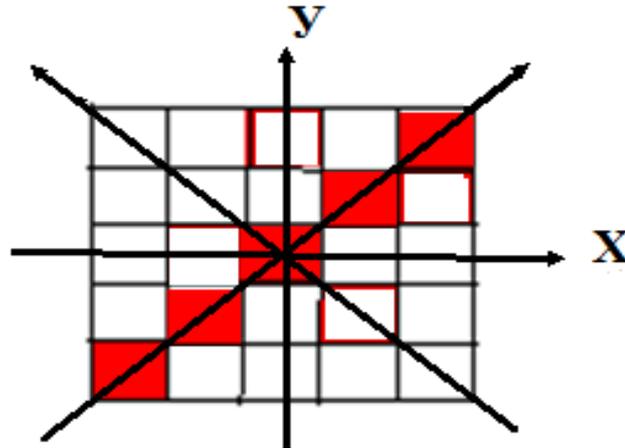


Figure 3. Plant coordinate arrows and diagonal arrows from the selected center of gravity.

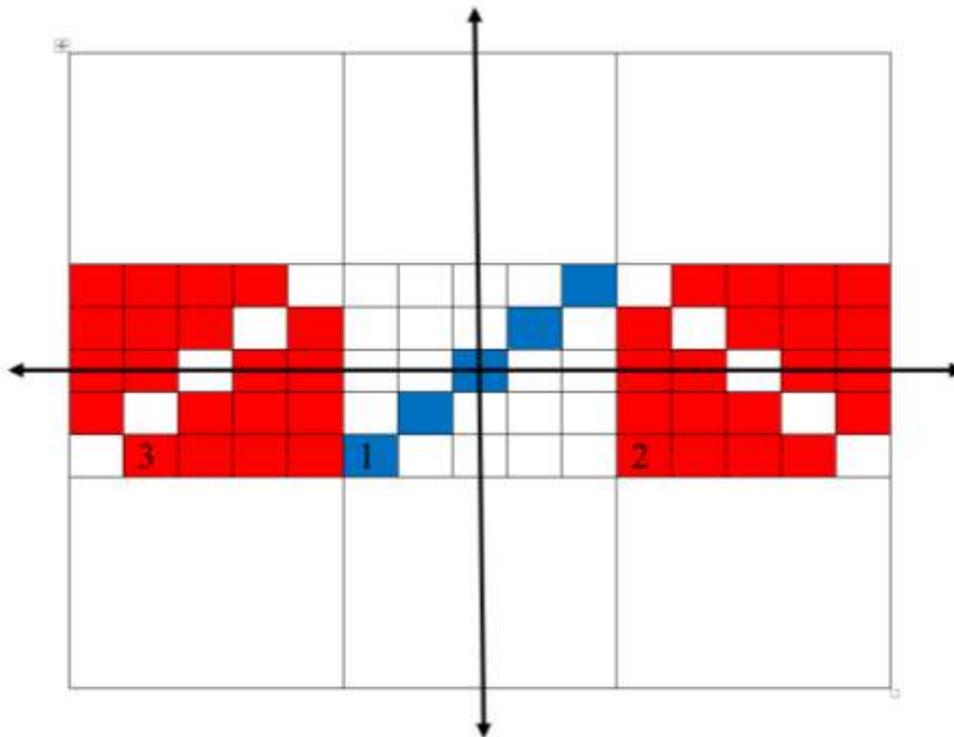


Figure 4. Place Srja 4/1 brackets on the right and left of the obtissa axis from the center of gravity chosen by the pattern.

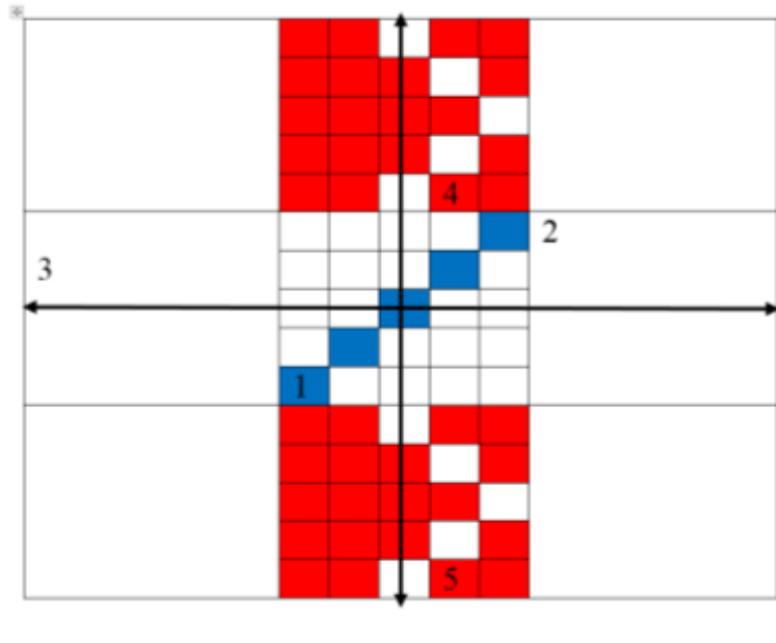


Figure 5. Place the Srja 4/1 bracket on the top and bottom of the ordinate, from the center of gravity chosen by the pattern.

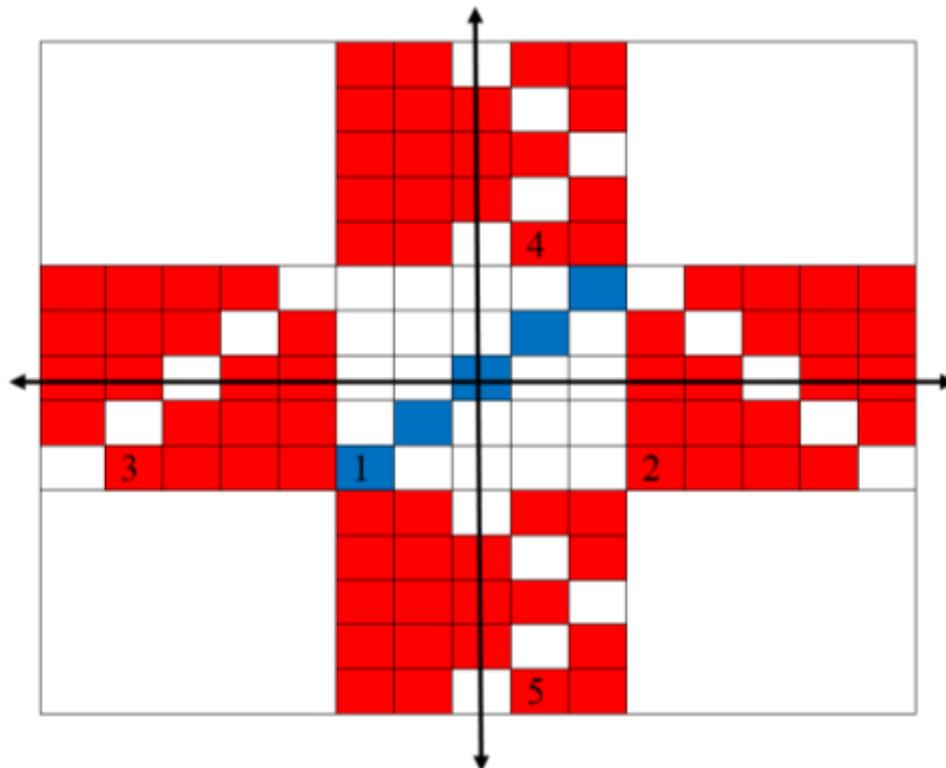


Figure 6. The base according to the pattern is a rawing of the 4/1 twisting obstruction and fully embedded on both sides of the axis.

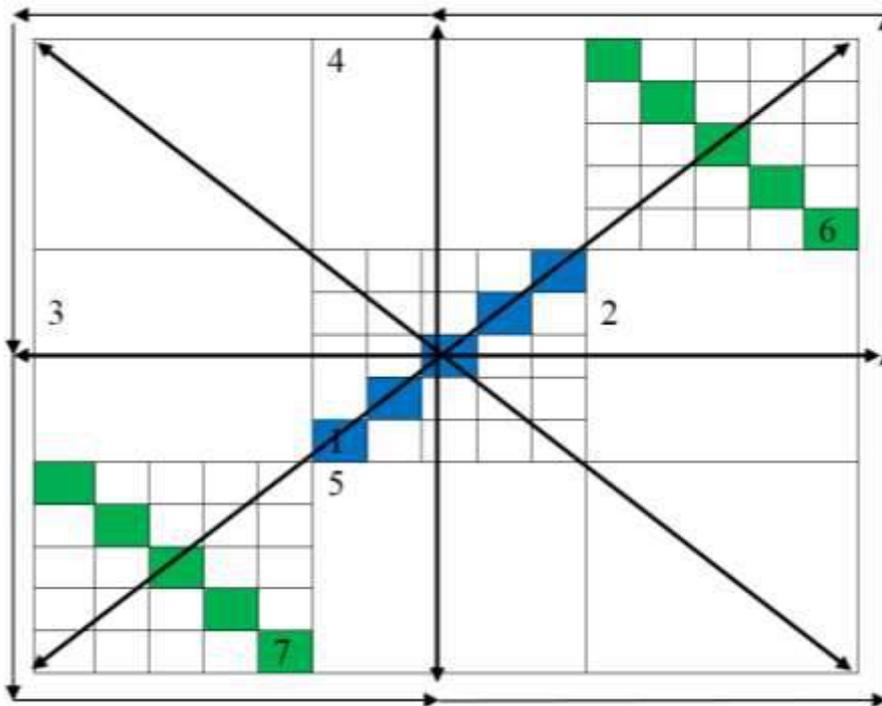


Figure 7. The base according to the pattern is a pattern drawn on the diagonal axis passing the center of the coil axis of 1/4 wrap.

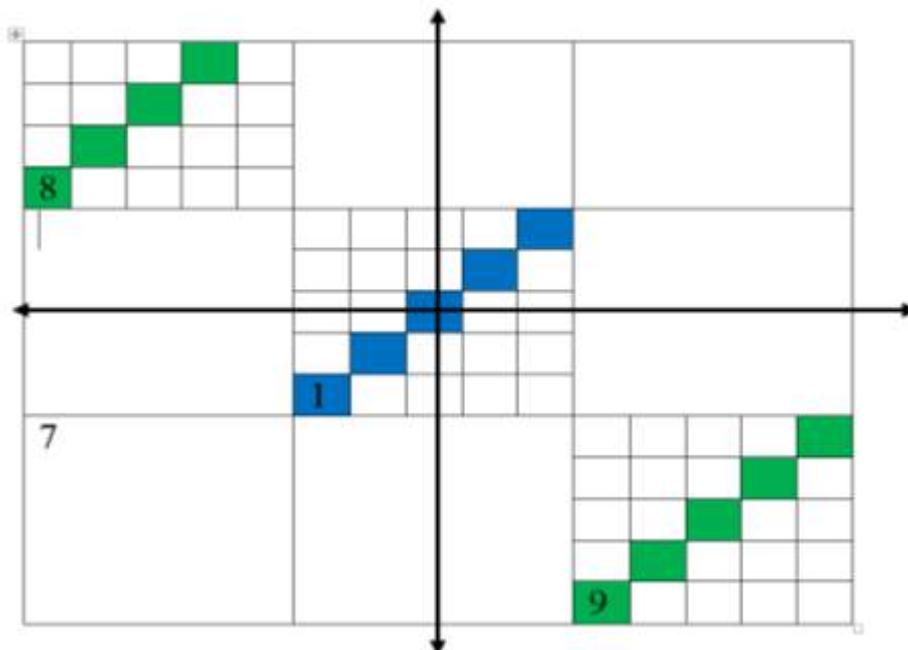


Figure 8. The base according to the pattern is the pattern of the wrapping of 1/4 wrap fully placed on two diagonal arrows that pass through the center of the coordinate axes.

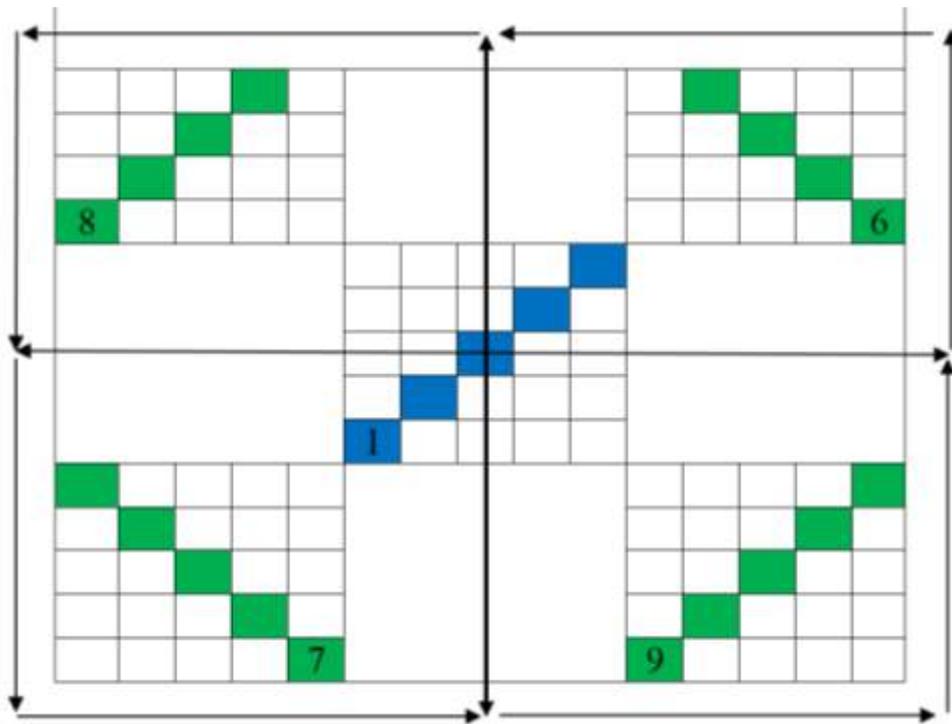


Figure 9. The base according to the pattern passes through the center of the coordinate axes

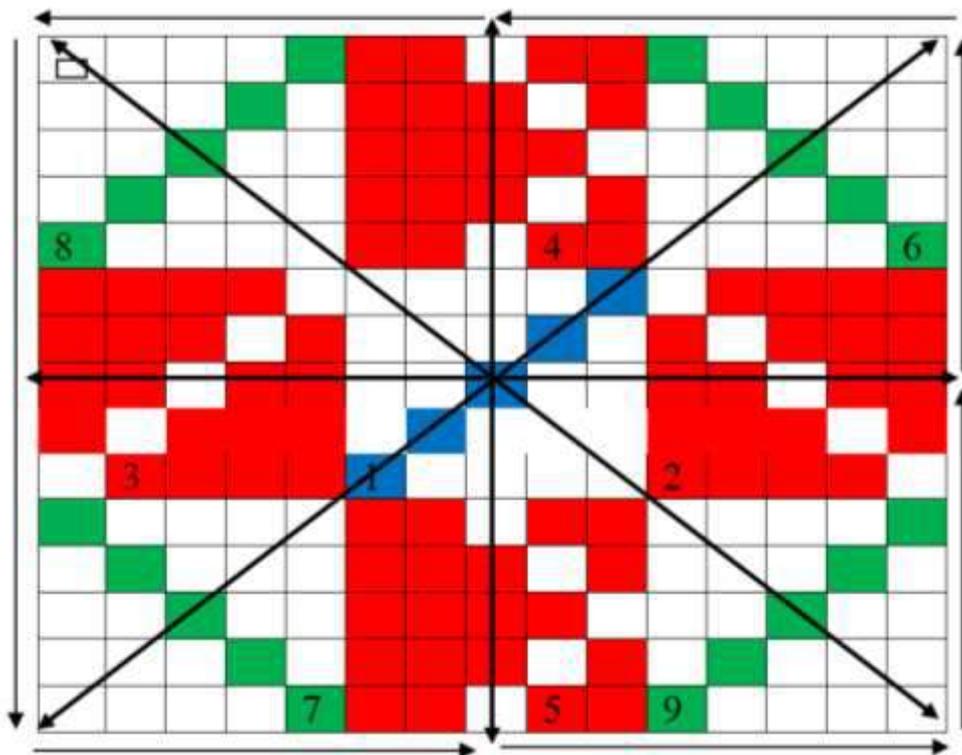


Figure 10. The base according to the pattern is the pattern of the wrapping of the wrapping in the coordinate and diagonal axes.

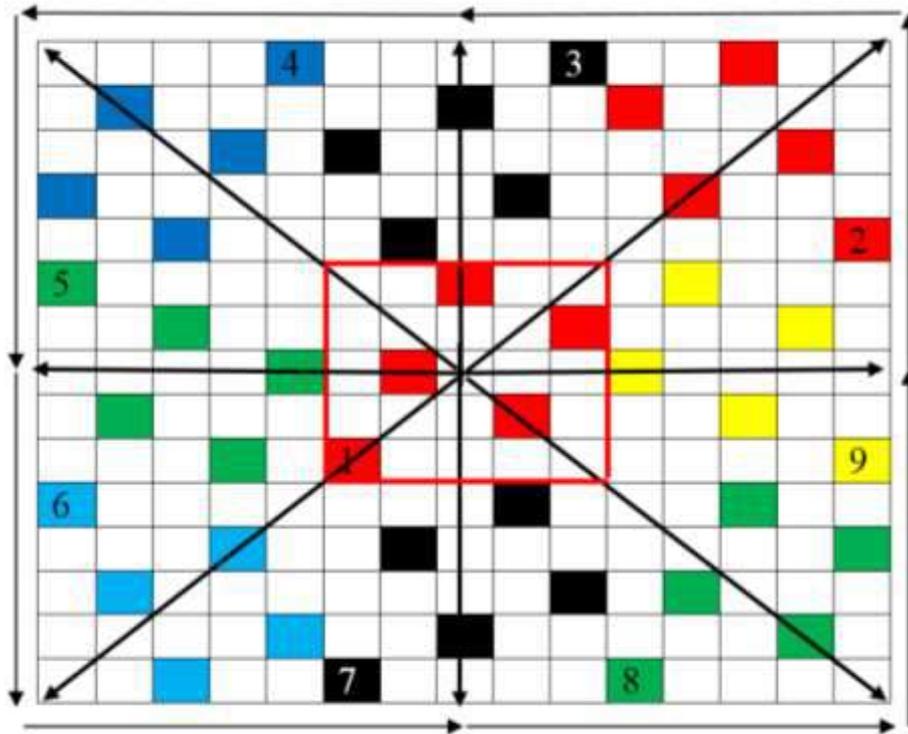


Figure 11. The pattern according to the pattern 5/3 The pattern obtained by rotating the satin axis around the counterclockwise and rotating it on the diagonal axis.



Figure 12. Copy T-shirt embroidery on a modern reproduction machine by placing the base on the coordinate and diagonal arrows according to the pattern.



## CONCLUSION

This method allows enterprises to quickly design new woven fabrics on computers based on software, and to enhance their theoretical and practical knowledge for researchers.

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# DEVELOPING A CULTURE OF NATIONAL COMMUNICATION IN STUDENTS BASED ON VALUES

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## ANNOTATION

*This article highlights the benefits of teaching higher education students our ancient traditions and eternal values in combination with the achievements of modern science. Today, in the development of a culture of national dialogue on the basis of pedagogical cooperation, it is necessary to have a thorough knowledge of customs, traditions, national, universal, educational values, our national spiritual heritage. To do this, it is important that the teacher properly organizes communication with students and constantly learns to talk, to communicate. Because it allows the teacher to conduct the lesson effectively. Accordingly, the article scientifically analyzes the importance of the introduction of factors in the development of a culture of national communication in the educational process based on the effective use of methods such as conversation, lecture, storytelling.*

**KEYWORDS:** Student, value, youth, tradition, culture, communication, national, knowledge, upbringing, education, formation, development.

## DISCUSSION

The education of harmonious, purposeful and energetic young people with modern knowledge and skills, able to take responsibility for the worthy future of the country, is the most important condition for the sustainable and progressive development of the country.

In the years of independence, a wide range of works have been carried out in our country to educate young people spiritually mature and healthy, patriotic and selfless, to protect their rights and interests. In order to raise this sector to a high level of quality, the decree of the president of the Republic of Uzbekistan Shavkat Mirziyoyev "On increasing the effectiveness of the state policy on youth and supporting the activities of the Youth Union of Uzbekistan" was adopted.

In 2017-2021, a number of new and important tasks related to the strategy of actions on five priority directions of development of the Republic of Uzbekistan, the concept of development of the higher education system until 2030, the concept of "continuous spiritual education" were set.

Chapter I, Section 1 of the concept of continuous spiritual education began with such words. "Uzbekistan has entered a new stage of development on the basis of the principle of" from the national revival-towards the National upsurge".

The new era sets its own specific, strict requirements for the education and training system."(1.1 P)

Youth is a period of aspiration towards the future and goodness. And young people are the main force of society. Today Uzbekistan has become a country of opportunities for young people. There is no end to the conditions created for studying, acquiring knowledge, studying a profession. President of the Republic of Uzbekistan Shavkat Mirziyoyev asked the question "What will you suffer from me? I will answer that the education and upbringing of our children, if you ask me, " is one more time that the need for the education and upbringing of educated teachers and students has increased in Uzbekistan. [10]

Today, the training of highly qualified, comprehensively developed, skilled, world-wide and deeply technical personnel is one of the most important issues in production. The modern university is a professionally educated, independent-thinking student, and also needs to realize the values of humanism both psychologically and technologically.

It is proved that the harmonization of our ancient traditions and immortal values with the achievements of modern science is one of the main obligations of modern scientific youth. For this purpose, in the development of the culture of national communication on the basis of pedagogical



cooperation, we must perfectly know the traditions, traditions, national, universal, educational values, national spiritual norms. Because today students are required to develop a culture of national communication by creating cognitive skills qualifications in their minds.

Pedagogical communication is an indispensable attribute of pedagogical influence. This is a professional communication between the teacher and the student in the educational process, in which information is exchanged and educational influence is made on the students. In this case, two-way communication should occur. As its basis, mutual respect and trust serve

In fact, collaborative learning educates the student on the daily intense mental labor, educates the mind, independence as an individual. It is envisaged to instill in each student a sense of personal dignity, to strengthen confidence in one's own strength and abilities, to form a sense of responsibility in studying.

The collaborative learning technology helps the student to work independently and painstakingly intelligently, to complete and qualitatively carry out teaching assignments, to fully master the instructional material, realizing that the success of the student in his / her education leads to the success of the group. (9. 77 P)

The correct Organization of pedagogical cooperation will be the basis for the development of national communication by studying the values in conjunction with the effective mastering of the teaching material in students.

"It is natural that the national consciousness and its formation begins first of all from the era of national awakening, " says X. A. Musaev, - now awakening: according to the dictates of the period, the object of development is becoming a social reality. Because, people are formed and developed because of their worldview, vital conclusions, relations with each other, will and desire, national way of life, national painting, traditions and traditions. Therefore, national, lifestyle and culture are an extremely original form of expression of social reality."

"National recognition," one more scientist argued X. Polotov, -means the recognition of the socio-ethnic stability of people belonging to the nation".

As a result of the research conducted with the aim of knowing the attitude of students towards national self-awareness processes, the same thing has become known, many of them express the opinion that national self-awareness begins with the occurrence of each nation's own independent national state. People who have their own independence, national flag, national anthem, emblem and national Constitution are conscious. His knowledge of national affiliation, his love, his unlimited respect for

language, culture, his understanding of his values, his good knowledge of customs, his knowledge of the past, present and future of his nation, his cohabitation with him are factors that show national consciousness [7. 26 P].

In the following years, on the basis of the great changes taking place in our country, the process of formation of national consciousness, the introduction of values into practical life has increased even more.

Values are a living history. Accordingly, the fact that young people study our educational, universal, national values and rich spiritual culture ensures the national identity of communication.

The term value is a philosophical concept, as most people note in the literature, which serves to reveal the meaning of its activities committed by an individual.

Philosopher E. Yusupov said that value is a material, spiritual need and interest that satisfies that or that need of a person or society, serving their interests. In general, values are material and spiritual wealth, formed and developed in the process of the historical development of the life of society, affecting both the socio-political, economic and spiritual development of the past, present and future, absorbing into the minds of people and gaining social significance.

Hence, it is understood from the above opinion that value is one of the constituent elements of human life, expressing the importance of its material and spiritual factors in the process of social development by people.

"Values from the pedagogical point of view develop the consciousness and activity of a person, it is a cultural-educational tool that affects the formation of him as a whole as a person," said [5. 6 P.].

Forms of manifestation of universal values have a relative feature, but it is also not right to understand this relativity as an absolute feature. In such an approach, it is possible to fall under the influence of a realistic view that "only relativity in the universe is the rule". And in practice and in social activity it is possible to interpret universal values in a desirable way, to justify any actions. However, relativity in the practice of values has a certain limit. This limit is determined by the peculiarities of the object of value, its social status, natural-historical aspects.

These limits are also affected by the relationship that occurs between people in society, the needs, interests, aspirations, the demands, procedures, laws of life and life expectancy, etc. (sub-aspect) [3. 114 P].

And by some authors this concept is interpreted as a set of the highest spiritual and moral qualities inherent in man. Location in the study conducted by inomova, the interpretation of the



concept of "value" is interpreted as follows: "when we say values, we understand the sum of such qualities as freedom, social justice, enlightenment, beauty, honesty, commitment to duty, which serve in the interests and purposes of the nation, Elat and social groups that are important to society".

From our point of view, the first two of the above points of view fully express the essence of the concept of "value". After all, as a value, not only moral, but also material factors are recognized.

In fact, it is necessary to understand that value is precisely in the formation of the spiritual and moral qualities of a person and that values of pedagogical significance are studied. One such value is educational value. "Educational values" is a complex of objects and sub-factors that give a person scientific and theoretical knowledge, bring up high moral and moral qualities in it, have an important socio-pedagogical significance in his / her harmonious development, and also have a special significance.

Today, a renewed society develops on the basis of its spiritual, intellectual values, rich traditions of the people, Universal and national values, science, technology, achievements, as well as on the basis of restoration and development of spiritual and moral traditions.

Values and their use in the process of establishing social and pedagogical relations should be built on the basis of the content of education, its process and the organization of mutual relations in the "pedagogical - student" system. A solution to the problems of pedagogical relations is required. The pedagogical phenomenon associated with the training of the future teacher cannot be ignored either.

- respect for each other by the teacher and the student on the basis of values, traditions in the relationship;

- formation of aesthetic rich outlook, high spirituality, culturalism and creative thinking in students;

- it is an expression of its continuity with the history, folk habits and traditions of maintaining and enriching the culture of the peoples of Uzbekistan, recognition of education as an important tool of national development, respect for the history and culture of other peoples;

- teach to make socially significant decisions using forms, methods, and tools that allow creative thinking, prediction, alternative thinking;

It is necessary to determine the methodological, theoretical and practical basis for the solution of pedagogical, creative problems of the necessary level of training of teachers, first of all, in pedagogical higher educational institutions.

In his works written in the content of education, oriental thinkers emphasize the organization of the educational and educational process with the help of the following forms,

methods and methods, guaranteeing the expected results (they are also important in the process of training and professional development of today's pedagogical personnel):

- describe the essence of conversation, events and events, explain by order, give information;

- question and answer method of teaching;

- Reasoning, logical reasoning, personal reasoning;

- monitor the process of social or natural phenomena and events, conduct experiments;

- induction, deduction, algorithms input, analysis, synthesis, generalization; [5.84 P].

Proceeding from the above theories, we can say that it is important that every method and method used in obtaining knowledge has a conscious approach to the acquisition of education, regardless of what it is. Because it is known from the history of mankind that in every period of time people's consciousness and actions develop in accordance with this environment. So it is necessary to have enough intelligence intelligence to be educated today.

An educated person is a person who knows where to find what he does not know. G. Zimmel "in obtaining knowledge, the example is more useful than the rule." Isaac Newton (2.31 P).

It is known that humanity has such great opportunities in the section of consciousness, intelligence, that we are still unable to take full advantage of these opportunities. For example, judging by the definition of human science, intellectual is the most mature people use only 5-6 percent of their mental and active capabilities, which is the most important thing. Therefore, the period of paying attention to more people's self-esteem has come. So the most basic treasure is hidden in a person himself. Man is a part of nature, and he is also a spiritual responsibility before the universe, nature, society.

The power and inexhaustible source of enthusiasm of this fountain is in the spirit of the trigger, the sharp mind, the mind in the spiritually rich soul of man. In young people, the formation of these spiritual-human qualities is carried out on the basis of a system of developing sciences on the basis of a complex approach, the harmony of amylogy and theory.

The consciousness that motivates the spiritual and practical activity in the life of students and students is knowledge. This means that knowledge is not the result of the process, but the fact that knowledge is the process itself, but it is necessary to motivate the person to continue this activity again and engage in new activities. [6. 96 P]

It is important to educate them in the spirit of respect for values and to formulate the idea and understanding of our spiritual culture, which reflects our nationality in communication on the basis of cooperation pedagogy. Because without speech,



contemplation does not form. Young people who do not know their own history and customs and traditions will create the ground for the further development of such personnel tomorrow.

Spiritual culture has a living character in relation to material culture. Therefore, it is able to develop and operate independently. In this respect, spiritual culture plays a leading role in the development of culture and the development of society, and therefore performs managerial, directing functions. Every society, nation understands its own because of its spiritual culture, knows its needs and interests, its features and occupies its place in world history. Therefore, the development of a person's spiritual culture, spiritual consciousness is one of the most basic tasks facing society.

Spiritual culture also serves as a successor on all fronts between generations and the task of knowing the past. Thanks to spiritual culture, the culture of the past is mastered by the future generation.

Another important feature of spiritual culture is that it manages and harmonizes communication between people as well as between a person and the outside world. In this respect, categories such as behavior, culture of communication are important components of spiritual culture.

Today the concept of spiritual culture in the educational process is being understood in the course of the lesson to the students. The purpose of the project is to familiarize students with the modern achievements of pedagogical science, its initial sources and values, which are the basis of our national spiritual heritage, and on this basis to form their national outlook, to find a solution to their spiritual qualities.

Therefore, in the process of teaching pedagogical science, on the basis of the periodical demand, the student plays an important role in educating young people the spirit of tradition, tradition, value and respect for the legacy left by our great-grandfathers, which is our spiritual culture.

"The years of studentship correspond to the period of mature growth (17-23). During this period, a person is biologically harmonious, from the social point of view, he rises to the stage of maturity, physical vitality.

In this regard, we are referring to its development when we talk about the formation of the spiritual culture of the student's personality from now on.

It is necessary to take into account all the peculiarities of the educational process, the laws of the general formation of the student's personality, its changes in the higher educational institution in order to conduct pedagogical work in the higher educational institution, including the formation of the spiritual culture of students in universities. [8.30 P]

Farabi believes that the highest virtue that glorifies human dignity is "striving for perfection", professional, hardworking.

And the Firdavsi states that a person has intelligence, consciousness, that he does not have crazy qualities in his higher qualities. In his opinion, contemplation is power, nobility, courage, self-esteem, purity is the glory of man.

The thinker, as at that time, divides values into good and bad characterizations; when honesty, justice, self-preservation, kindness, humility, grace, steadfastness, prudence, generosity, tenderness, knowledge, entrepreneurship introduce singaroos into good qualities, when one pursues, cannot see, hostility, the desire to make a fortune on the account of others and achieve a high rank, only thinking of himself, betrayal, infidelity, etc., enter into the bad characterizations of human values.

As can be seen from the above points of view, the issue of human values has taken an important place in the philosophical views of our scientists of the past. Due to the fact that the issue of human values is one of the core issues of human life, in each period it acquires its own relevance and becomes the object of research, the subject of debates. [4.16 P]

Our national values and spiritual heritage, which reflect our nationality, are conveyed through communication in the process of education of our culture. This process requires the proper organization of communication. Because communication is the basis of the formation thinking the development of information exchange.

This is the treatment of the individual's attitude so that with its help, people begin to communicate, interact and be influenced by each other morally, aesthetically, culturally, politically and spiritually. Therefore, treatment as a social category is directly or indirectly involved in the essence of its application in all spheres of life.

The process of treatment is of two-sided nature; it is in its essence more comprehensive than simply the transmission and reception of information or data, it is a complex system of interaction of two or more people. During the dialogue, the national traditions of what nationality people belong to are felt in the culture of colloquialism. [4.76 P]

Further improvement of these situations based on the above recommendations and discussions is significant.

-Establishment of activities aimed at increasing the national culture of young people in higher schools;

- Formation of skills of respect for national values in them, taking control over the work of each student-student according to the modern demand;

-Holding many events in educational institutions under the slogan "national values-our honor" and through this awareness of national



identity in the minds of the reader's youth, formation of the national worldview;

-To closely familiarize young people with the Uzbek enlighteners and their immortal heritage, who contributed to the formation of our national spirituality, to promote their loyalty, loyalty, patriotism, supporting approaches in the realization of national identity in our practical life;

- Improving our national culture by enriching it with modern knowledge on the basis of modern knowledge.

Most of the young people who receive knowledge in higher education are potential parents, if they are young family owners. So, the existing national education in students who are increasing their knowledge in higher education is the ground for the strengthening of the foundation of tomorrow. Because, upbringing is like air. Even if you do not see it, you can feel the effect every second.

Today every age is necessary to work on its own and strive for modern knowledge. That is, it is important for him to grow his spirituality by taking modern knowledge and developing national modern education in himself, and to add his sense to the growth of the younger generation as a harmonious person on the basis of developed education.

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## USING OF THE MODULAR TRAINING IN THE HIGHER EDUCATION SYSTEM

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### ANNOTATION

*In this article discusses the technology of modular training. The author uses concrete examples to prove that the use of modular training contributes to improving the effectiveness of the training session.*

**KEYWORDS:** *module, didactic materials, pedagogical technologies, innovation.*

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### DISCUSSION

Currently, a number of developed countries have introduced and effectively used various new pedagogical technologies and their various methods. One of these technologies is the technology of modular training. As you know, the word "module" comes from the Latin word "modulus", which means "norm, measure". In education, the module study of the discipline divides the studied material into parts, and an exact system is developed for studying the material.

Modular technology is a person-oriented pedagogical technology. It is aimed at optimizing and ensuring the integrity of the learning process, improving students' knowledge and developing the educational sphere, managing the learning process and providing broad opportunities for the implementation of learning goals. Another advantage of this technology is that as an integration process, it is inextricably linked with the content of learning, implemented through the following set of technologies: problem-algorithmic, programmable, step-by-step formation of mental activity, full assimilation.

Modular technology has the following advantages:

- The compactness of educational material and the ability to divide it into blocks of modules;
- Integrated planning of training sessions;
- Organic coherence of learning stages;

- increasing students' interest in learning;
- Self-control and evaluation of student performance;
- The transition of the teacher's position from information and monitoring functions to consulting and directing functions;
- Compliance with the pace of learning and individual characteristics of students;
- Guarantee of the planned learning results of students (learning results);
- Variability of module components in accordance with the learning goals.

The use of modular technology is recommended when performing various pedagogical tasks (searching for a new one), together with a variety of applications to the content of training, as well as with the use of individual modules on the application of labor methods. In addition, this technology is focused on the formation of self-learning skills. It is necessary to divide the learning process so that it is interesting, stimulating to independent study of the material and the full manifestation of all the abilities of the student.

The teacher should use these technologies intelligently when building a didactic process, rationally defining the educational elements of the topic being studied based on the complexity and time frame. The process of using new teaching technologies in the classroom must be organized so that active participation of all students in the group



that is in the process of the training is one part of the students self-study academic material, then the rest of the group for full discussion. The teacher is the organizer, the leader, controlling training. The student should develop their own qualities in educational activities, freely express their thoughts on the topic of learning. Being very diverse, new pedagogical technologies provide a huge selection of methods for studying educational material based on the topic and objectives of the lesson.

The basis of modular pedagogical technology is a training module, which is compiled in accordance with the age, level of knowledge and degree of activity of students during the educational process. The training module can be given to students individually or in a group, depending on the creative abilities of the teacher. The training module contains: an element of learning activity, i.e. the number of elements necessary for students to learn, the didactic purpose of the module, tasks on the training material, indicators of task completion and the allocated time.

Let's consider some well-known features of module allocation: functional, elementary, organizational, technological, etc.

A module that is separated by function is often associated with multi-stage professional training. Each stage is a module or group of modules. This approach was first used at the University of Budapest, where specialization took place in two modules, economic and pedagogical, and the system was supplemented by a pedagogical module and an international relations module.

The technological approach was considered at technical universities in the United States. The module here is of a technological nature and is understood as a closed unit of the educational process.

You can also consider the concept of a module as a training module, which is a logically complete form of the content of the discipline, including cognitive and progressive aspects, the assimilation of which should be completed by the appropriate form of control of knowledge, skills and abilities formed as a result of mastering this module by the trainees.

The module contains cognitive and professional characteristics, so we can talk about the cognitive (information) and educational-professional (activity) parts of the module.

The first task is the formation of theoretical knowledge, the second function is the formation of professional skills on the basis of acquired knowledge.

You can see that the concept of module includes certain parts of the curriculum of courses, without specifying them. Analyzing the point of view of the authors, we can see that the concept of module is multifaceted.

The content of the module in this case consists of a number of elements.

1. Element composition (training elements). They define the educational content of the module.

Educational element - all objects of science that are selected for the purpose of study. The training elements are:

1) Objects, objects, things of a certain area of reality;

2) Phenomena, processes and interactions between objects;

3) Methods of human influence on these objects or phenomena, i.e. skills and abilities to operate with them in practice.

1.2. The main elements-the development of which is the purpose of training (to learn such and such a concept, learn to identify faults, learn the geometry of the cutter, etc.);

1.3. Auxiliary elements that accompany the main educational elements and facilitate their assimilation. They are used to update students' knowledge and skills, to provide hints and illustrations, to generalize and consolidate knowledge in practice, and to monitor educational activities.

2. Group educational elements.

2.1. Information training elements - a set of specific knowledge (concepts, representations) formed within a particular discipline (worldview ideas, concepts, generalizations, design and practical examples, knowledge of graphic images of the objects being studied, diagrams, diagrams, knowledge of methods of scientific knowledge and methods of practical activity, knowledge of laws, laws, theories, concepts, etc.).

2.2. Operational and intellectual learning elements - a set of mental operations performed on the studied objects for the purpose of mastering them and forming the basis of dialectical thinking formed by students (recognition, merging features into more complex ones, description of characteristics, explanation and display of properties, features of objects, formulation, decomposition (parsing an integral object into its component parts), structuring (establishing logical interdependence between elements and parts of the object), transformation, modeling, design, construction, schematization, forecasting, diagnostics, algorithmization, coding, solving creative problems, etc., specification, detail, illustration, control of performance characteristics of qualities, generalization, classification, etc.).

2.3. Operational and practical training elements - a set of General and professional skills formed by students: calculations related to technological equipment, design, Economics and production organization; measuring objects (electrical, optical, technological); graphic objects (reading drawings, kinematic, hydraulic, electrical, process diagrams, maps), making sketches and working drawings, detailing, drawing graphs and tables, processing materials, knowledge of equipment



and its management, commissioning, assembly and installation, organizational, communication.

2.4. Organizational and methodological elements.

These include everything that provides direction and regulation of students' actions: goals, forms of organization of educational activities, methods and means of training, means of control and correction, prescriptions, requirements, rules, algorithms, criteria, indicators of the quality of educational activities, etc.

Modular formation of the course makes it possible to redistribute the time allocated by the curriculum for its study by separate types of educational process, expands the share of practical and laboratory classes, as well as independent work of students. There is a need for new forms of lectures, in which, along with fundamental training, the student would receive the necessary skills and knowledge in the field of general methodology for the design and operation of equipment, the development of modern progressive technologies.

With a comprehensive review of the content of training modules, there is no duplication in the study of the subject, it is possible to reasonably introduce elements of scientific research and research laboratory work into the educational process.

In addition, the visibility of the course structure shows promising directions for their improvement and allows you to scientifically plan the work of the entire teaching staff. A modular approach to training will allow more fully meet the needs of a creative person in educational activities, since there will be a conscious interest in obtaining certain knowledge; the ability to change the specialization or get several specializations; change the levels of claims (bachelor, master), force or extend the study period as a whole with a known final goal; quickly respond to market conditions, individualize the learning process, co-create with the teacher, reduce the factor of dissatisfaction with the individual in education.

The introduction of the new system will automatically cancel the traditional credit weeks and inter-semester exams, since the student will work on an individual schedule and will be able to integrate information on a fundamentally new system, which will combine basic, special, professional knowledge and skills. At the same time, there will be no unnecessary overload of disciplines.

The modular structure increases the motivation for learning, since the student is interested in getting information, attending lectures and laboratory practical classes. It decides the issue of step-by-step control itself, moreover, it is interested in it as a certain step on the way to the final goal. The assessment of knowledge is usually rated according to the individual integral index. As a result of this assessment of knowledge, students' interest in

learning increases, and it becomes possible to accelerate the study of the discipline, which will immediately give the learning process an individual character.

There will be no stressful situations inherent in the examination system; the process of knowledge control will turn into interesting conversations, discussions on pressing problems of science.

Thus, the modular system of higher education and the intensification of the information and active learning process associated with its introduction, the system of knowledge control and professional aptitude can significantly increase the efficiency and quality of training of specialists, and ensure the purposefulness of creative activity of the individual.

Undoubtedly, the introduction of modular training will require a certain organizational restructuring of the educational process. It will concern planning the work of teachers, preparing the laboratory base for front-line work, forming a contingent of students taking into account the capacity of laboratories, developing appropriate methodological support, organizing control tests of knowledge. But the emergence of these problems should not deter the introduction of a new form of education in universities.

In conclusion, it should be said that the use of modular technology creates a positive interest in the study of new learning content, as well as develops the ability to search, acquire life experience, and overcome learning difficulties. Along with the modern development of science and technology, it is natural to see changes in the field of education. In this regard, when transferring data to a new generation, along with practices of training needs change, upgrade, according to the abilities of the student, classroom environment and focus on increasing students' interest in learning process. This is the main principle for achieving the quality and effectiveness of education.

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# THE ROLE OF NATIONAL CULTURE AND NATIONAL IDEA IN THE DEVELOPMENT OF COUNTRY

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## ANNOTATION

*The idea of national independence is an important achievement of the spirituality and culture of independent Uzbekistan. Spiritual and cultural progress in independent Uzbekistan. Reviving the identity of the Uzbek people. Features of formation of Uzbek culture. Cultural state of modern Uzbekistan. Reforms of the entire education system. Formation of a new generation of intellectuals. In this article highlights the role of national culture and national idea in the context of globalization of development country.*

**KEY WORDS:** *globalization, culture, idea, national culture, national idea, development, modernization and integration, spiritual heritage.*

## DISCUSSION

Today, it is not the globalism itself, it is the science, technology, technology that is coming into action, such factors are the “fruit” of the human potential, and they fully express the essence of civilization with the possibilities that humanity has not yet achieved, its effects on development and spiritual life. It would not be an exaggeration to say that these factors that bring globalism to action are the civilization that humanity has achieved today. Today, simply by means of information technology, we can get acquainted with the event workers in another part of the world, having the necessary information.

The improvement of the national culture in the conditions of globalization, its importance in the current global processes and their ideological and ideological justification are linked. Accordingly, the analysis of the content and essence of ideological and ideological processes in the world, their features of influence on the life and development of our people is important directly in the process of modernization and integration of national culture.

It can be said that today it is impossible to imagine any sphere of our life without modern information technologies. In particular, television is one of the greatest discoveries of the twentieth century, but also the most influential in the media, according to its audiovisual nature. Television and the internet have been ranked as an effective and influential medium of information exchange as well as communication process. Audiovisual tools have been following us throughout the day, setting our

lifestyle apart from our vacations as well, informing, educating, and educating about world events. The scale, shape, idea and quality of information disseminated through these means cause the perception of a modern person, sometimes a change in his worldview, cultural views, the formation of an unusual attitude to values.

When uniting representatives of various nations and nationalities living in our native country around great goals, the idea of national independence, which is the mainstay of the spiritual and social life of society, is of great importance.

Although the idea of national independence is defined in scientific literature as a “product of national thinking”, this concept directly concerns not only one nationality, but also the life of every person living in our sacred country as their Homeland, regardless of their nation, social authority and faith.

In the book of First President Islam Karimov “High spirituality – invincible power” - this is stated as follows: “When we say national idea, we can imagine the most cherished dreams and aspirations, faiths and hopes of each nationality, passed from generation to generation from time immemorial, valued for many centuries, turned into life requirements and spiritual needs.”

Today, large intensive campaigns are being conducted to promote the national idea among a wide multi-layer population. This is a great achievement of the intelligentsia and industry representatives. The implementation of the national idea of independence is directly linked to the development of education at the level of modern requirements. Based on this, new



schools, academic lyceums, and professional colleges are being built and put at the disposal of young people in our country. In these educational institutions are brought up spiritually perfect, devoted to the traditions of their ancestors, always ready for the calls of the Motherland and the future.

The main goal of the idea of national independence is to strengthen independence, build a free and prosperous homeland and a free, comfortable life. In the exercise of such good intentions, it is considered a sacred duty of every citizen.

However, in today's era where information and communication technologies are rapidly developing and being recognized by experts as the "XXI century - information age", various information is at the same time a source of great opportunities for humanity, but it is also literally. This influx of information strongly influences not only the spiritual world of young people, but also the physiological and psychological state. It is known that both spiritual and physical development of a person is realized by the nature of a person and by external influences. But the normalization of these effects leads to a violation of the functions of the internal organs of a person and the occurrence of various defects, and even to an exacerbation of the disease. Unfortunately, it is a pity that information that serves to increase the scientific potential of a person, to grow his worldview, to enrich his spiritual world is also not affected by such a harmful effect.

As if there are two sides to the whole thing, it is worth mentioning not only the negative sides of modern information technology, but also the mostly positive aspects. In particular, the positive aspects of modern information communication technologies in relation to the modernization and integration of national culture can be explained by several factors such as:

- Various information coming from the internet is of great importance in the modernization of the national culture and in keeping with the times of this country;

- Familiarity with the culture of other nations, including through television, films of different countries, entertainment shows;

- Enrich our national culture by sharing ideas, experiences with the culture of other nationalities through various festivities, forums, get to know our culture to the world;

- Also, the penetration of various printed media, newspaper and magazines, almanacs, in particular, artistic literature, in turn, does not affect the improvement of our national culture.

Simply put, modern information technology is an important process in the modernization and integration of national culture. It is necessary to prevent its negative aspects, including the process of transformation of the national culture, to promote the original national characteristics of our national

culture to the world. Of course, even in glorifying the world, bleaching and showing the aspects that can be considered an example of homophony with modernity is evidence of the attention given to this area of the life of this society. The rational use of these depends on the intellectual potential, spiritual world, faith, power and man.

We need to apply them consciously and purposefully, that is, in the form of national upbringing, enlightenment, in the formation of national pride and feelings of patriotism in young people, in an increasing scale of the impact opportunities of today's global modern technological means.

It performs a number of functions according to the position and place of the national culture in the life of the society:

1. National self-awareness, strengthening of national characteristics and mutually beneficial relations between different nations;

2. Protect the national worldview and national consciousness from encroachments on the interests and development of the nation;

3. Social and historical experience as an inheritance from generation to generation;

4. Along with the "personal" interests of the nations living on Earth, there are commonalities that unite them, and the formation of the world as a whole as an important part of the worldview of the peoples of the world.

Today, there is a rapid rapprochement of cultures of different nations and peoples around the world with each other on the global scale under the influence of globalization. And information serves as an important means of communication, and people are also becoming a powerful weapon of their daily lives.

Our people, especially our young people, enjoy world cultural and spiritual achievements. It enriches its knowledge, spirituality through the internet and various other sources of information. This is there is reality. In our press a lot and an abscess is written on this site. But the problem is that such positive changes, as long as the opportunities do not automatically lead to kindness, spiritual growth. This can be seen on the example of behavior, behavior that contradicts our natural, National spirituality, some of which is growing in our society, especially among young people, to the level of value.

A number of negative consequences of global informatization are also manifested in the impact of the global economic and political processes. In particular, information is now being transformed by certain political forces into a means of achieving charitable goals.

One of the priorities of our country is the issue of spiritual and patriotic education of young people. As you know, the head of our state Shavkat Mirziyoyev has put forward five important initiatives to organize social, spiritual and educational work.



Increasing the interest of young people in music, drawing, literature, theater and other forms of art will contribute to the realization of their talent.

Today we are educating the younger generation in the spirit of the national idea. The national idea is based on the idea of individual freedom. A person who knows his rights, who relies only on his own strength and capabilities, who is able to independently assess events, coordinate personal interests with the interests of society will be able to correctly assess the principles of the national idea.

Ridding society of the mood of indifference, dependency, bribery, as well as raising a highly moral, spiritually rich, socially active, physically strong generation increases the effectiveness of our national ideology and our aspirations in building a democratic society.

The national idea is based on traditions and customs, high spirituality of our people. It is consonant with the ideas of justice, equality, freedom and is the support of the nation and people. As you know, the philosophical basis of the national idea is made up of pearls of world philosophy and classic examples of national intelligence. It is no accident that our President Sh.Mirziyoyev pays great attention to the study of the priceless heritage of our great scientists, poets, and thinkers, whose activities are the spiritual wealth of our people. The national idea connects the past and future of the people, serves to realize their dreams.

In accordance with the action Strategy, taking into account the identified priorities, the issue of developing the national idea is relevant. The national idea should serve the prosperity of the Motherland, preserve peace, and raise the standard of living of the people. Currently, the leaders of our state, scientists, teachers and mentors are doing a lot of work that contributes to the revival of national consciousness, the formation and development of the national idea. Now the main task is to make sure that our people, enriched with knowledge, are spiritually elevated, strengthen their faith in themselves, in the ability to change their lives for the better. The process of education is an endless process, and therefore for the education of young people need teachers who are creatively suited to each lesson, which always has educational elements. This can be special texts about great people, Patriotic poems, methodical games, reading books, songs, skits, excerpts from movies, etc. Each topic should interest and spark young people. Not only teachers are involved in education, but every parent, mahalla. Therefore, love for the Motherland and the native language must be instilled first of all in the family. Patriotic education should be promoted by broadcasts, films, and videos.

Since independence, we have had the opportunity to turn to the sources of our culture, to the rich spiritual heritage, to perceive and develop all the best that is in our historical past. An in-depth and comprehensive study of Eastern civilization, cultural

and spiritual wealth of previous generations opens the opportunity to better understand the culture, lifestyle, customs and traditions of our ancient people. Studying the history of the people, we try to return to the treasury of national spirituality all the names and works of our ancestors – thinkers, scientists, creators of beauty.

At present, humanity is faced with problems that do not take into account borders. These include the following: wars, environmental disasters, spiritual poverty, drug trafficking, and terrorism. The world is undergoing a process of globalization, an acceleration in the intensity of the flow of information, and global changes associated with universal technologies. The ideology of national independence will be improved and updated in accordance with the development of society. Certain norms and requirements that have fulfilled their purpose will make room for new, relevant ones. The ideology of national independence is not a dogma, not frozen truths, but the result of constant renewal, the work of thought. It is United in its basis and inviolable, but at the same time it is constantly improving, reflecting the development of society.

The struggle for the mastery of a new ideological space, for the consciousness of millions of people is becoming more and more urgent. There are certain political forces and movements that seek to expand their sphere of influence by ideological means. Therefore, only a strong national ideology can protect society from such encroachments. The formation of ideological immunity in people is an important task. Each generation has its own unique immunity. Ideological integrity and resistance can only be ensured by forming a human immune system. This is primarily knowledge that correctly and adequately reflects reality and serves spiritual growth and progressive development of society. This knowledge should be linked to the interests of the country and the people, the priority of universal values.

Secondly, it is a system of values formed on the basis of knowledge. The system of values of the individual, nation and state determines the possibilities of ideological immunity and serves as a shield for ideological aggression. Third – there are clear and definite goals in the socio-economic, political and spiritual spheres.

Therefore, every citizen, people and state must have clear goals and firmly, unshakably move towards them. In the formation of such an ideological immunity, an important role is played by ideological prevention. It includes a set of measures aimed at preventing the influence and elimination of alien ideas, a set of ideological and educational, political, economic, social, spiritual and moral measures carried out by social institutions. The creation of ideological immunity in people by rooting in their minds the ideology of national independence is a requirement of the time. This is the concern of more



than one day. This requires the activity, perseverance and consistency of every citizen. The implementation of these goals will further increase the capabilities of Uzbekistan, ensure the creation of a great state, and strengthen the faith of our compatriots in the future.

The main goal of the national idea is to unite the people to achieve a great future and great goals; to inspire every citizen of our country, regardless of their national, linguistic and religious affiliation; to live with responsibility for the happiness of the United Fatherland, in accordance with the priceless heritage of their ancestors, national values and traditions, to educate comprehensively and harmoniously developed people, to encourage them to creative activities. As a combination of political, legal, moral, aesthetic, philosophical, scientific, environmental, religious and demographic views on the transformation of Uzbekistan into a great future, the ideology of national independence is at the same time an effective, strong ideological weapon and an ideological factor that strengthens the faith of the people of Uzbekistan in the future. To do this, it is necessary to strengthen the will of our people, especially young people, to educate them as independent-minded, harmoniously developed people. Develop their self-awareness, memory of the sacred values of their ancestors and respect for them.

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## THE STRUCTURAL ANALYSIS OF PRIMARY DISABILITY OF EMPLOYABLE POPULATION IN FERGANA REGION



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### ABSTRACT

*The article dealt with the structural analysis of primary disability of employable population in Fergana region. The main causes of disability have been highlighted by classes of diseases and their distribution by survey. The specific position of the primary disability of employable population have been analyzed by place of residence, age and gender groups of this contingent.*

**KEY WORDS:** *disability of employable age, level, specific position, class, diseases, analysis, dynamics, the spread, structure.*

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### INTRODUCTION

The actuality of the problem of disability and disable people is determined by a large number of people in this category in the social structure of society [1, 3, 4, 7, 8]. According to UN experts, people with disabilities account for 10% of the total population of the Earth [2].

S.N. Puzin (2006, 2008) noted that the disability indicator characterizes social ill-being of population, reflects social maturity, economic

viability, moral development of society and violation of relationship between disabled person and society [5, 6].

One of the priority directions of the state health policy is preventing and strengthening the health of employable population, on which the country's socio-economic development depends. The disability of employable population is an actual problem for not only public health and social protection authorities, but also for executive and

legislative bodies at all levels of the government hierarchical vertical [3].

At present, disability among employable population is one of the most urgent public health problems, which directly affects socio-economic development of the country [4].

However, this problem has been insufficiently studied, and comprehensive in-depth study the formation of disability of employable population in the Republic of Uzbekistan, particularly in Fergana region, has not been carried out. Therefore, the condition of this problem is one of the main characteristics of the country's public health and social well-being.

The aim of the research is to study the structure of primary disability of employable population in Fergana region.

## MATERIALS AND THE RESEARCH METHODS

Object of the research is the set of first registered disabled people of employable age in Fergana region.

The research is continuous. The study volume amounted to 4013 people of all newly registered disabled people of working age in 2017.

The material for the study was the official statistical data of the Republican Inspectorate of Medical and Social Expertise under the Ministry of Health Care and the reports of the State Statistics Committee of the Republic of Uzbekistan.

The unit of observation is the first recognized disabled person of employable age.

## RESULTS AND DISCUSSION

The number of newly recognized disabled adults in Fergana region amounted to 4,013 people in 2017.

The distribution of primary disability by age groups of employable population observed as follows: primary disabled people aged 15-are 562 people (14.0%); in the age group of 17-19 - 70 (1.7%); in age group of 20-24 - 173 (4.3%); in age group of 25-29 - 280 (7.0%); in age group of 30-34 - 380 (9.5%); in the age group of 35-39 - 410 (10.2%); in the age group of 40-44 - 446 (11.1%); in the age group of 45-49 - 501 (12.6%); in age group of 50-54 - 652 (16.2%); in age group of 55-59 - 539 (13.4%). (Figure 1.)

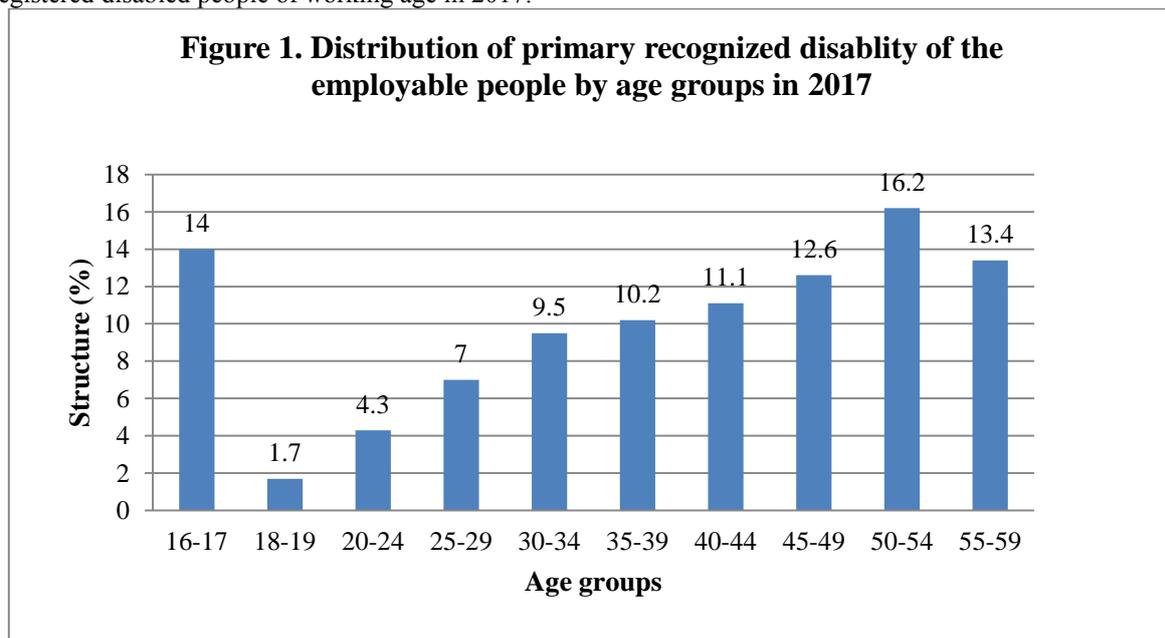


Figure 1 shows, the number of primary disabled people among the whole employable population was 562 people (14.0%) in the age group of 16-17, and subsequently there is a sharp decrease in the proportion of primary disability in the age group of 18-19 and equals 70 people (1.7%). In our opinion, an increase in the proportion of disabilities in the age groups of 16-17 may be due to subjective factors, because children with disabilities under 15 get disability benefit despite the disability level.

From 16 age, the disability level are taken into account for receiving benefit.

For the above-mentioned reason, among children of 16-17 age, the appeal to medical re-examination is sharply increased for determining disability level.

Consequently, the proportion of people with disabilities sharply decreased between 18-19 ages, because the majority population of this age group, when they were aged 16-17, had already been re-examined for disability and the extensive indicator of



disability gradually increases between age group of 50-54.

The highest proportion of primary disability among employable population are the disabled people of 50-54 age and 55-59, respectively 16.2%

and 13.4%. This may be explained by getting disability pension on the eve of retirement age.

It should be noted, it is also characteristic of the population by place of residence (urban and rural areas) and gender characteristics of the population in Fergana region (Table 1).

**Table 1**  
**Age and gender distribution of primary registered disabled people by place of residence in Fergana region for 2017**

Age groups	Total number		Including							
			By place of residence				By sex			
			Urban		Rural		Male		Female	
	Absolute number	%	Absolute number	%	Absolute number	%	Absolute number	%		
15-16	562	14,0	208	13,5	354	14,4	316	13,0	246	15,5
18-19	70	1,7	23	1,5	47	1,9	40	1,6	30	1,9
20-24	173	4,3	57	3,7	116	4,7	117	4,8	56	3,5
25-29	280	7,0	88	5,7	192	7,8	170	7,0	110	6,9
30-34	380	9,5	137	8,8	243	9,9	193	8,0	187	11,8
35-39	410	10,2	149	9,6	261	10,6	211	8,7	199	12,5
40-44	446	11,1	180	11,6	266	10,8	240	9,9	206	13,0
45-49	501	12,6	192	12,4	309	12,5	244	10,1	257	16,2
50-54	652	16,2	280	18,1	372	15,1	355	14,6	297	18,7
55-59	539	13,4	233	15,1	306	12,4	539	22,2	-	-
<b>Totally</b>	<b>4013</b>	<b>100,0</b>	<b>1547</b>	<b>100,0</b>	<b>2466</b>	<b>100,0</b>	<b>2425</b>	<b>100,0</b>	<b>1588</b>	<b>100,0</b>

Particular interest rises in the analysis of the disability distribution by class of diseases caused disability.

The structure of primary disability among people of employable age have been studied in Fergana region for 2017. (Table 2)



**Table 2**  
**The structure of primary disability of the employable people by class of diseases for 2017 considering the rank (%)**

No	The class of diseases	Absolute number	%	rank
1	Mental disorder and behavioral disorder	618	15,4	1
2	Malignant neoplasms	524	13,1	2
3	Diseases of the nervous system	482	12,0	3
4	Diseases of the blood circulatory system	428	10,7	4
5	Traumas, intoxication and some other consequences of external factors	325	8,1	5
6	Diseases of the digestive system	316	7,9	6
7	Diseases of the musculoskeletal system and connective tissues	250	6,2	7
8	Diseases of the endocrine system, nutritional disorders, metabolic disorders	222	5,5	8
9	Eye diseases and appendages of eye	181	4,5	9
10	Congenital anomaly, (development defect), deformation and chromosome disorders	151	3,8	10
11	Tuberculosis	114	2,8	11
12	Diseases of the urogenital system	107	2,7	12
13	Diseases of the respiratory system	106	2,6	13
14	Diseases of ear and mastoid bone	42	1,0	14
15	Blood and hemopoietic organs diseases, individual disorders involving immune mechanism	42	1,0	15
16	Other diseases	83	2,1	-
	<b>Totally</b>	<b>4013</b>	<b>100,0</b>	-

The diseases of mental and behavioral disorders are in the first rank- 15.4%; the second rank is disabilities caused by malignant neoplasms - 13.1%. The third rank is disabilities caused by the diseases of nervous system, the specific position of which is 12.0%. Then disable people with circulatory system diseases take the fourth rank and their specific position is 10.7%.

The disability caused by traumas, intoxication and some other consequences of external causes make up 8.1% 5th rank. The sixth rank is disabilities caused by digestive diseases, their share is 7.9%.

Diseases of the musculoskeletal system and connective tissue account for 6.2%, this contingent is ranked 7th and the eighth rank is the disabilities caused by endocrine system diseases, nutritional disorders, metabolic disorders, the specific position of which is 5.5%.

The ninth rank is the disabilities caused by diseases of eye and its appendages; their share is 4.5% of the total.

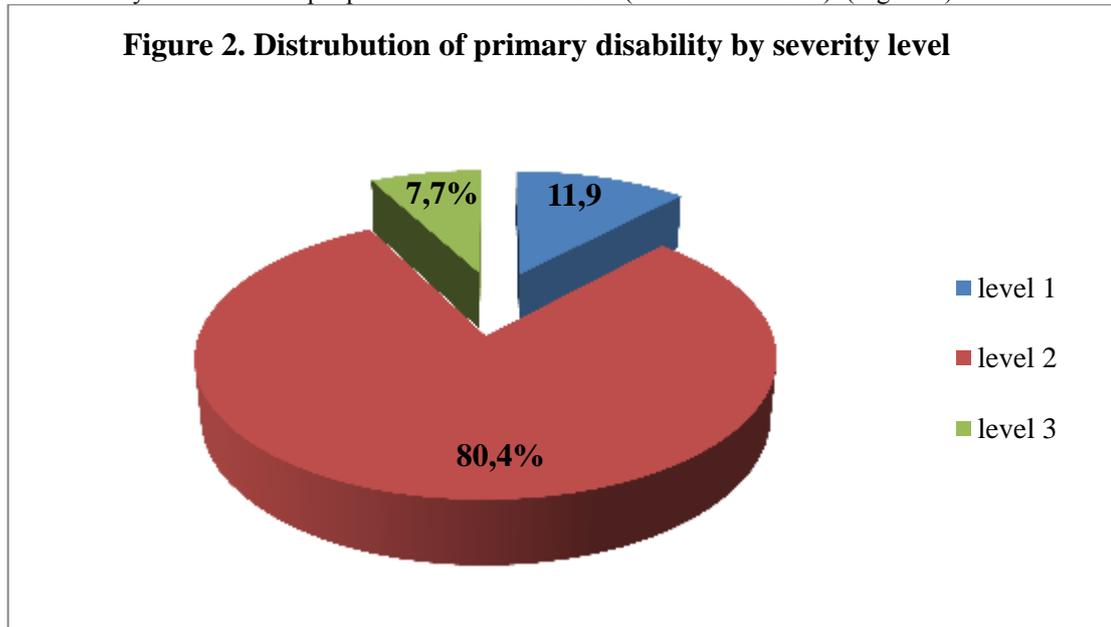
Next, the tenth rank is the disabilities caused by congenital malformations (deformities), deformations and chromosomal abnormalities; the specific position is 3.8% of the total.

The eleventh rank is the disabilities caused by tuberculosis diseases; the specific position is 2.8%. Then the twelfth rank is the disabilities caused by diseases of genitourinary system, the proportion is 2.7%.

The thirteenth rank is the disabilities caused by respiratory diseases, their specific proportion is 2.6% and the fourteenth rank is the disabilities caused by the diseases of ear and mastoid process and blood diseases, hemopoietic organs and individual disorders, their specific proportion is 1.0% of the total.

Studying the structure of disability by severity shows the adversity with disabled people of the most severe levels - 1 and 2, correspondingly, 477 and 3228 (11.9% and 80.4%). (Figure 2).

**Figure 2. Distrubution of primary disability by severity level**



The above mentioned shows that the disability of employed population in Fergana region is an actual problem.

## CONCLUSIONS

1. It was found that in the age group of 16-17, the number of primary disabled people is 562 (12.9%), and in the age group of 18-19 there is a sharp decrease in the proportion of primary disabilities and ranks 70 people (1.6%), then, in subsequent age groups, gradually increasing to 50-54 years, the extensive disability rate reaches 14.9%.
2. The analysis of the distribution of disabled people by class of diseases and the diseases caused to disability showed that more than half of the percent (51.2%) in the structure was taken by disable people with mental and behavioral disorders, malignant neoplasms, diseases of circulatory system and nervous system.
3. The most adverse case is with disabled people of the most severe levels: group 1 and 2, and this indicator makes 88.1% of all cases of disability.

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## SOCIO-SPIRITUAL CONDITIONS FOR THE FORMATION OF ISHAKHAN IBRAT'S WORLDWIDE

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### ANNOTATION

*The article describes the social life of the Jadid thinker Ishakhon Tura Ibrat with his views in his works. He spoke about the unjust society in which he lived, the debt of ordinary people, the educational process, the tyrannical policies of the khans, and the colonial policy of Tsarist Russia. At the same time, the influence of the vices that came with Tsarist Russia on the morale of the people is shown.*

**KEYWORDS:** *Jadid, spiritual heritage, social environment, enlightenment ideas, spiritual education, russification.*

### DISCUSSION

During the period of independence, as in other areas, great attention was paid to the restoration of our national history, the names of our historical figures, the justification and perpetuation of their names. In the age of globalization, the threat of "popular culture" to national and spiritual values is growing. And the fact that our national spiritual values, the exemplary life of our ancestors, their rich spiritual heritage are preserved, preserves and enriches them and passes them on to future generations.

The role of the modern thinker Ishakhon Ibrat is significant. We can mention his efforts in the socio-political sphere. As an advanced pedagogue, the Jadids did a great job in educating the children of the people, teaching them secular knowledge and awakening the spirituality of the nation.

The article describes the socio-political environment of the time of Ishakhon Ibrat, one of the prominent representatives of the Jadid Enlightenment. At the same time, his socio-philosophical views on society are analyzed. As the President Shavkat Mirziyoyev noted: "Our great ancestor did not choose the nickname Ibrat for nothing. His selfless life for the development of the motherland and the country remains a real example not only for his time, but also for all of us today". [1]

It is a well-known fact that the invasion of Turkestan by Tsarist Russia worsened the situation of the common people, and that one tyrant was two. At that time, the main goal of the tsarist officials was to plunder the country, to make more money in time, and to lay the groundwork for such evils as bribery

and violence. According to historians, capitalist relations with Tsarist Russia led to the enrichment of the rich and the enslavement of the poor. For Russification, which was the main means of subjugating the country, fertile lands began to be allocated to the population who had been resettled from the central regions of the empire. At that time, "loan" debts had to be increased by 25-60%. Those who are engaged in cotton trade can get a loan of 8%. Apparently, such a loan was not given to an ordinary farmer. Ishaqhan Ibrat says about this:

Mundin qadim xalqda bor erdi iqtisod,  
Kam erdi xalq ichra tu yaxsh ila fasod,  
Qilmay bu xalq ilmi hisob ila ijthod,  
Iqbol yovar o'lmadi ham topmadi murod.  
Keldi bu xalq boshiga birdan baloyi qarz,  
Bo'ldi tamom xalqi jahon muhtaloyi qarz  
Farg'onada bu vaqtda beqarz kimsa yo'q,  
Ming so'm aqalli qarz bo'lib, bo'lsa qorni to'q.  
[2,51]

(Meaning): The ancient people had an economy,  
There was little corruption among the people,  
At the expense of this national science,  
Did not survive and find luck.

It came as a sudden calamity to the people,  
The people of the world are in debt  
There is no one in Fergana at this time,  
Has a thousand soums is a reasonable debt,  
and the stomach is full. [2,51]

(Apparently, the condition of the local population was very deplorable. At that time, the majority of the population was heavily in debt, and the people were accustomed to the plight of the social environment.)



Commenting on Tsarist Russia's colonial policy, Alfred Riber, a Western scholar, said: "The Tsarist government in the late 19th and early 20th centuries focused on its policy of assimilation of peoples abroad. There was Russification." [3.]

At the same time, Ishakhon Ibrat lamented the harmful effects of harmful practices on the spiritual upbringing of the people at that time.

Jahondin aysh izlab, ahli haqsin olmading ibrat,  
 Hama kori jahon borini etding, topmading nusrat.

Sanga tanbih emasmu mu'taqid dunyoga u shaddat,

Behisht taylab bino ko'rmay o'ziga soldi haq furqat.

Uzun umri-la olam ahlig'a shoh o'ldi ul Qorun,  
 O'lib ketdi, hama dunyosi qoldi, oldimu muhlat.  
 Xudodin yoki xat oldingmu o'lmaslikka dunyoda,

Qo'lingda bo'lsa ko'rsat o'lmasingga bir xattu xujjat. [4,55]

(Meaning):

You did not set an example for the people of the world by seeking madness,

You did everything in the world, you did not find help.

Is it not a rebuke to you, it is a blow to the believing world,

It was a real pleasure to see Paradise without seeing the building.

Long live the king of the world, Qarun,  
 He's dead, he's dead, he's dead.

In the world, whether you receive a letter from God or not,

If you have it, show it to me so that I don't die. [4,55]

(In these verses, Ishaqhan Ibrat emphasizes that the people are indulged in entertainment, that the moral upbringing of the people is corrupted, and that no one who is greedy for wealth can still take away his wealth.

In several of his views, Ishakhon Tura Ibrat implies the destruction of the moral and spiritual environment of society and the occupation of Central Asia by the Russians as a major factor. Therefore, the words of the leaders of the nation, such as Ibrat Domla, were very important. That is why the devotees of the country, such as Ishakhon Ibrat, burned the people not to succumb to various vices in order to make them educated and enlightened. In Namangan region, they were familiar with the activities of all schools that opened in the early twentieth century. By 1908, the number of schools in the valley was about 30.

Compared to the sources of that time, it was more in the valley than anywhere else, which was the result of the work of the country's advanced people. Ishakhon Ibrat also began to pay more attention to the establishment of a library and a school, not to be

indifferent to the future of the people. The role of the book in the development of human spirituality in the understanding of national identity is invaluable. Realizing this, the enlightener began to open a library in his house. At the initiative of Ishakhon Ibrat, a book-sharing and reception book was organized in the library.

Ishakhon Ibrat, as a historian, pays special attention to the description of the attitude of the beys and khans to historical processes in his work "History of Fergana". In 1842, on the eve of the conquest of the Kokand Khanate and the impending Russian invasion, Amir Nasrullo pursued a policy of disunity: "When the khan (Muhammad Alikhan) was tied up and taken to the Emir, and the Emir immediately sentenced him to death, a wise man named Abdusamad Naib, one of his ministers, said to the Emir: The Amir said, "What is the word?" He said, "Holo Huqand is dead. Fergana is a big country. How many soldiers and soldiers have been killed? It is still a local danger for Russia to come." The khan would swear an oath, repent, submit to Huqand, submit to Bukhara, and a property would be a shield for the enemies who came to us, "he said, not agreeing with the Emir." [6,77]

In his social views, Ishakhon Ibrat believes that the development of society, the rise of culture can be achieved through science. He describes the developed city as follows: "Cultural cities will be such that at the present time madrassas and schools of various kinds will be in their cities, which will protect them from various sciences and professions, great doctors, doctors and oppressed tyrants. Whatever and all kinds of crafts are woven, even if the tools are in their own cities, and there is no need for other people, and in that city factories, fire-ships, and interest-bearing and tanneries are built with electricity. [7,112-113]

It is known that the Turkestan Regional Newspaper was the first newspaper to be published in Russian in order to accelerate Tsarist Russia's colonial policy in Central Asia and to Russify the local population. The Jadids did not ignore the fact that the newspaper published highly reactionary articles on changing the ideology of the people. Therefore, they began to use newspapers for their own purposes. Enlightenment ideas are the basis of exemplary journalism. In all his articles, he tries to draw the attention of others, raising the concerns of ordinary people. Of his more than 45 articles, 35 were published in the Turkestan regional newspaper. Ibrat himself worked as a people's judge in the villages of Turakurgan and Khanabad for more than 20 years before and after the October coup.

A number of Ibrat's articles are aimed at exposing corrupt officials, local officials, and fifty leaders. Tsarist Russia expresses strong dissatisfaction in its "pologenesi". He is dissatisfied with the fact that the fate of the people has been



handed over to bad, vile and ugly people: "It is mentioned in Chapter 223 of the Pologeny that there should be a person (judge) not younger than 25 years old who has not paid a fine of more than thirty soums." He did not say whether he was a scholar, a fool, or a wise man, or who knew the Shari'ah, or whether he knew the rules. "If a balloon falls a lot, it will write exactly what it does. No matter what they do, if they do it in accordance with the polytheism, it does not mean a mullah who knows the Shari'a in the polynomial." If you do not think, friend, you will die." [8]

These views of Ishakhon Ibrat were a strong criticism of the working people of that time, the colonial government, the vices of society, so during the colonial period of Tsarist Russia, such articles themselves required great devotion to the Enlightenment. It was at that time that conditions were created for the emergence of people like Ibrat and the work to raise the morale of the people. Ishakhon Tura Ibrat negatively acknowledged the role of religion in the deplorable state of the society at that time and criticized the activities of the followers of the old creed in awakening the nation's spirituality, saying: Everyone knows the truth. Who will prevent and correct it? ...preaching in mosques in all parts of the Islamic world. Turkestan and Bukhara alone, why not. The morality of the people is being violated day by day. Ori, we are not understood by the poor common people in the mosque "Salat Masudi"... When the ulama is changed, the nation will definitely reform". [9]

Ishakhon Tura Ibrat differs from other modern thinkers by the breadth of his knowledge, the depth of his enlightenment ideas, and his ability to think meaningfully in all spheres of society. This can be explained by the fact that Ibrat's trip abroad was acquainted with the culture and language of different peoples, he read many Western works. In the current era of globalization, as Uzbekistan enters the world integration, we realized how important it was to study foreign languages and history of our great ancestor a century ago. In his works, Ishakhon Tura Ibrat called on the people to wake up from their slumber, to develop new methods of schools and to study secular sciences.

In the words of Nodira Mustafayeva, a well-known scholar and candidate of historical sciences, in the activities of the enlightened Jadids "... training of national specialists, satisfaction of these needs through modern educational institutions or sending them abroad for education, radical reform of educational institutions, in-depth teaching of natural sciences in the field of education, educators of the nation – women. The need to learn more languages, to expand cultural and educational activities in order to achieve enlightenment, modern education and development was identified as the main topics." [10,165-166]

In conclusion, we can reaffirm that the social environment of the time of Ishakhon Ibrat had a great influence on the worldview of the thinker. Realizing the impact of colonial policy on the social, economic and spiritual aspects of the people, he encouraged the people to perfection and carried out practical reforms. The ideas put forward in the works created by Ishakhon Ibrat played an important role in changing the spiritual image of the people. The rich spiritual and scientific heritage created by our ancestors still leads the people to spirituality and enlightenment. Therefore, it is very important to educate the current generation not only in the activities of the Jadids, but also in the rich heritage of our other great scholars.

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## THE PRESTIGE OF USING AUTHENTIC MATERIALS IN TEACHING FOREIGN LANGUAGE CLASSROOM

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### ABSTRACT

*This article argues about the essence of using authentic materials during the process of educating foreign language in English environment. It is undoubtedly true that the usage of authentic materials is regarded as one of the rudimentary needs of communicative way or approach, especially, the most valuable objective of that is to make language the process of acquiring as reliable as possible to real life as well as real conversation, additionally, an essential situation for the establishment of cultural consciousness and the specific communicative competence which is cross-cultural, that is extremely significant for an overwhelming majority of language learners, particularly, students. This very article portrays special arguments of the importance to involve authentic foreign language content into the process of learning, the prestige of which can not be represented without any kind of artificiality. Furthermore, the prestige of using authentic materials in educating foreign language classroom is discussed. This article can support how to evaluate truly students` abilities. Eventually, it can be concluded that authentic materials bring real-life conditions into classrooms and equally support both teachers and students reach their ambitious goals during the educating process along with acquiring foreign languages even though authentic materials may include complicated grammatical structures as well as unfamiliar vocabulary.*

**KEY WORDS:** *Authentic materials, intercultural competence, communicative competence, specificity, encouragement.*

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### INTRODUCTION

In recent years, the requirement for capacities or skills in verbal as well as written form of foreign language communication for individual and professional intentions is an expandly depicted fact. Owing to the fact that nearly the whole contacts, such as, social, political, economical and personal ethnics. The primary aim of foreign language teaching is flourishing the social English environment for numerous students so as to widen their horizon successfully within intercultural communication. Moreover, acquiring vocabulary and grammatical structures of a language comes in handy with creating a passive language like a tedious environment who are engaged in learning

various foreign languages. That is to say that it may not be enough for full communication. This is mainly because at this time most of learners attempt to enlarge their vocabulary and to broaden their outlook through communicating with native speakers or native English teachers. It is evident that today the vast majority of people, who are engineers, teachers, doctors and others, have the possibility to travel and recognizing the culture of other countries, also they have conveniences of using social networking systems, for example, Twitter, Instagram, Facebook by the help of the Internet access, or else watch the types of films or listen to music in a foreign language, of course. What is more, most of bookworms read a number of



foreign popular books, journals, magazines and so on. It is stated that nowadays a large number of teachers purpose at educating students a foreign language as a means of communication. Up-to-date methods of teaching foreign languages are based on a communicative method, which means that the principal objective of acquiring language is to utilize it in practice[1].

## MATERIALS AND METHODS

So as to achieve this goal, it is extremely necessary to use authentic materials in teaching foreign language classroom. It is undeniably true that this kind of materials or else sources is thoroughly beneficial to realize the real person of English one as well as it will be helpful to motivate any language learners, such as students. Certainly, at that time numerous students who are thinking about enhancing their verbal and writing abilities through using authentic materials autonomously. It is evident that a lot of definitions which are presented about the authenticity by a number of scholars, linguists, pedagogies as well. One of the most famous ones who is named Jeremy Harmer`s point of view: “the reality of some materials or sources is completely necessary to comprehend the language in a real manner, namely authentic materials are written for native speakers` language with the real goal” [2].

Furthermore, from Morrow`s perspective: “overall, the text which is authentic is stretch of language reality, produced or performed by real writers or else speakers, particularly, for real audiences as well as designed to convey real messages of some types, like texts that are written for the purpose of communicating information”[3].

It is known that there are numerous merits of utilizing authentic materials during the process of educating foreign language. One of the most significant ways which is called “inspiration”, encouragement” or it is stated that “motivation”, namely authentic materials are vibrant, more real-life as well as more convincing, which encourage students to further education maximally. It is evident that this kind of materials serves as a special and crucial bridge between the English environment and the real world. According to Gebhard`s point of view: “even though for educating materials there are unlimited resources. Also, it is stated that for most of persons who live in English countries, it is commonly a primary success of them that are enable to search the creativity of students”. In order to use authentic materials, it possesses a wide range of peculiar benefits:

– *the process of learning is not based on repeating similar activities every lesson in a*

*traditional way, yet on a more efficacious and fascinating approach that puts up students` skill to use the language in life;*

– *students comprehend various accents and vivid speech more easily, acquire the specific meaning of the idioms more freely as well as use them in daily speech, begin reading and watching different films in English more instantaneously;*  
– *the learning process becomes adaptable along with a line of students` interests;*  
– *an integrated strategy, a holistic approach to acquiring language without exaggeration on grammar or vocabulary*[4].

From another angle, the use of authentic materials at foreign language lessons supplies certain needs. An educator who must have an excellent command of language, an excellent knowledge of methodics of teaching within an excellent comprehension of students` requirements. It is undeniably true that students should easily adapt authentic materials, certainly, during the learning process students attempt to create or make a new or unique approach for being diligent in any case, it may be very challenging or very hard it does not matter, students forever adjust this very position or else situation pedantically.

## DISCUSSION

For that substantial reason, adjustment of authentic sources allows to adjust the original text, initially, to the grade of knowledge and abilities of students through simplifying the original language structures as well as secondly, to the up-to-date acquiring objectives through strengthening some grammatical and lexical features. Nevertheless, adjustment does not contribute to the pivotal aim of utilizing authentic materials at foreign language lessons-enhancing techniques of working with authentic materials. This is particularly true at early steps of language learning. It is necessary to comprehend that efficacious work with authentic materials needs certain abilities, which are not able to be sufficiently improved on the basis of educational as well as adjusted texts.

As a matter of fact, three of abovementioned scholars` ideas are the most reliable and substantially valuable fact for the essence of authenticity. This is mainly because it is clear that an overwhelming majority of autonomous language learners who might be teachers, students or amateurs it does not matter, during the learning process which belongs to each of them attempts to acquire almost every skills, for example, speaking, reading, writing and listening from the authentic sources maximally. It is clear that to improve speaking skills, it is likely to create real-life conditions, for instance,



inviting a native speaker to the lesson, making a phone call, writing an e-mail to a real travel agency, conducting a mock tour. Apart from those types of activities, during the teaching process an overwhelming majority of teachers can utilize numerous beneficial sources in order to enhance students listening skills, for example, BBC news, talk shows, commercials, video blogs, film passages, songs and colourful presentations which are accomplished by native speakers. Besides, if teachers want to enhance students' writing skills, they, of course, can use blogging, e-mails, announcements, feedback as well.

What is more, some of learners who have difficulty in selecting an appropriate way or method of learning. In that case, for most of them this kind of pure materials comes in handy with overcoming some issues which are related to the language. In particular, such kinds of materials or sources are comprehensively unique as well as delicate. For this noticeable reason, the whole educators or students occasionally try to create a peculiar learning and teaching English classroom in order to collaborate their mysterious features of capabilities perceptibly. Therefore, it should be admitted that countless texts, involving debate posts, contracts, assignments, announcements, lectures, seminars should be prepared by native speakers if we feel like enhancing our students' communicative competence, intercultural competence as well.

## RESULT

As a consequence, according to the vast majority of linguists' viewpoint, teaching foreign languages is strongly debatable in English classroom. Due to the fact that especially, English, it is highly essential to get acquainted with the styles along with the accents of English from distinctive countries. That is to say that if educators teach their students how to differentiate the authentic materials in their learning process it will be significantly useful for persuading themselves to search pedantically all kinds of authentic materials. Nevertheless, this can also be challenge owing to the fact that minority of students will estimate it more troublesome to deeply comprehend the meaning, besides, as a result, students might lose the encouragement to further study the material. In this very time the question here is when teachers should begin using authentic materials as soon as possible. It should be noted that educational materials are of great value. Namely, educating materials instruct the structures of language, produce new vocabulary. They are very beneficial for practicing within introducing language material, certainly at an early stage of acquiring. However, the language of textbooks is totally various from

the real life's language. Moreover, to practise real-life language which is helpful to utilize authentic materials successfully, it will depict students the studied vocabulary and structures in practice, in real life[5].

It should be noted that nowadays tourism industry is also extremely necessary to widen persons horizon. By this way most of learners who are students or teachers can comprehensively consolidate the countries different fields, such as, hotel business, employment of inhabitants, international relations, economy, culture, as well as the most effective transport organizations. Skilful training of specialists in the sphere of tourism, it can be implied that direct contact and interaction with other people, namely colleagues, consumers of tourist product. Therefore, foreign language teaching process is thoroughly important to implement the whole things or works pleasantly and very successfully. In that case, not only education system, but also all the branches of countries should be flourished and be welfare without any hesitation or suspicion.

## CONCLUSION

Taking everything into consideration it can be concluded that even though there is not a single definition of authenticity, language learners who are thoroughly curious in any cases whether they really adore to learn language collaborately and elaborately. It is undeniably true that this article can be thoroughly helpful to indicate in details of language teaching as well as learning processes with consolidating the authentic materials appropriately and accurately in the English classroom. However, there are also some demerits of using authentic materials that are connected with lexical units and grammatical structures, or some vocabulary, namely highly academic version of idioms, phrases, students should not focus on them deeply. That is to say that, they should be very critical and logical thinkers about them. Additionally, they forever attempt to work on themselves and enlarge their vocabulary, not only vocabulary, but also their other important skills, for instance, reading, writing, speaking, listening by concentrating on their future life. Finally, it should be noted that promoting the motivation for learning language can be implemented equally by both teachers and students. If they attempt to achieve their ambitious and eternal goals heartily, of course, they can easily improve certain abilities of them.

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## **STRONG CYLINDRICAL MAGNETOGASDYNAMIC SHOCK UNDER INFLUENCE OF RADIATION FLUX**

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### **Abstract**

This paper deals with the strong cylindrical magnetogasdynamics shock under influence of radiation flux. The radiation pressure and radiation energy are considered to be small in comparison with gas pressure and gas energy respectively and therefore only radiation flux is taken into account in case of cylindrical symmetry. Runge- Kutta method has been employed to obtain the solution. The variations of pressure and radiation flux with distance have been illustrated through graphs for different values of radiation parameter. From figures it is very clear that the region of disturbance near the shock surface decreases with the increasing value of radiative parameters.

### **1-INTRODUCTION:**

The effect of radiation transfer on high speed flow in optically thick medium has been studied extensively by several authors, e.g. Wang [1], Koch [2], Helliwell [3] and others. Elliot [4] discussed the self-similar solution for spherical blast wave using Rosseland's diffusion approximation under the assumption that there is no effect of heat flux at the center of symmetry. Propagation of spherical blast waves in a transparent medium was carried out by Erickson and Olfe [5]. Koch and Gross [6]. and Oppenheim [7] studied propagation of strong shock wave in an optically thin atmosphere taking different radiation models.

Wang and Helliwell studied strong plane shocks in a thick atmosphere of uniform density using Plank's diffusion approximation. Unlike Wang and Helliwell, self-similar solutions for the propagation of plane shock waves have been obtained in transparent grey atmosphere of variable density under the influence of magnetic fields. The radiation pressure and radiation energy are considered to be small in comparison with gas pressure and energy respectively and therefore only radiation flux is taken into account in case of the cylindrical symmetry. Runge Kutta method has been employed to obtain the solution.

Ahead of the shock, the density distribution  $\rho_0$  and magnetic field distribution  $h_0$  is taken to vary as

$$\rho_0 = \rho_0 r^\alpha$$

$$h_0 = h_c r^\delta$$

where,  $\rho_c$ ,  $h_c$ ,  $\alpha$  and  $\delta$  are constants.

## 2. EQUATIONS OF MOTION AND BOUNDARY CONDITIONS :

The equations of motion of a fluid having infinite electrical conductivity when expressed in cylindrical symmetry, symmetric Eulerian form with zero viscosity and thermal conductivity are,

$$\frac{\partial \rho}{\partial t} + u \frac{\partial \rho}{\partial r} + \rho \frac{\partial u}{\partial r} + \frac{\rho u}{r} = 0 \quad (2.1)$$

$$\frac{\partial u}{\partial t} + u \frac{\partial u}{\partial r} + \frac{1}{\rho} \frac{\partial p}{\partial r} + \frac{h}{\rho} \frac{\partial h}{\partial r} + \frac{h^2}{\rho r} = 0 \quad (2.2)$$

$$\frac{\partial h}{\partial t} + u \frac{\partial h}{\partial r} + h \frac{\partial u}{\partial r} + \frac{hu}{r} = 0 \quad (2.3)$$

$$\frac{1}{\gamma - 1} \left[ \frac{\partial p}{\partial t} + u \frac{\partial p}{\partial r} \right] - \frac{\gamma p}{\rho(\gamma - 1)} \left[ \frac{\partial p}{\partial t} + u \frac{\partial p}{\partial r} \right] + \frac{\partial F}{\partial r} = 0 \quad (2.4)$$

where  $u$  is the material velocity,  $\rho$  the density,  $p$  the material pressure,  $h$  the component of magnetic field and  $F$  the radiative flux, all at a distance  $r$  from the plan of explosion at time  $t$ ;  $\gamma$  stands for the ratio of specific heats.

Also, assuming local thermodynamic equilibrium and taking Plank's diffusion approximation we have,

$$\frac{\partial F}{\partial r} = 4\bar{k}_p \sigma T^4 \quad (2.5)$$

where  $\overline{k_p}$  is Planck's mean absorption coefficient,  $\sigma$  the Stefan-Boltzmann constant, and  $T$  the absolute temperature.

As the gas is taken as ideal, the equation of state is given by

$$p = \rho R T$$

$R$  being the gas constant.

We next take  $\overline{k_p}$  as a power-law function of the density and temperature as,

$$\overline{k_p} = \mu_0 \rho^{\alpha'} T^{\beta'} \quad (2.6)$$

where  $\mu_0$ ,  $\alpha'$  and  $\beta'$  are constants.

The jump conditions for a strong shock wave propagating in a perfectly conducting gas are,

$$\frac{u_1}{v} = \frac{2}{\gamma + 1} \quad (2.7)$$

$$\frac{\rho_1}{\rho_0} = \frac{\gamma + 1}{\gamma - 1} \quad (2.8)$$

$$\frac{p_1}{\rho_0 v^2} = \frac{2}{\gamma + 1} \quad (2.9)$$

$$\frac{h_1}{h_0} = \frac{\gamma + 1}{\gamma - 1} \quad (2.10)$$

where the suffices 0 and 1 denote the regions just outside and just inside the shock plane, respectively and  $v$  is the shock velocity.

### 3 SOLUTION OF THE EQUATIONS :

We seek solutions of the equations in the form,

$$\begin{aligned}u &= \frac{r}{t} U(\eta) \\ \rho &= r^k t^\lambda \Omega(\eta) \\ p &= r^{k+2} t^{\lambda-2} p(\eta)\end{aligned}\quad (3.1)$$

$$h = r^{\frac{k+2}{2}} t^{\frac{\lambda-2}{2}} H(\eta)$$

$$F = r^{k+3} t^{\lambda-3} Y(\eta)$$

$$\text{where } \eta = r^a t^b \quad (3.2)$$

Where  $K$ ,  $\lambda$ ,  $a$  and  $b$  are constants and  $\eta$  is called as similarity constant .

We choose the shock fronts to be given by  $\eta_0 = \text{constant}$ , its value depending on the constant amount of explosion energy.

By direct substitution of the form (3.1) in the equations of motion and shock conditions, we find that similarity conditions are compatible when  $K = \alpha$ ,  $\lambda = 0$ ,  $a = -(\alpha+3)$ ,  $b = 2$ ,  $\delta = -1/2$ , and  $\beta' = 3/2$  ;  $\alpha'$ -remaining arbitrary.

For our study however, we choose the particular value  $\alpha' = 1$ . This unable us to consider the mean free path of radiation to be adequately large when the density is small and temperature is reasonable high.

Therefore, the shock velocity is

$$v = \frac{2}{3 + \alpha} \frac{d}{t} \quad (3.3)$$

where d is the distance of shock front at time t from the location of the initial impulse. Next combining the equations (2.1), (2.2.) (2.3) & (2.4) we have,

$$\frac{\partial E}{\partial t} + \frac{\partial}{\partial r} [(E + p^*)u] + \frac{\partial F}{\partial r} = 0 \quad (3.4)$$

where,

$$E = \frac{p}{\gamma - 1} + \frac{1}{2} \rho u^2 + \frac{h^2}{2}$$

$$p^* = p + \frac{h^2}{2}$$

AS E is of the form  $r^{\alpha+2} t^{-2} \phi(\eta)$ , equation (3.4) can be written as,

$$-\frac{\partial}{\partial r} \left[ \left( \frac{2}{3 + \alpha} \right) \frac{r E}{t} \right] + \frac{\partial}{\partial r} [(E + p^*)u] + \frac{\partial F}{\partial r} = 0$$

which on integration, we get,

$$\frac{F}{\rho v} = \frac{1}{2} u'^2 (r' - u') - \frac{2}{(\gamma + 1)} w^2 (\gamma u' - r') + \frac{1}{2} M_A^{-2} (r' - 2u') \quad (3.5)$$

where, we have taken

$$w^2 = \frac{p}{\rho_1} \frac{\rho_1}{\rho}$$

$$u' = \frac{u}{v}$$

$$M_A^2 = \frac{\rho v^2}{h^2}$$

and,

$$r' = \frac{r}{d}$$

$M_A$  being the Alfven mach number.

Equation (3.5) helps us finally to calculate radiative flux  $F$  when the other flow variables have been determined.

After some manipulation, the following set of equations are obtained from (2.1) to (2.5)

$$\frac{dw^2}{dr'} = \frac{w^2}{r'-u'} \left[ (\gamma-1) \frac{du'}{dr'} - (\alpha+1) + L(w^2)^{2/3} \right] \quad (3.6)$$

$$\begin{aligned} & \frac{(\gamma+1)^2}{4(\gamma-1)} \left[ (\alpha+1)u' + 2(r'-u') \frac{du'}{dr'} \right] + \frac{w^2}{(r'-u')} - \frac{\gamma w}{(r'-u')} \frac{du'}{dr'} \\ & + \frac{(\gamma+1)^2}{4(\gamma-1)} \frac{M_A^{-2}}{(r'-u')} \left[ 1 - 2 \frac{du'}{dr'} \right] - \frac{L(w^2)^{5/2}}{(r'-u')} = 0 \quad (3.7) \end{aligned}$$

$$\begin{aligned} \frac{dB^2}{dr'} &= M_A^{-2} [2(r'-u')] \frac{du'}{dr'} + (\alpha+1)u' \\ & + \frac{4(\gamma-1)}{(\gamma+1)^2} \frac{M_A^{-2} W^2}{(r'-u')} \left[ 1 - \frac{\gamma du'}{dr'} - L(w^2)^{2/3} \right] \quad (3.8) \end{aligned}$$

$$(r'-u') \frac{ds}{dr'} + 1 - \frac{\gamma du'}{dr'} - L(w^2)^{3/2} = 0 \quad (3.9)$$

where we have putting,

$$S = \log p / p_1$$

$$B = \log h / h_1$$

and

$$L = \frac{32 \sqrt{2}}{(3 + \alpha)^2} \frac{\mu \sigma (\gamma - 1)_{5/2}}{\eta_0 R^{5/2} d^\alpha (\gamma + 1)^3}$$

The symbol L represents the radiation parameter depending on the nature and optical properties of the medium, as well as the explosion energy.

#### 4.RESULTS AND DISCUSSION:

Similarity solutions of the problem of propagation of strong cylindrical magnetogasdynamics shock wave in an optically thin atmosphere have been obtained. The numerical integration has been done by Runge-Kutta program. The variations of pressure, density, magnetic field, velocity, temperature and radiation flux with distance have been illustrated through graph for different values of radiation parameter L and for  $\gamma = 4/3$ ,  $M_A^{-2} = 10$ .

Radiation parameter L has significant effect on pressure, represented by figure 1. Near the shock surface, pressure decreases rapidly to a maximum and then increases asymptotically in a narrow region; when L taken maximum value 20. But in case when  $L = 1$ , near the shock velocity, temperature and radiation flux is represented by figs. 4, 5, 6. It is very clear that the region of disturbance near the shock surface decreases with the increasing value of radiative parameters.

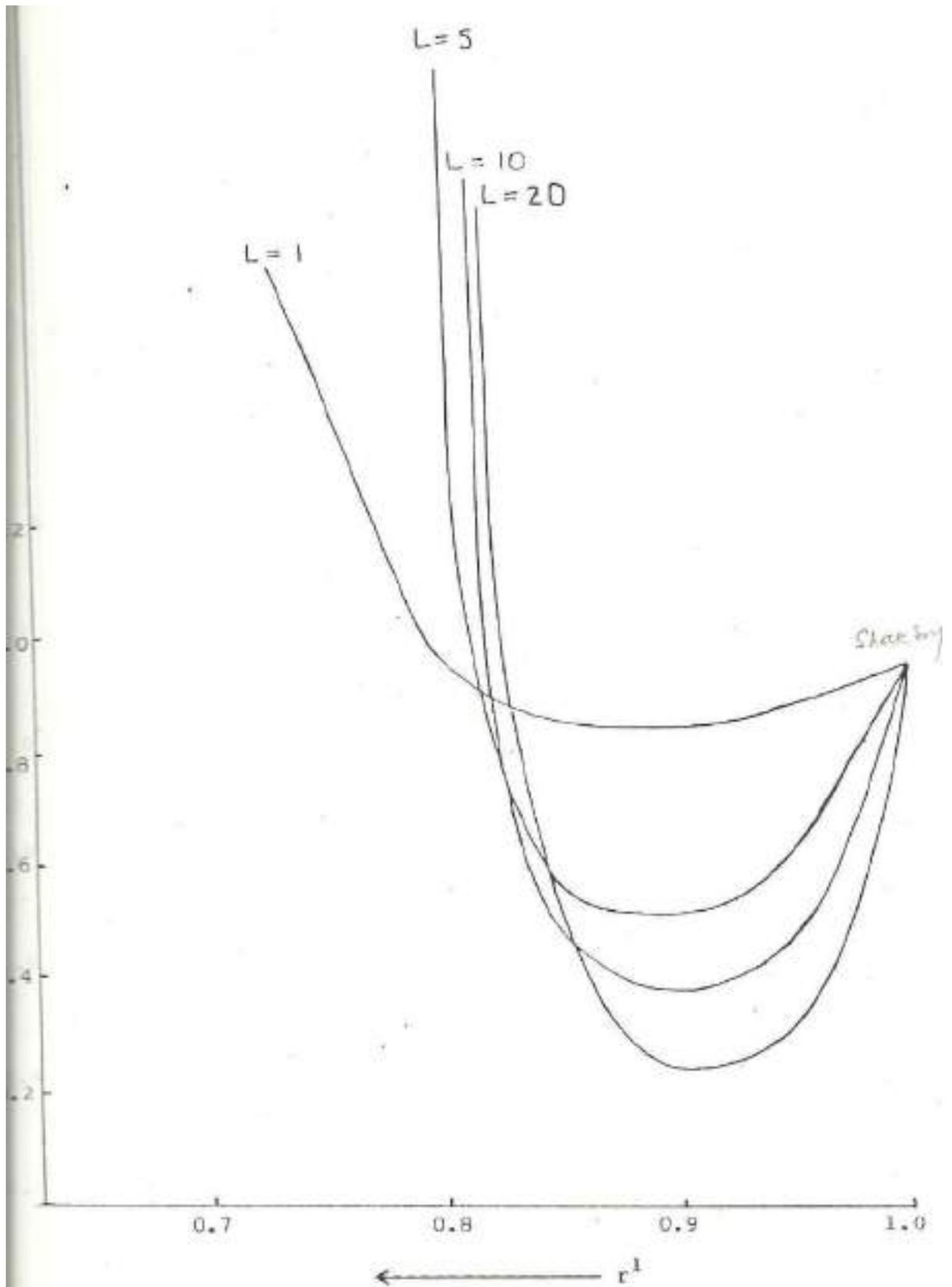
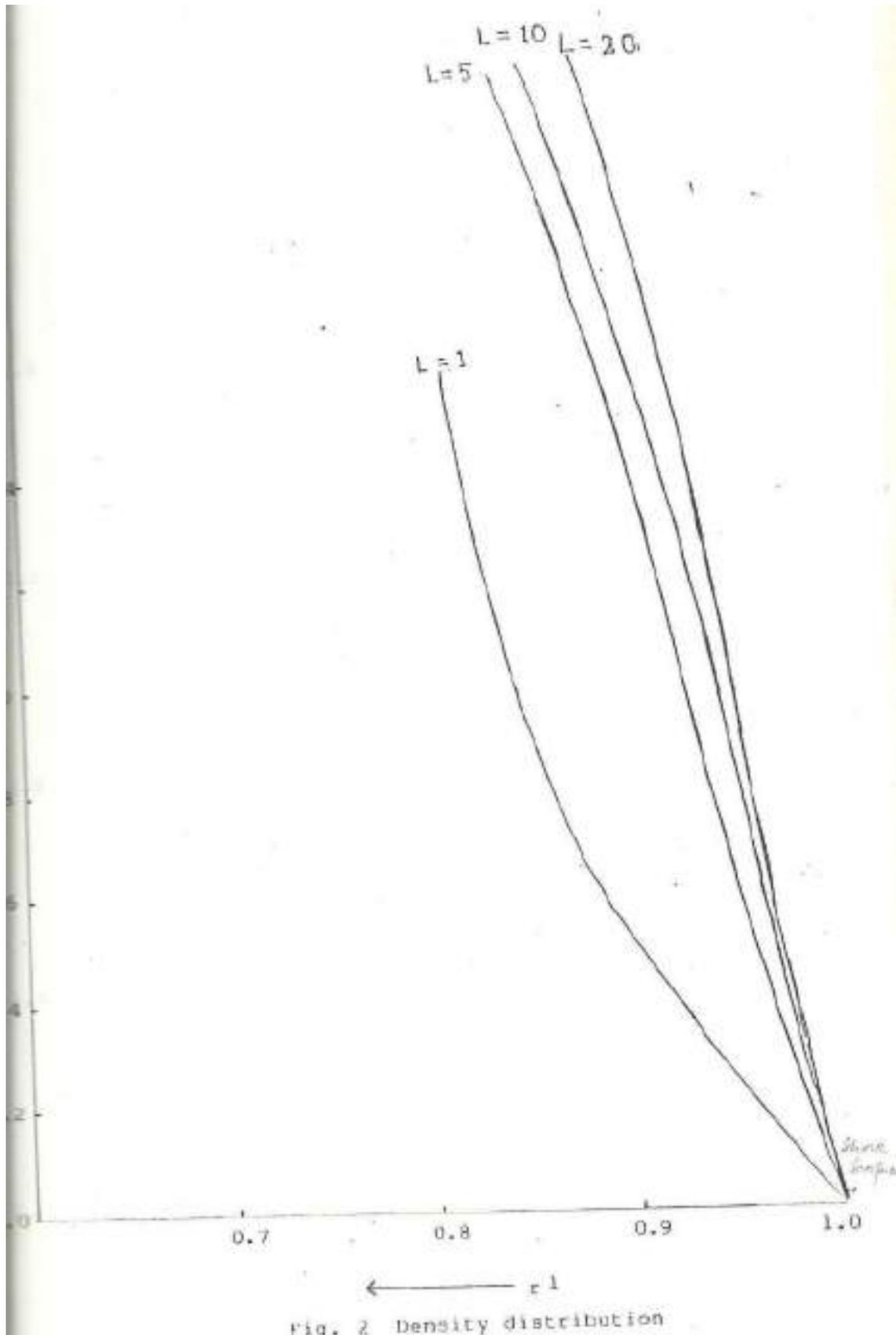
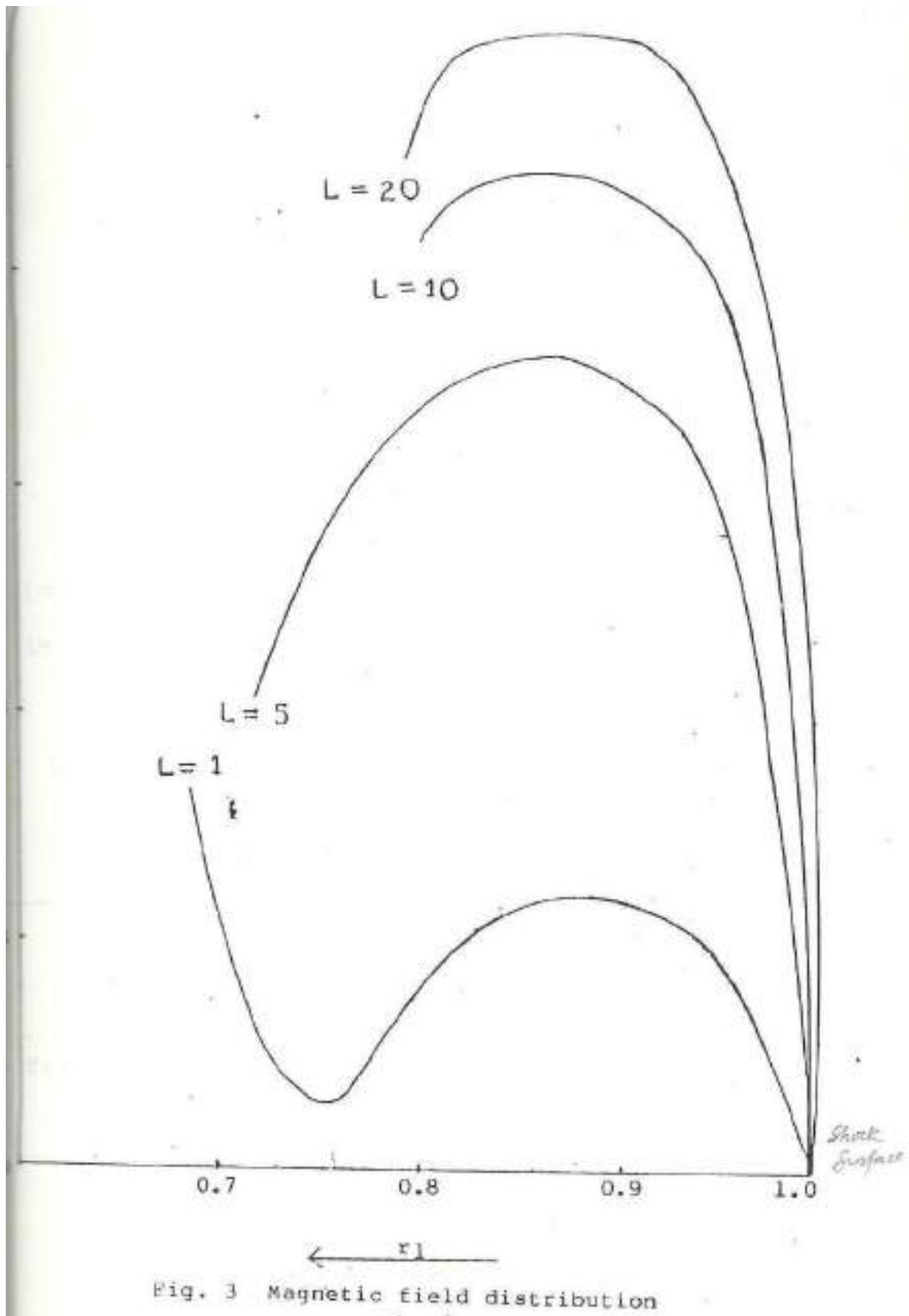


Fig. 1 Pressure distribution





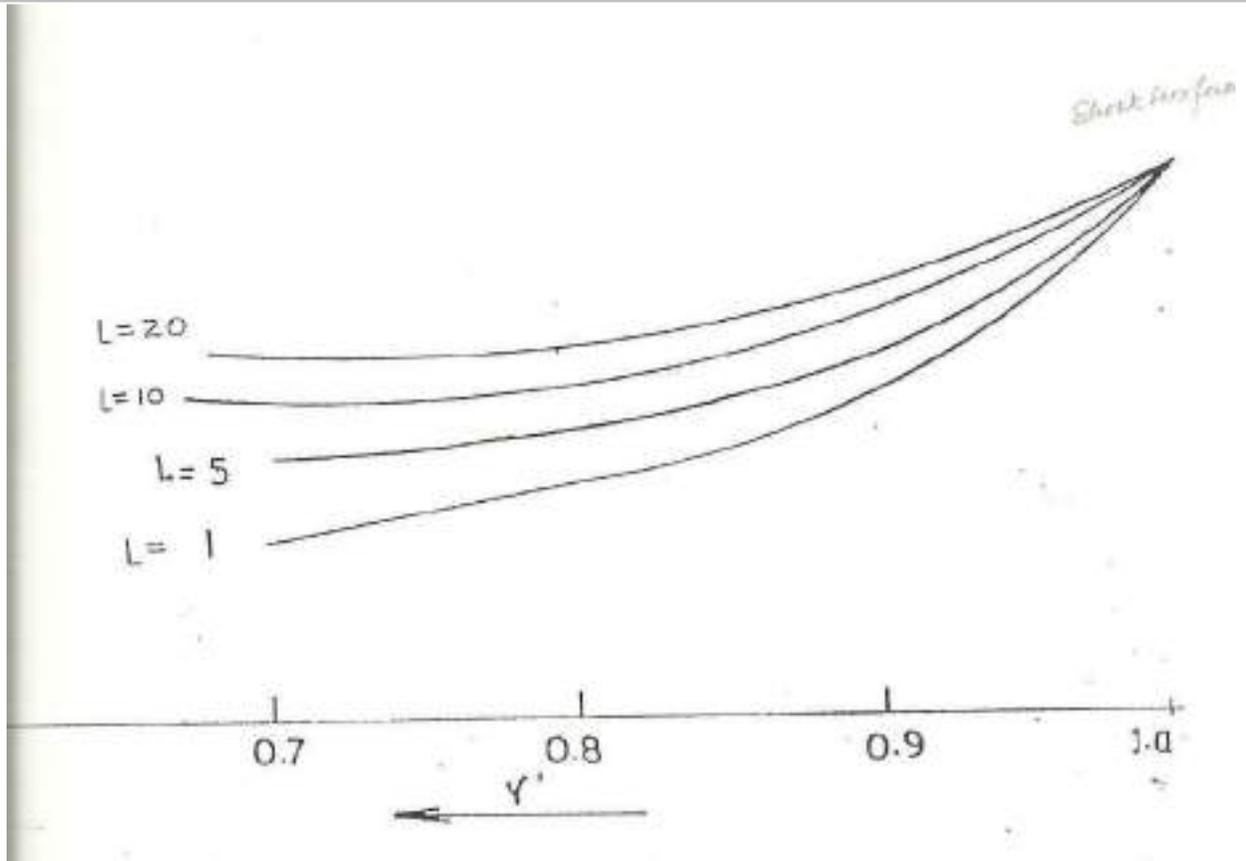
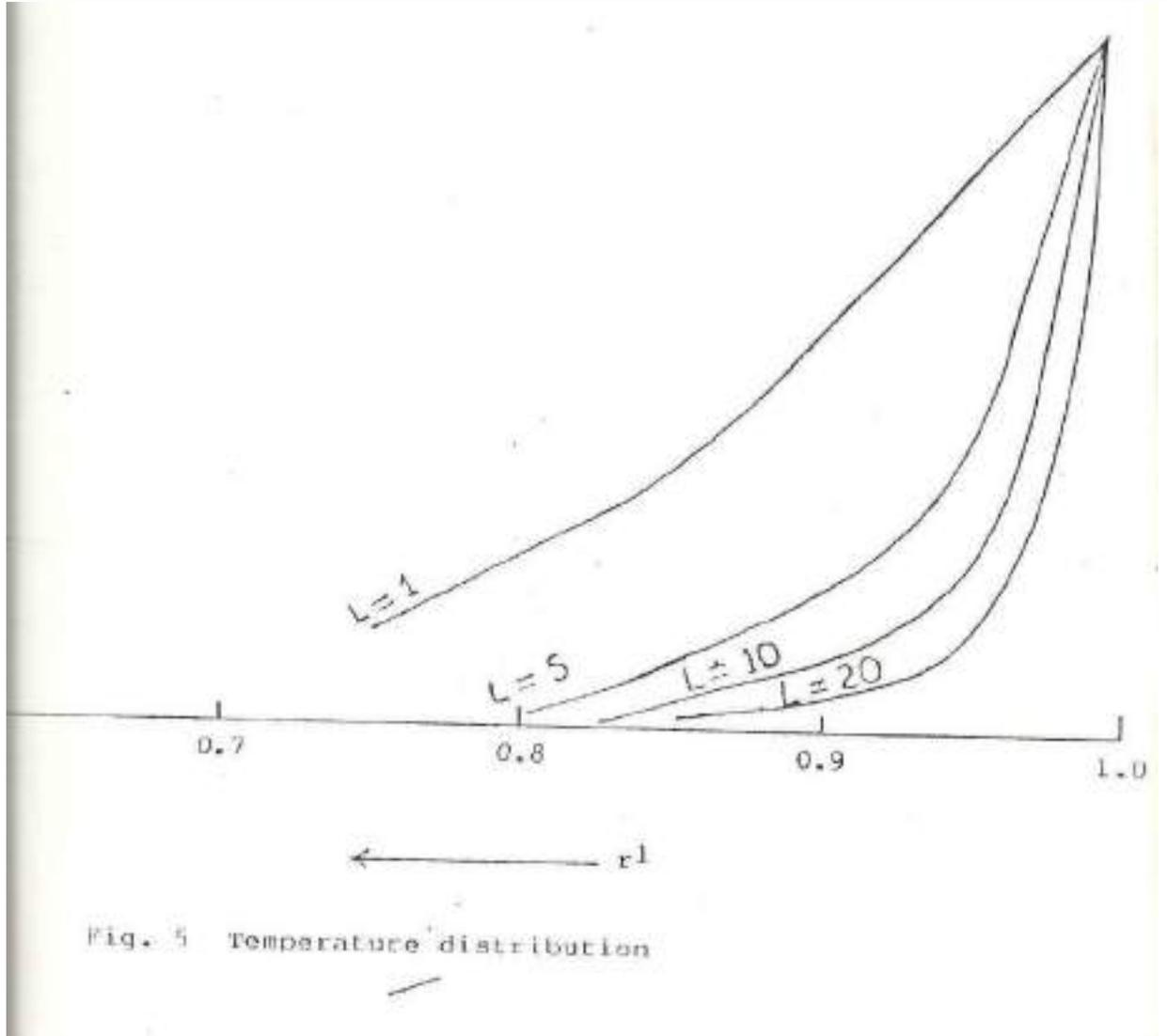
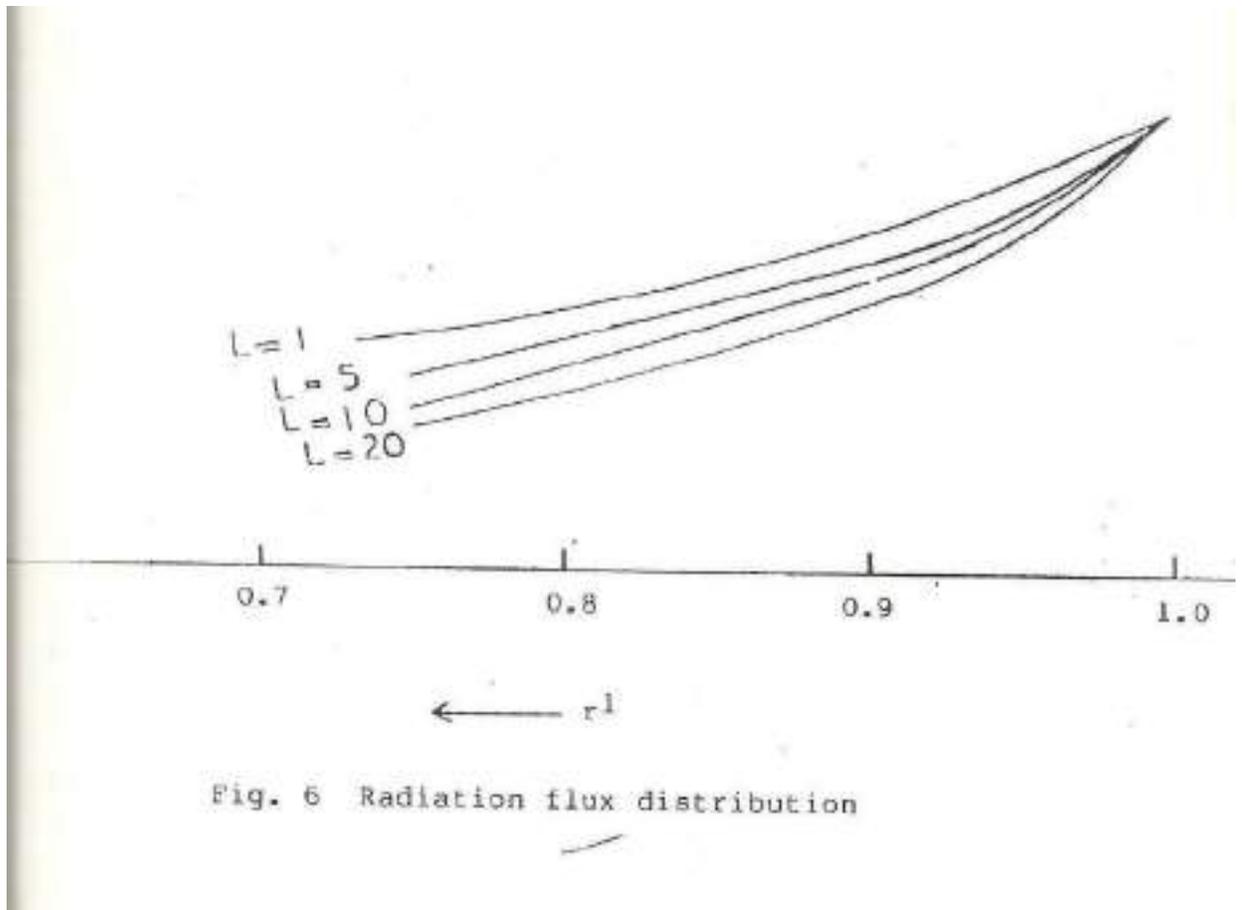


Fig. 4 Velocity distribution







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# DESIGN AND MANUFACTURING OF CUSTOMIZED WATER CHILLER FOR INDUSTRIAL PROCESS COOLING

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## ABSTRACT

*Refrigeration can be costly in terms of equipment and energy, if not done correctly will fail to achieve its objectives and lower the quality and safety of the product. To ensure that refrigeration is effective, we need to be able to calculate, heat load, fluid temperatures, over all dimensions of the system. The refrigerant used is R-407C, which is ozone friendly. Incorporated in this report is the literature study, which discusses the components of the chiller and the detail design of the chiller, including the specifications of the standard components and the designs of the heat exchangers is mentioned..*

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## 1. INTRODUCTION

This chapter gives us an introduction about the working principle of the system. It explains in detail the each main component which constitutes the system. Heat exchangers, expansion valves, suction accumulators and the compressor theory will be discussed. Heat exchangers are to be designed whereas the expansion valve, compressor and suction accumulator are to be standard components. Therefore more in depth designs of different types of heat exchangers will be discussed, both for condensers and

evaporators. A chiller is a system which functions to chill or cool water to desired temperatures which is usually a temperature of about 15°C. This is a thermodynamic vapour compression system which can be used for air-conditioning, industrial and aerospace applications. A water chiller has four main parts: evaporator, condenser, compressor and expansion valve. The main purpose of a water chiller is to remove the heat from water and replace the heat with cold. Not only does a water chiller remove heat from water, it removes heat from the air surrounding the water. An



inlet of water at a temperature of about 20 to 30°C flows through a heat exchanger which works as an evaporator. This is to remove the heat and thus cools the water. A cold refrigerant is generally used to boil the gas, and the pressure is increased using a compressor. This vapor is then at a temperature higher than that of the ambient. The heat absorbed from the

water, and the work of the compressor is then released to the environment, and as a result, the refrigerant is condensed. The refrigerant then flows through an expansion valve which decreases the temperature, before it once again flows through the evaporator and the cycle begins again.



Fig.No.1-Experimental Setup

**2. WORKING PRINCIPLE**

Heat flows naturally from hot to cold body. In refrigeration system the opposite must occur, i.e. heat flows from a cold to hot body. This is achieved by using a substance called refrigerant, which absorbs heat

and hence boils or evaporates at low pressure to form a gas. This gas is then compressed to higher pressure, such that it transfers the heat. The refrigeration cycle can be broken down into following stages:

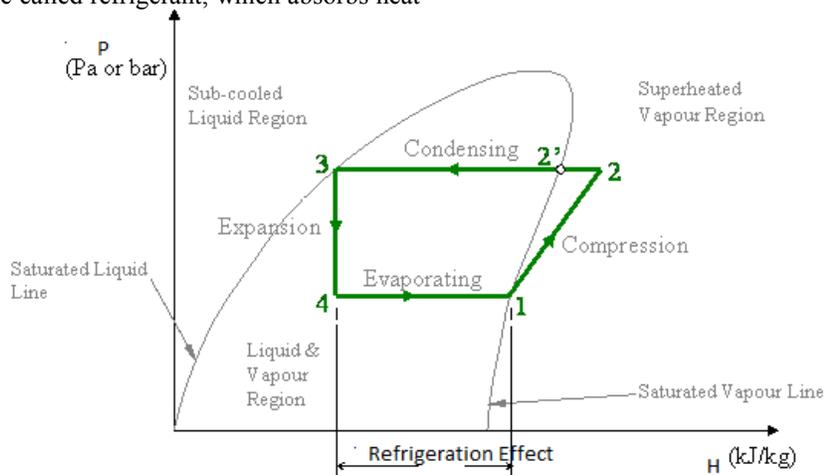


Fig.No.2-p-h Diagram



➤ Process (4-1) :

Low pressure liquid refrigerants in the evaporator absorb heat from its surroundings, usually air, water or some other process liquid. During this process it changes its state from liquid to gas and at the evaporator exit is slightly superheated.

➤ Process (1-2):

The superheated vapor enters the compressor where its pressure is raised. There will also be a big increase in temperature; because of proportion of energy input into compression process is transferred to the refrigerant.

➤ Process (2-3):

The high pressure superheated gas passes from the compressor into the condenser. The initial parts of the cooling process (2-2') de-super heats the gas before it is turned back into liquid (2'-3). The cooling for those processes is usually achieved by using air or water. Further reduction in temperature happens in pipe work and liquid receiver (3-4), so that the refrigerant liquid is sub cooled as it enters the expansion device.

➤ Process (3-4):

The high pressure sub cooled liquid passes through the expansion device, which reduces both the temperature, pressure and controls the flow into evaporator. It can be seen that the condenser has to be capable of rejecting the combined heat inputs of the evaporators and the compressor; i.e. (1-2) + (2-3) has to be the same as, (3-4). There is no heat loss or gain through the expansion device.

**3. DESIGN DETAILS**

- Refrigerant : R407C
- Scroll Type Compressor: Power required for compressor (P) =3 KW  
Flow rate of refrigerant = 0.215 kg/sec
- Condenser: Number of tubes (Nt) = 22  
Number of passes = 4pass
- Gasket Plate Heat Exchanger  
Inlet temperature = 45°C  
Outlet temperature = 5°C
- Thermostatic Expansion Valve Selection TGE 10 DANFOSS

**4 .ADVANTAGE OF 3 UNITS OF 6.3 TR OVER SINGLE UNIT OF 20 TR SYSTEM**

Consideration	20TR system	6.3TR system
Refrigerant used	410A High cost, high efficiency, more energy consumption rate	407C Low cost, medium efficiency, less energy consumption
Compressor	Recirculating compressor (due to friction there is more energy loss and high compression work)	Scroll compressor upto 20% energy saving is obtained
Shell and tube condenser	System operates at the pressure of 45 degree C. Hence, high pressure was operating heat exchange during requires.	Same goes for 18.6 bar pressure range at 40 degree C, high pressure operating heat exchange during requires
Evaporator	Shell and tube type	Plate heat exchanger causes upto 21% energy consumption and is suitable for low pressure range and low specific volume
COP	15.8	7.5

By considering above parameters:

**5. CONCLUSION**

- 20TR system has been divided into 3 parts that is 6.3TR for the objective of reducing energy consumption and to achieve flexibility in operation.
- The 3 units (6.3TR each) of chiller circuit as compared to whole of 20TR reduces the risk of shutdown in process industry.
- COP efficiency of normal operating system and flexibility in operating system may differ

but it has an advantage of energy saving and flexibility.

- Each of energy component contribute to less maintainace, power rating.

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# BODILY ORGAN TRANSPLANT IN ISLAMIC JURISPRUDENCE (FIQH) PERSPECTIVE

Alimuddin

## ABSTRACT

*This paper aims to discuss how to transplant organs in the perspective of Islamic jurisprudence. Organ transplant is the transfer of part or all of the organ tissue from one individual to another individual with the same or different species. Currently what is commonly done in Indonesia is the transfer of an organ between humans, not between animals and humans. This transplantation is intended to replace damaged or non-functioning organs of the recipient with other organs still functioning from the donor. At the legal level, transplantation is seen as a noble effort to make people healthy, even though it is considered an act that is against criminal law, but by way of exceptions, it is no longer threatened by criminal sanctions and can be justified. Organ transplants experience ethical dilemma, one side can endanger the donor but on the other hand can save the patient in certain conditions. In some countries that have legislation on organ transplants there is retaliation in the implementation of transplants, for example there is a prohibition on embryo, testicular and ovarian transplants for both medical and experimental purposes. However, there are also countries that allow transplants of the organs mentioned above for research purposes only.*

**KEYWORDS:** organ transplantation, Islamic jurisprudence

## A. INTRODUCTION

Along with the growth of medical science, there were cases that had never existed before in the time of Prophet Muhammad, as well as in the time of Prophet Muhammad's companion. In fact, *fūqaha* had never been discussed before, like the transplantation of human organs. Where humans desperately need it now, following the emergence of many chronic diseases those are very deadly. For example, in the case of traffic accident, where the patient runs out of blood and needs several blood bags, or perhaps the patient needs a donor of the heart or kidney and other organs. Quite rapid developments in medical science can be seen from the success of many cases of organ transplants, which have yielded quite promising results. Nevertheless, success is not safe from legal issues, and so on. In the medicine world, east and west in general, it is assumed that any illness has a cure. There are diseases that can be treated by simply giving simple medicines, but there are also those that require relatively complicated treatments, such as organ transplantation.

For example, a patient with kidney failure has only three alternative treatments, undergoes routine hemodialysis, performs a body transplant, or dies. There are currently 40,000 patients in Indonesia with this situation. Those who are undergoing medical treatment are very few because the cost of treatment in cases of kidney failure is very expensive and long-term. The first kidney transplant was performed in Indonesia at Cipto Mangunkusumo Hospital in 1977. Until now, only five hundred

patients had transplanted their kidneys at the PGI Cikini Hospital. Organ transplantation in Indonesia is a living donor and the amount is very small compared to the needs.

Difficulties looking for kidney donors makes patients with cases of kidney failure have to find a kidney to China. In recent years many patients from Indonesia have gone to China for treatment for organ transplants. According to reportedly in China organs such as kidneys are openly sold, although not cheap.<sup>1</sup>

As a medical treatment, organ transplantation has the potential to be misused and to cause disputes, so that it is felt that implementation requires regulation not only in terms of ethics, but also of applicable law.

In practice, organ transplantation is a noble act, as someone gives a part of their body to another to help patients with other diseases. Organ transplantation should, in principle, only be performed if the donor has informed consent, taking into account the risk of the donor, the effectiveness of the donor donation is likely to be successful with the recipient and there is no sale or marketing element in the donor.

In Islam, *fardhu kifayah* (collective obligation) was implemented and the existence of experts in the field of medicine was promoted and

<sup>1</sup>Trini Handayani, *Fungsionalisasi hukum pidana terhadap perdagangan organ tubuh manusia* (Bandung: Mandar Maju, 2012), h. 72



medicine was seen as a very noble science. Imam Shafi'i said, "I don't know the science of Halal and Haram (*Sharia Fiqh*) which is nobler than medical science."

Organ transplantation has begun to be thought of by the world since 4000 years ago. According to the manuscript found in Egypt, which contains a description of the organ transplant experiment, it was first carried out in Egypt about 2000 years ago before the Prophet Isa was sent, following India a few years before the birth of the Prophet Isa. The Hindu surgeon was able to repair the prisoner's nose, which had been damaged by torture, by transplanting a portion of the skin and fat tissue from his arm. This experience inspired Gaspare Tagliacosi, an Italian surgeon, to try to correct a person's nose defect by using a friend's skin in 1597 AD.<sup>2</sup>

At the end of the 19th century AD surgeons were only able to transplant tissue, but since the discovery of John Murphy in 1897, which succeeded in connecting blood vessels to experimental animals, the experiment opened the door to the transplantation of organs from humans to other humans. Experiments that have been carried out on animals have finally been effective, although it has been a long time, half a century. In 1954, Dr. J.E Murray succeeded in transplanting a kidney into a child from his twin, which brought faster and more advanced advancement in the transplantation area.<sup>3</sup>

When Islam emerged in the 7th century AD, surgery was already known in various countries in the world, especially developed countries, such as Rome and Persia. But network transplantation has not yet experienced significant development, despite efforts to develop it. For thousands of years after going through many experiments then succeeded at the end of the 19th century, for tissue transplantation and in the mid-20th century began transplanting other human organs. At the time of the Prophet, the Islamic State paid attention to human health issues, and also sought to guarantee the safety and care of all its people free of charge. At the time of the Prophet, there were several surgeons who were well known, such as al Harth ibn Kilda, Abu Ramtah Rafa'ah, and Rafidah al-Aslamiyah, from their women.<sup>4</sup>

While organ transplants were unknown to the world at that time, plastic surgery that used artificial or fake organs was recognized at the time of the Prophet, as stated by Imam Abu Daud and Tirmidhi of Abdurrahman ibn Tharfah, that his grandfather 'Arjafah ibn As'ad had his nose cut off during the *Kulab* war, then he put on a fake nose of silver metal, but the nose began to rot, the Prophet

suggested to replace it with a fake nose made of gold metal. Imam Abu Sa'ad in his *Thabaqat* also narrated from Waqid ibn Abi Yasir that Usman ibn Affan had put on gold false teeth so that his teeth became strong and durable.

In the next Islamic era, thanks to the doctrine of the urgency of medicine, monumental works of medicine began to spread, which included numerous medical procedures, including transplantation, and at the same time gave rise to many great names of medical scientists, including Al Rozy (251-311 H) who discovered and distinguished veins and arteries besides many who discussed other medical problems, such bone surgery and casts in his book *Al Athibba*. More than that, studies in the field of science. Az Zahrawi Muslim medical expert who died in Andalusia after the 400s *Hijriyah* was successful and became the first person to separate surgery and make it a separate subject in the field of medical science. He has written a great monumental book in the field of medicine, especially surgery under the title "At Tashrif."<sup>5</sup>

In the medical dictionary, this is explained that the transplant originated from a transplant, which means planting tissue taken from the body of the individual to another individual. Transplant medicine is defined as the process of transferring or transplanting body tissue from an individual or another individual. In medicine, moving tissues or organs are called graft or transplantation, transplant administration is called a donor..

In practice, the success or failure of the tissue or organ transplanted from the donor to the recipient depends on whether or not the immune reaction occurs at the recipient. Rejection of tissue or organs by the recipient is caused by the occurrence of antigens that are owned by donor cells but this is a major obstacle. Medical experts in the field are still able to cope with a variety of ways that can minimize the possibility of a rejection reaction, such as damaging lymphocyte cells owned by the recipient or removing organs that produce lymphocyte cells, namely the spleen and thymus.

Transplants are innovative in the new field of medical surgery. Over the last few decades, organ transplantation seems to have become increasingly prevalent and a medical challenge, both in terms of efforts to develop applied applications and practical technology, and in terms of widespread polemics about the Code of Ethics and Law, especially Islamic Sharia law.

In this case, Shaykh Al Azhar Jadul Haq stated that the transplantation of living human organs may be done on a voluntary basis to other people or

<sup>2</sup>Mahmud Alhajj Qasim, *Atthib`indal`arab wal muslimin Mu`jam`ulama al`arab* (Beirut: Daar el Fikri, t.t), h. 105

<sup>3</sup>*Ibid*, h. 106

<sup>4</sup>*Ibid*, h. 109

<sup>5</sup>Al Kahrasyi, *Syarah al Kharsyi* (Bulaq: Maktabah Amiriyah, t.t), h. 621



those who are ill with certain conditions if the doctor confirms the need to do so.<sup>6</sup>

When the part of the body that is grafted causes the death of the volunteer, such as the heart, then the rule is utter haram, either through the consent of the volunteers or through disapproval. That if he allows it, he means committing suicide, and if he doesn't allow it, he means murder, and all of them are haram.

If a grafted part of the body does not cause death to mean that he can live without the organ, then the law must pay attention to issues such as if it causes his inability to perform the lawful or allows him to do the unlawful, the law becomes unlawful or haram, for example, both legs or arms where, without them, they can no longer work to meet their daily needs, or because of it they do things that are prohibited from *syara'*, then transplanting with or without their permission is unlawful.

If the transplant process does not bring harm to him such as transplantation of one kidney, eye, part of the teeth or blood and a transplant done without his permission, and then the law is haram and is considered to be persecution. It is obligatory for him to apply the *qishas* law on his terms or pay the sum as stated in the book of *fiqh*.

In this regard, Imam Nawawi said that there was a prohibition on connecting human hair with other human beings. It is forbidden to use human hair and all of his body because of his glory, even his hair, his nails and all his limbs must be buried.<sup>7</sup> However, connecting the hair of other people to the debate of scholars prohibiting it if it is done for the purpose of deceiving or slandering and the obligation to bury it.<sup>8</sup> In a hadith narrated by Mu'awiyah, Ibn Hajar said that it was permissible to remove hair and not to bury it. Sheik Al Azhar added that every human being has a free will related to him not to harm himself or to kill himself.

From some of the above information and opinions, it is clear what the scholars of jurisprudence have said about jihad with the soul that can cause him to be killed. What is required of the teachings of Islam is to save people who are drowning, burning and buried heaps of buildings on the basis of the arguments of the *syara'*. These are exceptions to the previous thing. Therefore, if a specialist guarantees that by transplanting a living organ in order to save another person with his or her permission, then, of course, it is legal if he or she can guarantee that it does not pose a danger to the donor, since the rules of *ushul fiqh* state that "a risk can be replaced with another risk"

<sup>6</sup>Jadul Haq, *Buhus Wa Fatawa Islamiyah* (Cairo: Amanah Al Ammah, 1994), h. 427

<sup>7</sup>Nawawi, *Al Majmu'*, jilid III (Beirut: Darul Fikri, 1994), h 277

<sup>8</sup>Ibnu Hajar, *Fathul Bari* (Damaskus, Maktabah al Ghazali, 1993), h. 10

It is also permissible with other terms, namely that an organ cannot be sold or brought under other condition, since the selling and purchase of an independent human being or parts of his body is null and void according to the *syara'*.

## B. TYPES OF TRANSPLANTS

Until now murder cases have frequently occur with a variety of reasons, also commonly heard lately there is a kind of conspiracy that kills and mutilates the bodies, the many organs of the body, the most costly is the price of the kidneys and the heart. This kind of killing behavior that is done intentionally will get a curse and torture from Allah SWT and he will be thrown into hellfire. In the An Nisa verse 93 it is explained that "Whoever kills a believer intentionally then the reward is hell, he is eternal in it and Allah is angry with him and cursed him and provided him with immense torture"

Based on the essence of the removal of organs or tissues that are moved to another body, transplants are classified into three groups:

1. Auto graft is the removal of tissue organs or organs from one place to another in the patient's own body. For example, a cleft lip, this case is usually taken from his cheek.
2. Allograft is the removal of tissue or organs from another body of the same species, that is, from humans to humans. Common allograft transplants and high success rates include kidney and corneal transplants. Besides that, liver transplants have also occurred, although the success has not been high.
3. Xenograft is the transfer of tissue or organ from one body to another that is not the same species. For example between human species and animals that have occurred. For example a human liver transplant with a baboon's liver even though the success rate is very small.

Transplantation is an effort to cure chronic diseases, as Islam itself encourages people to treat all diseases and to try to recover. Since having a disease in your body will lead to death, while allowing yourself to fall to death is also prohibited. This provision is also the main reason for all people suffering from chronic diseases to continue to do everything in their power to get rid of diseases in the body.

## C. CONCLUSION

Organ transplantation is a very noble act, someone gives a part of their body to another to help patients with other diseases. Transplants can, in practice, only be carried out if the donor has informed consent, taking into account the risk of the donor, the feasibility of the donor donation, the probability of success of the recipient and the absence of an aspect of sale or commercialization in the donor.



Body transplantation is revolutionary in the new field of surgical surgery. Over the last few decades, transplantation seems to have become more common and a medical challenge, both in terms of efforts to establish applied technologies and practice technology, and in terms of common polemics about the Code of Ethics and Law, particularly Islamic Sharia law.

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# ENVIRONMENT VALUE: CONCEPT AND MEASUREMENT

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## ABSTRACT

*This paper deals with environmental value and its measurement. Environmental value (E-value) is considered as the real wealth of nation. E-value can be calculated on the basis of the use value. This paper defines e-value and concepts related with e-value. It also includes various methods of measuring e-value. There exists monetary and non-monetary measurement of e-value. Non-monetary measurement fails to define e-value. In the economic sense we must monetize e-value.*

**KEYWORDS:** Environmental Value (EV), Environmental Value Accounts (EVA)

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## INTRODUCTION

National income accounting was created for the purpose of producing a more scientific measure of the performance of the economy (Holcombe 2004). It is the monetary value of all final goods and services produced in an accounting year. But modern national income fails as a true measure of calculating the wealth of nation. National income excludes the value of environment. Environment has important concern today. Now a day's environments become deplete. Man's activity leads to the depletion, in order to reduce the deterioration of environment, putting price on environment is essential. This paper tried to calculate the value of environment and discuss about various techniques of environmental valuation.

## ENVIRONMENTAL VALUE

The paper discussed about environmental value. The environmental value is the value acquired by environment from its non-polluted or pollution Free State (Satheesh Babu). According to G.S Rai and Macer "Environment value is common value across the culture that can promote foundation for building and promoting a more sustainable economic growth preserving biodiversity and preventing environment from deteriorating further". According to Bishop and Wood Word (1995) Environment value is the value of

goods damaged by environmental deterioration either by dislocation of eco-system or by harmful effect on species or both. Economic valuation offers a way to compare the diverse benefits and costs associated with eco-systems, by attempting to measure them and expressing them in a common denominator—typically a monetary unit (Pagiola,2004). Environmental valuation is the process of putting monetary values on environmental goods and services (Dixon, 2008)

## MEASUREMENT OF ENVIRONMENTAL VALUE

Environmental value measured in monetary terms through individual's willingness to pay (WTP) or willingness to accept (WTA) (Bishop et al 2004) and through Total Economic Value (TEV). TEV is used a convenient organizing frame work for thinking about different sources of value (Atkinson, 2007). TEV divided in to two i.e., use value and non-use value.

## USE VALUE

Use value is the value that individuals derive from using the environmental resources. Use values can be further classified into three broad categories: Direct use values, indirect use values, and option values. Direct use values come from the consumptive use of the environmental resource itself with regard to water



resources; these include drinking water, irrigation. For most private (normal) goods, value is almost entirely derived from their direct use. Many environmental resources however perform an array of functions that benefit individuals indirectly that is known as indirect use value. Indirect use values of water resources include benefit

s such as flood control, nutrient retention, and storm protection. Option value recognizes that individuals who do not presently use a resource may still value the option of using it in the future.

### NON- USE VALUE

These are valuing that individuals may derive from environmental resources without ever personally using or intending to use them. These can be further classified into three categories, namely existence value, bequest value, and altruistic value. Existence value refers to the value individuals may place upon the conservation of an environmental resource, which will never be directly used by themselves or by future generations. Individuals may value the fact that future generations will have the opportunity to enjoy an environmental resource, in which case they might express a bequest value. And finally, altruistic value states that even if the individuals themselves may not use or intend to use the environmental resource themselves, they may still be concerned that the environmental good in question should still be available to others in the current generation (Birol et al., 2006).

### DIFFERENT METHODS OF ENVIRONMENTAL VALUATION

Revealed Preference and stated preferences are two important methods of Environment Value (Atkinson, 2010).

### REVEALED PREFERENCE

Revealed Preference means that we infer preferences for environmental goods from observed behaviour in actual market transaction (Kolstad ,2000 pp.313). Revealed preference (Indirect valuation methods) is a market for environmental goods is implicitly traded. Information derived from observed behaviour in the surrogate markets is used to estimate willingness to pay (WTP), which represents individual's valuation of, or the benefits derived from, the environmental resource. Production function, Replacement cost, Travel cost, Hedonic pricing are the important methodology used in Revealed preference (Pagiola et al, 2004).

### HEDONIC PRICE METHODS

The Primary empirical approach to measuring environmental value is known as hedonic price methods. The basic idea is best conveyed through examples: measure the price of houses for a variety of different air pollution levels and attempt to see how the price changes when the air pollution changes, keeping everything else constant (Kolstad,2000 pp 313).

### TRAVEL COST

Travel cost method is the oldest method of valuing environmental goods. The travel cost method (TCM) is used to estimate use values associated with ecosystems or sites (such as forests, wetlands, parks, and beaches) that are used for recreation to which people travel for hunting, fishing, hiking, or watching wildlife (Bishop et al 2006). We are referring to an environmental good that takes effort to enjoy, such as national park, we can infer something about how the consumer values the park. When that effort consists of traveling to the park, what we are dealing with is the travel cost approach to valuing environmental goods. This method is most frequently applied to valuation of natural environments that people visit to appreciate. Travel cost method can be used to value the beach in its clean state and polluted state; the difference can be attributed to damage from the pollution (Kolstad, 2000 pp344). Important limitation of Travel cost method is time consuming

### STATED PREFERENCE METHODS

Stated preference method is also known as direct valuation method. Stated preference methods of valuation involve finding an individual's willingness to pay for a good by posing a set of questions regarding preferences directly to the individual (Kolstad, 2000 pp 356). Most widely accepted stated preference technique is Contingent valuation method.

### CONTINGENT VALUATION METHOD

Contingent valuation became very popular for valuing environmental goods. In contingent valuation, respondents to a questionnaire are asked directly for their WTP (Pearce et al. 2002)

### CHOICE MODELLING

Choice modelling refers to a variety of procedures for inferring WTP from sets of rankings or ratings of alternative options presented to respondents (Pearce et al., 2002).



## CALCULATING NATIONAL INCOME INVOLVING ENVIRONMENTAL VALUE

There are rare studies related with the incorporation of environmental value in national income analysis some of them are:

1) Environmental accounting for sustainable growth and development with special reference to a system of integrated environmental economic accounting (SEEA): The Indonesian Experience by Kusmadi Saleh, 2002 discussed about the calculation of environmental value. The methodology used in this study is SEEA. The equation used for calculating environmental value is derived as follows:

$$NDP = C + I + (X - M)$$

NDP = Net domestic product = Consumption, I = Investment, X = Export, M = import

If net capital accumulation in economic assets (Ap.ec + Anp.ec) replaces I, then equation becomes

$EDP = C + (Ap.cc + Anp.ec) - Anp.env + X - M$  is an important methodology given by (Kusmadi Saleh, 2002)

EDP = Environmentally Adjusted Net Domestic Product

Ap.cc = Produced assets

Anp.ec = non-produced economic assets

Anp.en = other natural assets

In order to maintain the identity, the negative element for the economic counter part of changes in natural assets other than economic assets (Anp.env) is added. Then equation can be rearranged in to

$$EDP + Anp.env = C + (Ap.cc + Anp.ec) + (X - M)$$

2) Greening the national Accounts – Approach and policy use by Peter Bartelmus, 1999 discussed about the inclusion of natural assets in national income calculation. He used System of national Accounts (SNA) methodology. Environmentally adjusted indicator is used. The equation used in this paper is

➤ supply-use identity:

$O + M = (IC + EC) + C + (CF - EC) + X$  equation for supply side given by Peter Bartelmus, 1999

Indicating that the supply of goods and services produced (O) and imported (M) equals their use in intermediate (IC) and final consumption (C), capital formation (CF) and export (X). Note that environmental costs (EC) are added to intermediate

consumption (IC) as additional cost and deducted from environmentally adjusted capital formation, thus maintaining the supply-use identity;

➤ value-added (environmentally adjusted) identity for industry i:

$EVA_i = O_i - IC_i - CC_i - EC_i = VA_i - EC_i$  methodology by Peter Bartelmus, 1999

Describing value added generated by an industry i ( $EVA_i$ ) as the difference of output ( $O_i$ ) and cost, including intermediate consumption ( $IC_i$ ), fixed capital consumption ( $CC_i$ ), and environmental depletion and degradation ( $EC_i$ );

$$EDP = 3EVA_i - 3EC_h = NDP - EC = C + CF + X - M - CC - EC$$

defining Environmentally-adjusted net Domestic Product (EDP) as the sum of environmentally adjusted value added of industries, with a further deduction of environmental costs generated by households ( $EC_h$ ). Alternatively, EDP can also be calculated as the sum of final uses of consumption (C), environmentally adjusted net capital formation ( $ECF = CF - CC - EC$ ) and the balance of exports (X) and imports (M). Environmentally-adjusted net Capital Formation (ECF) is an indicator that can be used for demonstrating the non-sustainability of economic performance.

3) Green GDP is another important index of economic growth. The equation for Green GDP is

$$Green\ GDP = GDP - CNR - ED - EPE$$

Where,

GDP - gross domestic product,

CNR – natural resource consumption

ED – degradation of environment

EPE - environmental protection expenditures.

4) Genuine progress indicator is alternative to GDP. It measures well-being (Venetoulis, 2004). The calculation of GPI presented in the simplified form is the following:

$$GPI = A + B - C - D + I$$

A is income weighted private consumption.

B represents non-market services value

C is private defensive cost of natural deterioration

D is natural deterioration cost



I include improvement in both capital stock and balance of international trade

The above methodology of calculation of certain draw backs. One of the most important limitation is it does not calculate environmental value, they only try to deduct the depletion. The existing methodology excludes the real wealth of nation. My study is different from the above study. In this study incorporate the value of environment through Environment Value accounts (EVA).

### ENVIRONMENT VALUE ACCOUNTS (EVA)

Environment value accounts are the methodology for calculating the value of environment. Environmental value accounts are defined as the monetary valuation of all things in nature. Environment account is based on environmental index. Equation used for environment value accounts

$$EVA_i = GDP + EV_i - ED_i$$

$EVA_i$  = Environmental value accounts

$EV_i$  = Environmental value

$ED_i$  = Depletion of environment

### CONCLUSION

Modern world faces the problem of depletion of environment. In order to reduce the depletion of environment, environmental value is essential. Environmental value is used as a monetary value of environmental goods for reducing depletion. Through the calculation of environmental value, we can reduce the problem of depletion.

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# HOW TO IMPROVE THE ECONOMIC STATUS OF HOUSEWIVES WITHIN THE HOME –AN EXAMPLE FROM KHADI VILLAGE INDUSTRIES IN KERALA

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## ABSTRACT

*"All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood"*

*United Nations, Charter 1945*

*Equality of men and women is the main motive of the welfare society . Economic equality is the first step to achieve the equal concept of men and women and in turn it accomplishes the evergreen dream of women empowerment. In the case of housewives their economic participation is very low . one of the important reason for this is their unpaid works in their family . The household jobs or unpaid activities are the main obstacles for the housewives to engage in other income gain works .The important works under the unpaid categories are cooking ,washing ,cleaning and caring of children and disabled persons . These unpaid works of housewives helps the children's to become good human assets of the labourmarket and also to be the good citizens of tomorrow . These unpaid activities are sometimes barriers to the housewives life in all aspects especially their entrance to the labourmarket for these reasons they are losing their self sufficiency in achieving their own income ,these income helps not only their own life and but also it strengthens their entire family . This paper shows how to improve the economic status of the housewives within the home by doing the income earning activities by not giving up their unpaid activities .This is an example from the kadhi village industries in Kerala.*

**KEY WORDS:** *housewives, households, economic security, khadi ,unpaid activities ,labourforce participation rate ,self sufficiency ,women empowerment*

## INTRODUCTION

Woman plays multiple roles in the society. She plays the role of daughter, wife, mother and at the sometimes she also participate in the economic activities. During the past decades the participation of women in economic activities depends upon the traditional customs and beliefs of the family. Now a days the educational status of women are increasing , so automatically the labourforce participation also increases. However in every cases we cannot assume the same trend. Even if the education level increases the intensity of unpaid work in the family draws them back from labour participation. The intensity of the time devoted to paid and unpaid work depends on many factors. The important factors are age ,gender ,number of children in the household , household size, geographical location and social class[1] .The number of children in the household is an important factor which determines how much time women spent on unpaid work [2]. The declining level of labourforce participation of women leads to financial insecurity .

For every financial matter they depend upon their male counterpart..

Equality is the main motive of every democratic society. The real meaning of equality can be only achieved through the equal participation of men and women in economic social and political matters. In the case of economic equality fulfillment, a wide range of platform is needed. Present economy provides wide range of opportunities for both men and women. In the egalitarian society housewives want employment opportunities to achieve their self realization and escape from the trap of depression [3]. In the case of housewives there are number of reasons responsible for their entry and exit from the economy opportunities. An important reason which restricts women to explore new fields is household jobs. The household jobs are generally said as unpaid activities which is entirely different from the Paid work . Paid work is mainly concentrated to men than women but women also participates in work which weighs the same efforts or more unlike the paid work . unpaid



work mainly concentrates women communities . Most of the unpaid works are done by women .The incorporation of the unpaid work of women in national income is an controversial subject .the boundary between unpaid and paid work is differentiated by the third person criteria. Third person paid to the activities for what he or she receives is considered paid work and otherwise it is considered as unpaid work [4]. The paid work is associated with remuneration whereas the unpaid work is not. Therefore It creates a negative relationship with paid and unpaid work .when the unpaid work of women increases their paid work participation in the economy decreases. One of the factor that determine the economic participation of women is unpaid activities.

Labourforce participation is one of the yardstick to measure the women empowerment . Thus inclusive growth is possible only if the female have an income earning capacity like male . The eleventh and twelfth five year plan mainly concentrate the sustainable and inclusive growth. On this part many empowerment programmes introduced by the government to empower the marginalised section especially women. However many housewives are not engaged in the economic activities due to unpaid works . Development cannot take place if we neglects the role of women in the economic activities. The 12th FYP recognises the need

for inclusive and sustainable growth. This can be achieved only if women progress equally. Since the economic reforms women have played a very significant role in the growth of the country, as per the United National Development Fund for women (UNIFEM), the term women's empowerment means:

- Acquiring knowledge and understanding of gender relations and the ways in which these relations may be changed.
- Developing a sense of self-worth, a belief in one's ability to secure desired changes and the right to control one's life.
- Gaining the ability to generate choices exercise bargaining power.
- developing the ability to organize and influence the direction of social change, to create a more just social and economic order, nationally and internationally [5].

The real meaning of women empowerment cannot be achieved without the economic participation of women .the real courage of self sufficiency arises from one persons economic independency . Now a days the government implement many programmes for women empowerment . Economic participation or labourforce participation is an yardstick of women empowerment . The labourforce participation of male and female of india and kerala is the following:

**Table :1 Labour Force Participation Rate for Kerala and India (percent) Urban and Rural (PS+SS)\***

Year	Rural				Urban			
	India		kerala		india		kerala	
	Male	Female	Male	Female	Male	Female	Male	Female
1987-88	54.9	33.1	55.8	33.6	53.4	12.9	59	26.1
1993-94	56.1	33	56.8	26.4	54.3	16.5	59.9	25
1999-2000	54	30.2	58.7	27.3	54.2	14.7	59.1	25.4
2004-05	55.5	33.3	58.9	32.1	57	17.8	58.3	30.1
2009-10	55.6	26.5	58.3	26	55.9	14.6	56.4	23.3
2011-12	55.3	25.3	58.3	25.8	56.3	15.5	56.7	22.2

(Source : Secondary Data , various reports of NSSO , [6])

\*Refers To Principal Status Plus Subsidiary Status, The Most Inclusive Definition Of Worker

In this data shows that in 1987-88 the rural male and female labourforce participation of kerala is comparatively better than the all india average level. But the four following consecutive periods 1993-94 ,1999-2000,2004-05, and 2009-10 male labourforce participation of kerala is much better than the Indian average but in the case of female participation it is decline to compare the all india average. Kerala's rural female labourforce participation rate is decreasing over the years. In the case of urban areas of Kerala the participation rate is decreasing 2010-2011 as compared to the 2009-2010 ratio. But it is slightly higher than the all India female labourforce participation rate. in the period 2011-12 the male

labour force participation is also high in kerala as compared to all india average and female labourforce participation is slightly improving .The case of urban labourforce participation the year 1993 to 2012 in the six consecutive periods the male and female labourforce participation of Kerala is higher than the all India average .In the case of female it has huge different existing . keralas urban female labourforce participation is much better than the all india average level .in the case of rural this is shows a decreasing trend.

One of the reason for declining trend in the rural women labourforce participations is their unpaid work in the family .they care their family members for their



lifelong time. from Early mornings to night they do all the household jobs for their family members . They did not even think about their own matters ,some times they did the entire household jobs without caring their physical illness . their entire life is fully dedicated to others and their economic dependency is depend on male counter part in the household . The economic participation of women directly and indirectly depend upon the households. The economic participation of women is an important factor determines the women empowerment. In the case of unpaid worker it is not possible because the increasing role of women in the housework does not increases their economic participation .here There is an inverse or negative relationship between economic empowerment .as well as the household responsibility and also it negatively affect their wellbeing and also effect the social, political and economic participations [4].However these works are not priceless or valueless and it is an important unrecognized economic activity to the economy.

This study highlights the Economic earnings of housewives through khadi yarn making process within the home after completing their unpaid activities.

#### A SMALL INTRODUCTION TO- KHADI

Khadi or kadhar is a natural fiber cloth which is made up of cotton . The khadi movement was started in India in 1918. The main ideology of this movement was self reliance and self government .this was the part of swadeshi movement . Mahatma Gandhi called the khadi the ‘livery of the freedom’.All india khadi and village industries came in to existence in 1953. In this industry Womens are the majority they are taken by the different stages of production[7]. There are mainly four types of khadi . there are cotton ,muslin ,woolen ,silk and poly vastra . Polyvastra is a combination of polyester and cotton .

kadhi is one of the village industrial unit agency , government also encourage to promote employment through this unit . the name of the other important agencies which increases the promotion of the industrial units are following

- (1) MSME Development Institute (formerly SISI)
- (2) Kerala State Industrial Development Corporation (KSIDC)
- (3) Small Industries Development Bank of India (SIDBI)
- (4) Kerala Industrial Infrastructure Development Corporation (KINFRA)
- (5) Infrastructure Kerala Ltd (INKEL)

- (6) Directorate of Industries and Commerce (DIC)
  - (7) Khadi & Village Industries Commission (KVIC)
  - (8) Khadi & Village Industries Board (KVIB)
  - (9) Kerala Small Industries Development Corporation (SIDCO)
  - (10) Kerala Financial Corporation (KFC)
  - (11) Kerala Industrial and Technical Consultancy (KITCO)
  - (12) Kerala Bureau of Industrial Promotion (K-Bip)
  - (13) Centre for Management Development (CMD)
- [8]

Khadi and Village Industries Commission (KVIC) is the nodal implementing agency at the national level. Khadi & Village Industry Boards (KVIB) and District Industry Centres are the implementing agencies in the States. The kerala khadi and village industries board constituted by the act 1957 . This programme mainly constituted the employment opportunities in the rural area more concentrate the socio economic weaker sections of the society[9 ] . In keral total number of khadhi village industrial units is 371.out of these 138 are weaving and 233 are spinning . the government also promote financial assistance to start the khadi units by the BPL womens . a unit contain 10 members .

The study area of this paper is Thrissur district in kerala . The district was formed on 1949 July 1. Thrissur is situated in the central part of the state . It is the revenue district of kerala and cultural capital city of kerala and also the land of poorams . It cover the 10 percentage of keralas population . The north area of this district bordered by the districts of Palakkad and Malappuram to the north and the districts of Ernakulam and Idukki to the south . the Arabian sea lies to the west and the east is bounded by the strches of western Ghats . The district office controlled and coordinated the khadi village industries activities of the district . Khadi sector of this district consist of 14 Weaving Units and 17 Spinning Units . There exist 210 Charkhas and 155 Looms in this district in the working condition..Olarikkara is a dyeing unit ,the speciality of this unit is colouring the yarn . The yarns from the districts of Ernakulam, Idukki, Kottayam, Alappuzha and Palakkad are taken to this unit for dyeing. A readymade warp unit is also functioning in olarikkara another peculiar kadhi unit is vinissery ,a panchayath in Thrissur . it is known as vardha in south india[10]



**Figure:1 A weaving unit**

Double burden of the work is the main reason which restricts housewives from entering in to the market labor force. Even if she is a working women burden of household work affects[3]. Majority of the Educated womens are not entering into job after marriage because of the increasing intensity of household works and to care children and elderly members of the family. In this situation how will these housewives earn within the home who also suffer other kinds of difficulties to enter the market is a relevant question. This study focus on how the to improve the economic status of housewives by using their residual time after doing their household works. This study is an example from the the kadhi village industries of kodakara from kerala.

### **OBJECTIVES**

Main objective of this study is to find out the economic self sufficiency of housewives through kadhi industries – special reference to kodakara.

### **MATERIALS AND METHODS**

To satisfy this objective both primary as well as secondary datas were used. in the case of primary data datas collected from the khadhi industry of

kodakara. secondary data also collected from the books journals articles, newspaper etc.

### **RESULT AND DISCUSSION ECONOMIC SELF SUFFICIENCY OF HOUSEWIVES THROUGH KADHI VILLAGE INDUSTRIES -PRIMARY DATA ANALYSIS FROM KODAKARA KADHI VILLAGE INDUSTRIES**

This study concentrates the alathur khadhi industrial unit. Alathur is situated in Thrissur district. The name of the khadhi unit is kerala kadhi industries association - kodakara production centre. Under the kodakara kadhi village industrtries there are 5 sub centers existing. These are at kuttikadu pattepadam, kuthaattukunnu ,pulani, alathur. in the total subcentres there are presently 82 spinning workers and 35 weaving workers. out of these 82 spinning workers 75 are housewives. They do their yarn making by using charkha in their home after doing their entire household jobs. charkha is provided by the khadi unit. Lots of housewives are doing the yarn making process within the home and they reach the khadhi industrial unit in a weekly or monthly basis with this yarn. The target of every housewives is to produce 20 -54 yarn.

**Table :2 the minimum wage rate of different periods**

Year	Spinning (Minimum Wages per month) in rupees	Weaving ( Minimum wages per month ) in rupees
2019	10075	14244
2018	6581	7791
2017	6389	7599
2016	6048	7258

(Source: primary data)

One yarn is thousand meter. the payment is done within the 25 days .the half payment is done by the government and half is done by the industrial unit . Many housewives are crossing the target of 20-24 yarn and they produce more than the target to get high level income. Spinning is also possible in the households . weaving is possible in the industrial unit. In the case of spinning the wage rate for making one yarn is 17 rupees and 90 paise and also they get the incentives of 45 rupees per yarn . There are two types of yarn produced in the industry, one is soft and another one is hard. Soft yarn production target is one day 20 yarn and hard yarn production target is 24yarn per day. The target is 100 count yarn it means 10 gram. So the

workers main target is to produce 20 yarn. The yarns for the entire sub centers are produced by women .in these 75 housewives do it in their home . Rest of the seven are working in the khadi unit . In the case of weaving, the workers target is 3 lungis per day . one lungis is consist of 1.80 meter so they produce a total 5.60 meter per day . the weaving of one lunge they get 93 rupees 71 paise and also get 45 rupees incentives . This is the weaving and spinning rates of 2019 wages . The target influences their wage rate . However 10478 is the average level of salary with incentives . This table shows that the minimum wage rate is increasing with every year . The highest wage rate shown in the period of 2019 .



**Figure:2 Lungis-a khadi products produced by womens in the khadi unit by using yarns made by the house wives in their home .the price of one lungi is four hundred rupees .**

The difference in the wage rate is because of increasing demand of khadi products in kerala. To compare the spinning and weaving wage rate weaving wage rate is higher than the spinning because Weaving is only possible in the khadi unit ,it need big machinery . spinning is also possible in houses by using charkha . so the weaving workers daily travel to this unit for work and comparatively it is tough . the spinning and weaving workers are womens . women are the major labourforce. Technicians are males and females. These works are their main sources of income for the

housewives and it is not only for them but also for their entire family.

## CONCLUSION AND RECOMMENDATIONS

Women empowerment is not possible without the economic empowerment of an individual. In the case of housewives how to achieve economic empowerment is an important questions. Household jobs are the main barriers for the women to enter to the market. This paper shows that how to improve the



economic status of housewives within the home an example from khadi village industries. the purpose of the establishment of khadi is to achieve self reliance and self sufficiency. the mantra of khadi is also applicable in the case of housewives. they can achieve the economic self sufficiency and self reliance within their home. This is a good sign to the way of achieving gender equality

This study is an example for housewives those who really want a source of income without sacrificing their unpaid works and care for their family. This study recommended that the knowledge of khadi yarn making is limited among the peopleso we should conduct courses for housewives those who are really interested in this field and also make awareness of this scheme among the women community about the yarn making process of khadi in home.

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## A COMPARATIVE ANALYSIS OF ADVERTISEMENT CONTENTS OF SELECT FMCG PRODUCTS OF INDIA AND WESTERN COUNTRIES

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### ABSTRACT

*Advertisement is the best medium for any business to attract, educate and stimulate its potential customer and thereby, push through actual sales. In today's world, advertisement not only creates demands for the product but also successfully creates needs and attracts the customer towards created needs. A successful and creative advertisement not only establishes the product but it also establishes the brand for its future success. Survival in a competitive market depends on the level of trust, confidence and loyalty of customers which are usually created and sustained through advertisements. The challenge is huge for MNCs as they have to adjust their message, contents, features and timing according to the land, its culture, its beliefs, its likings and disliking, its taste and preferences and so on. The present study makes a comparative analysis of the advertisement contents of FMCG products between India and Western countries. From the research, it is clearly found that the contents, visuals and messages are planned and designed to cater socio cultural demands of target population. The advertisements emphasize on core product features in both places in general but there are subtle differences in content of messages.*

**KEYWORDS:** advertisement, customer, brand, culture, preference, interest.

### INTRODUCTION

The term advertisement implies promotion of a product, brand or service to viewers in order to attract interest, engagement and sales. It is an ancient practice and has been carried out since time immemorial. Printed advertising in English magazines dates back to the 17<sup>th</sup> century. In America, the first newspaper advertisements were placed in the early 18<sup>th</sup> century. The first advertising agency was set up in the United States in 1841.

Advertisement is created on the basis culture, beliefs, perceptions and interest of people who are being targeted. It has to be admitted that most consumers take their decisions based on emotions, not logic or reasons. They also react differently and derive different conclusion under similar circumstances. Advertisers thus have tried to read the pulse of their targets and today, in a knowledge economy, they have become demand creators.

Indian economy, since liberalization has grown at steady rate and has been preferred destination of many MNCs. Indian firms are also going global and making remarkable presence in world markets. Indian economy and the West have maintained their boom since the last two decades and similar trends are expected to continue. Several products which were not available in Indian markets previously are readily available today. Indian consumers with increased per capita income have been focal point of many global concerns.

Advertisement is the best medium for any business to attract, educate and stimulate its potential customer and thereby, push through actual sales. People view the product through advertisement and after perceptual need satisfaction they plan to use the product. In today's world, advertisement not only creates demands for the product but also successfully creates needs and attracts the customer towards created needs. A successful and creative advertisement not only establishes the product but it



also establishes the brand for its future success. Survival in a competitive market depends on the level of trust, confidence and loyalty of customers which are usually created and sustained through advertisements. Customers are also conscious about the product quality and are more informed than ever before due to availability of all requisite information in the internet.

Advertisement today is an art to successfully establish and maintain customer loyalty. The challenge is huge for MNCs as they have to adjust their message, contents, features and timing according to the land, its culture, its beliefs, its likings and disliking, its taste and preferences and so on. This herculean task is successfully negotiated by many firms globally. They adjust to local demands besides maintaining their global image. The secret of success usually lays in the situation appropriate advertisements that they display.

Under the above backdrop, the present study makes a comparative analysis of the advertisement

contents of FMCG products between India and Western countries. Advertisements of popular products sold in India and also in the West are selected and studied.

### DATA AND METHODOLOGY

For the purpose of this study, advertisements of FMCG products were considered which are featured in Indian media as well as in West. Advertisements of similar products were taken up and the message and contents were thoroughly analyzed. The similarities and differences projected for the same product in two different cultural setups were noted. The subtle differences in projections to adjust to a particular culture were also taken note of. The assessments such made were then tabulated with similar products being clubbed into distinct segments, presented and meaningful inferences were drawn.

### FINDINGS FROM THE STUDY:

Sl No	Product Name and Content of the Advertisement	Indian Advertisement	Advertisement in Western Countries
1	<b>Coca-cola</b> <b>India-</b> The product focus on entertainment with friends. <b>USA-</b> The product gives a message to unite all.	It shows four young girls taking a drink break at the same time and notice that their favorite hero is also enjoying his. So with Coca-Cola it will turn up your times.	It shows a beautiful girl sharing Coke with friends with joy and happiness and she spread the message among society.
2	<b>7 Up</b> <b>India-</b> The product shows how 7 Up and Fido Dido opens frontal cortex. <b>USA-</b> The product shows winning the customer minds.	It shows couples in a beach suddenly notice a familiar face at the beach - an uncle from his neighbourhood. A 7 Up drink and its Fido Dido rescue the couple with ideas.	It shows finding and winning the customer through generating emphasizes on needs for the product.
3	<b>Pepsi.</b> <b>India</b> -Pepsi is irresistible in any situation. <b>USA-</b> In any time and any place Pepsi for all generation.	It shows a group of college students are on hunger strike against new rules of their administration but one young boy can't resist the Pepsi in this difficult condition.	It shows people getting a glimpse of some Pepsi cans on the Moon and on Mars and every generation celebrating this product.
4	<b>Mountain-Dew</b> <b>India</b> - The product focus on for achieving goals by overcome the fear. <b>USA-</b> The product shows achieving goals in any circumstances.	It shows the spirit of those who push themselves in the face of fear to achieve extraordinary results.	It shows nothing can stop you if you have willingness to do it. As the person entering the car through window though having difficulties to do so.
5	<b>Sprite</b> <b>India-</b> the product focuses on summer refreshment. <b>USA-</b> The product shows in summer with under pressure to stay in a refresh mind.	Two friends are restless and fed-up with the heat. They reach an AC theater to find it house full. Then the other boy takes a swig on his sprite and he freshens up his mind.	It shows in a base ball match the players earn Sprite by winning and the audience are also enjoying the Sprite at the end of the game.



6	<p><b>Tropicana</b>  <b>India</b>-The product focus on iron power for health.  <b>USA</b>-The product focus on power of probiotics with fruit juice.</p>	<p>It shows a beautiful lady doing exercise with iron for a healthy body but it is not enough as she need iron and vitamin which is present in Tropicana.</p>	<p>It shows probiotic delicious hundred percent fruit juice with peel grain that feel great.</p>
7	<p><b>Maggi</b>  <b>India</b>- It shows Maggi can be cooked easily and accepted by all ages.  <b>South Africa</b>- The product focus on quick food with high nutrition.</p>	<p>It shows that Maggi can be cooked well by young women willing to be independent and staying single. The easy recipee is followed by generations.</p>	<p>It shows how people proudly choose Maggi and they believe it is a smartest choice with high source of food nutrition.</p>
8	<p><b>Top Ramen</b>  <b>India</b>- The product shows people can have the old happiness again with same taste and confidence.  <b>UK</b>- The product focus on everybody chooses a new option.</p>	<p>It shows that two brothers were bored due to common food with bread and jam. Suddenly they notice their mother has brought Top Ramen which was again sold in the market and they were very happy to have it again.</p>	<p>It shows a new way and quick option for the healthy food with a great taste with all, knowing re-utilization of basic minerals like salt.</p>
9	<p><b>Nescafe</b>  <b>India</b>- The product focus on an emotional moment of life with responsibility.  <b>UK</b>- The product shows an emotional feelings and focuses importance of spending time with those who cares about him.</p>	<p>It delivers a strong and responsible message through father to son at very early morning for being selected at fathers college for higher studies.</p>	<p>It Shows one person bringing all his acquaintances and systematically reducing the numbers to finally have coffee with only those who know him well. This rekindles the lost touch.</p>
10	<p><b>Tetley</b>  <b>India</b> – It shows one of the biggest challenges of our daily lifestyle.  <b>UK</b> - It shows togetherness feelings.</p>	<p>It shows in today's world with friends and family it is very difficult to maintain daily healthy food without oil and fat. So one can have Tetley green tea everyday as it has five times more antioxidant than apple.</p>	<p>It shows in a rainy day a cat and a dog enjoying and chatting as tetley tea can makes anyone to talks their feeling with each other</p>
11	<p><b>Lipton</b>  <b>India</b>- The product focus on keep healthy.  <b>USA</b>- Product show natural freshness added in life.</p>	<p>It shows exercise with green tea keeps everybody healthy for long as its reduces fat and increases metabolism.</p>	<p>It shows a beautiful tea garden with the help of the pure nature how sunshine and rain help the tea to grow leaf nutritious healthy.</p>
12	<p><b>Colgate</b>  <b>India</b>-It shows on smile and get started.  <b>USA</b>- It shows for every mouth protection of colgate is essential.</p>	<p>It shows a couple adopting a child and makes her feel like a family member with a smile, which is symbolic of hope and optimism.</p>	<p>It shows we need anti bacterial protection for healthier mouth.</p>
13	<p><b>Oral-B</b>  <b>India</b>- Product shows one solution for many problems.  <b>UK</b>- Product stress on clean and healthy teeth.</p>	<p>The toothpaste having eight different advantages fulfils types of need for teeth. It is the only solution .</p>	<p>It shows for a healthier mouth with cleaner teeth and the product is recommended by doctors.</p>



14	<b>Sensodyne</b> <b>India-</b> It focus dual advantage of the product. <b>UK-</b> It focus on stronger and repaired teeth	It shows benefit in sensitive teeth and helps bringing back the natural whiteness of teeth on daily usage.	It describe a sensitive teeth can be repaired. It provides long lasting protection for coating sensitive teeth which is recommended by doctor.
15	<b>Loreal</b> <b>India-</b> The product is one solution for five problems <b>USA-</b> The product focus on colour protection of the hair.	It shows this product fights the five signs of damaged hair dryness,roughness,dullness fall and split ends with conditioner in its become all in one.	It shows how shampoo with no sulphates and no foam cleanse and condition for every type of hair.
16	<b>Pantene</b> <b>India-</b> The product focus on freedom of hair. <b>UK-</b> The product focus on strong is beautiful.	It shows open hair adds a new dimension to your personality. It has pro-v so it build up of your personality with less hair fall.	It shows the hair strength of a beautiful woman. It has multinutrient, pro-v blend and antioxidant lipids that makes hair much stronger.
17	<b>Head and Shoulders</b> <b>India-</b> The product focus on confidence of a woman. <b>UK-</b> The product focus on nourishing care of hair.	It shows a beautiful lady hide her hair having dandruff from others. After using the product, she is dandruff free and she regain her confidence.	It shows the product uses lavender to give shiny, glossy, break free and dandruff free hair which all women admire.
18	<b>Dove (Shampoo)</b> <b>India-</b> The product shows unbeatable damage repair of hair. <b>Canada-</b> The product focus on fight back against daily hair damage.	It shows splitten hair and damage hair affects your personality. After using the product the split ends are controlled and so one can flaunt her hair.	It shows through experiment on flowers, how Dove protects hair and resist damage from heat.
19	<b>TRESemme</b> <b>India-</b> The product focus on get salon at home. <b>UK-</b> The product focus on natural ingredients to make healthy and shiny hair.	It shows one can make others feel and recognize her presense by displaying smooth and beautiful hair nourished by argan oil and keratin.	A hair designer uses the product to make hair reflect natural beauty as it has aloe vera and coconut oil and devoid of silicon and dyes.
20	<b>Dove (Soap)</b> <b>India-</b> The product shows soft and glossy skin with moisturizer. <b>Canada-</b> The product focus on keep your face feeling soft, clean and nourished.	It shows a woman uses Dove with ¼th moisturizer to make her skin softer and smoother like a child. The effect is visible in seven days.	A woman iron worker has dirt on her face and daily after returning home she uses Dove and it has ¼ th moisturizing creme to retain her natural beauty so that she can dress up during the weekends.
21	<b>Dettol (Soap)</b> <b>India-</b> The advertisement shows even kids use Dettol between fun or food. <b>France-</b> The advertisement focus on automatic sanitizer dispenser.	It shows in a school kids using Dettol hand sanitizer to fight with germs and then come together to share tiffin with friends.	It shows after daily works using Dettol automatic sanitizer dispenser remove all the germs from hand.
22	<b>Nivea Body lotion</b> <b>India-</b> The product focus on hydrate the skin with aloe-vera. <b>USA-</b> The product focus on noticeably smoother skin.	It shows in summer the skin needs to maintain hydration. The product having aloe-vera extracts is ideal for summers.	It shows this product have essentially enriched body lotion with unique formula of nurishing almond oil which moisturise the skin for twenty four hours to give smoothness.
23	<b>Vaseline Body lotion</b>	It shows the product has deep	It shows our dry skin needs



	<p><b>India</b>-The product focus skin glow.  <b>UK</b>-The product focus on intensive care of skin beauty.</p>	<p>restore micro droplet that heals dry skin by moisturising and we can do a scratch test to prove the healing power.</p>	<p>nutrition to protect from dryness and thus the product have microdroplet vaseline jelly that can protect upto three weeks which is proven by clinics.</p>
24	<p><b>Ponds Face Wash</b>  <b>India</b>-The product helps to transform a man`s face.  <b>USA</b>-The product can control men`s oily skin.</p>	<p>The product having coffee bean extracts that transform dull face into bright one and remove tiredness of the face.</p>	<p>The advertisement shows that by using this oil cleanser a man can have protection from oily skin by long lasting oil control process. So don`t let oily skin steal the show.</p>
25	<p><b>Horlicks</b>  <b>India</b>-The product focus on the kids hunger for growth.  <b>UK</b>-The product focus on family health.</p>	<p>It shows a dancer, a tennis player, a junior mathematician and a footballer having the product to grow taller, stronger and sharper as it has bio available nutrients.</p>	<p>It shows a family enjoying christmas together and having the product as a healthy drink for complete nourishment of all members.</p>
26	<p><b>Pediasure</b>  <b>India</b>-The product focus on better immunity and physical growth.  <b>USA</b>-The product focus on nutrition to help kids grow.</p>	<p>The product having thirty seven vital nutrients increase immunity and shows visible signs of growth to kids even during season change.</p>	<p>The product provides seven grams of protein, DHA, and twenty five vitamins and minerals which is help to kids grow faster.</p>
27	<p><b>Milo</b>  <b>India</b>- The product focus on child growth requirements.  <b>Australia</b>-The product focus on child growth needs.</p>	<p>The product helps kids to grow as it has milk, promalt, vitamin and calcium to give energy to play, study and be responsible.</p>	<p>It shows Victoria take care of her child with this product given with milk as the product has more calcium, more iron, more protein, more vitamin for daily growth.</p>
28	<p><b>Boost</b>  <b>India</b>-The product helps kids grow and compete  <b>USA</b>-The product use can overcome inhibition of age</p>	<p>A young cricketer was underestimated by others due to his tender age. He competes effectively as he uses the product to gain protein and nutrition that increase stamina three times more than others.</p>	<p>It shows an aged woman photographer is healthy and happy and doesn`t care about age as she takes the product with thirty three percent more protein, twenty six essential vitamins like calcium and others daily.</p>
29	<p><b>DairyMilk</b>  <b>India</b>-The product focus on goodness celebrated with sweets  <b>UK</b>-The product focus on the love in society.</p>	<p>An elder brother out of goodness of his heart, gives up his chocolate in favour of his younger brother making him and their mother happy.</p>	<p>A baby girl finding her mother busy on phone goes inside a chocolate shop, buys Dairy Milk for her mother and offers her precious toys to the shopkeeper as she had no cash. Seeing her compassion, shop owner gives her the product free of cost.</p>
30	<p><b>Kitkat</b>  <b>India</b>-The product shows breaks are meant to be free.  <b>USA</b>-The product shows happiness in every situation.</p>	<p>It shows two independent woman free from their work pressure during break, express their happiness by having and sharing the product.</p>	<p>It shows a woman trying to do pumpkin carving and failing but the pumpkin wisely tells the lady not to loose heart and be happy with Kitkat</p>
31	<p><b>Oreo</b></p>	<p>It shows a lady desirous of</p>	<p>Multi cultural people develop</p>



	<b>India-</b> The product shows crunchy surprise for all. <b>UK-</b> The product focus on bonding between people.	signing on plastered hand of her friend in a hospital is shocked and fooled by crunchy sound made from Oreo biscuits.	deep bonds among themselves just like Oreo for healthy relationship and good taste.
32	<b>Snickers</b> <b>India-</b> The product focus on hunger can change the entire personality. <b>UK-</b> The product focus on hunger can stop important jobs.	It shows due to hungerness a responsible cricketer turns into a dramatic character and then his team mates give him the product which in full of protein, calories and nuts and bring him back to his real character.	It shows in a movie hall a man transforms into a complaining lady but his friends gives him the product to end his hunger and bring him back to his real character.
33	<b>Doritos</b> <b>India-</b> The product shows a new taste for nacho chips has entered in the market. <b>UK-</b> The product focus on even an unborn can be bold because of it.	It shows nacho chip with golden yellow corn and creamy cheese brings out the bold personality hidden inside everyone.	A husband eating Doritos during ultra sound of his pregnant wife discovers that the unborn baby is following him eating the product. As the product says do the bold for everyone.
34	<b>Lays</b> <b>India-</b> The product focus on sharing smile <b>USA-</b> The product shows operation smile by contributing on donation.	It shows that a smile comes in a variety of flavours and goes beyond boundaries to establish connection with various moods and emotions.	It shows every flavour of the product spread smile and happiness in every situation and moment. Donation of a part of profit is also shown.
35	<b>Rexona (BodySpray)</b> <b>India-</b> The product focus fear sue to odour <b>Australia-</b> The product shows protection in extreme situation	It shows how people reacts if one has body odour even though the person is well dressed. The product having ten times odour protection saves the user from bacteria caused by sweat.	It shows three times stronger protection against heat to combat and fight with sweat and odour while exercising.
36	<b>Axe(BodySpray)</b> <b>India-</b> The product focus on smell fresh and stay ready for every situation. <b>UK-</b> The product shows grooming for what you are.	It shows only couples can enter a night club and a man comes alone and he simply ask the lady gate keeper if she can be with him. As the man uses the product which makes him smell fresh, the lady agrees	It shows that men don't need to have six packs or costly suits by simply using the product they can groom themselves.
37	<b>Kellogg's</b> <b>India-</b> The product shows how to manage the time with productivity. <b>Australia-</b> The product shows healthy family relationships.	A father grooms his daughter before exams and makes her have the product having sufficient iron for good memory and strength and which lasts for three hours.	A mother is happy as healthy breakfast for her kids also brings an atmosphere of sharing.
38	<b>Kellogg's Special K</b> <b>India-</b> The product focus on well balanced break fast. <b>UK-</b> The product focus on healthy and slim life.	The product having special protein and fibre with delicious flavour makes one feel full for a long time and also gives slim and healthy look.	It shows to feel the special one need to eat special. The product having more cherries raspberries and strawberries gives a healthy slim look.
39	<b>Kellogg's Chocos</b> <b>India-</b> The product focus on power of milk with chocolate flavour.	The product is so tasty that a little boy sacrifices watching the T.V and others thing and study as his mother says gives	It shows two siblings desirous of having the product with chocolate milk shake with crunchy pops,



	<b>Australia-</b> Healthy choccos with taste like chocolate milk shakes.	it everytime for studying.	rush to purchase milk from shop and on return, they see their father already eating it and after that they share it together.
40	<b>Yakut India-</b> The product focus on good bacteria to increase intestine strength. <b>UK-</b> The product contains goodness	A yoga instructor after completing her class, drinks the product to kill all bad bacteria making the body seventy percent stronger.	The product is shown as enriched with vitamin D and E and is aimed for perfect health.
41	<b>RedBull India-</b> The product focus on the power of the imagination. <b>USA-</b> The product gives wings to imagination.	It shows during car race the driver and his partner have the product and after that they starts flying with the car through the mountain as the product gives wings.	The product simply gives wings for imagination as termite transform a simple wooden table into a beautiful design table.
42	<b>Pedigree India-</b> The product focus on perinial hope <b>UK-</b> The product focus on healthy nutrition food for dogs.	A kid throws his shoe at home as he had lost a football match but his little dog brings the shoe back again and thus taught the kid not to loose hope. Similarly, Pedigree with nutrients helps to develop confidence to fight back.	It shows the new product pouches has all the needs for the pet dogs and they enjoy it. The product being good food for pets help them grow faster.
43	<b>Whiskas India-</b> The product focus on delicious fresh meal for kitten. <b>UK-</b> The product shows its best to increase the curiosity.	A couple bring the little kitten to their home and feed the product for faster growth and healthy life.	It shows a kitten curiosity looking at the window as the rain falling and then the product is given to the kitten which she enjoys.
44	<b>Ariel India-</b> The product focus on removal of stains even by a man. <b>UK-</b> The product focus on cleanliness of sensitive clothes.	It shows a single dad taking up the responsibility of a girl child very sincerely. Even when the child pores sauce in her dress then he use the product easily for removing the toughest stains in single wash.	It shows a boy and a girl come home with tough stains on clothes which can not be washed in hot water. The mother uses the product as it works lower temperature water and remove all stains.
45	<b>Tide India-</b> The product removes toughest stains in a wash. <b>USA-</b> The product focus on quality for years.	The product cleans dirty uniform of a child, who plays with mud regularly, in a single wash thereby removing all worries of his mother.	The product for the last seventy years with its super quality performance for cleaning the toughest dirt it is holding the pioneer position in American market.
46	<b>Huggies India-</b> The product focus on soft touch like mothers. <b>USA-</b> The product focus on natural care for babies.	The product with soft feelings like pure cotton and advanced dry touch sheet makes it as comfortable as mother's hugs.	The product is the softest diaper with trusted protection of plant based materials and free of parabens or other harsh ingredients.
47	<b>Pampers India-</b> The product focus on dryness for entire night. <b>UK-</b> The product focus on convinience like pants (underwear).	A doctor is shown recommending the product to a mother as the product has the ability to transfer the urine into gel and stops chances of infection and catching cold.	This product is very easy to put on as its just like a pants which keeps dryness upto twelve hours.



48	<b>Johnson`s (shampoo)</b> India-This product focus on the trust. UK-The product focus on safety for eyes during bath.	The product does not have formaldehyde, parabens and harmful chemicals provides hundred percent gentle care of the babies hair.	The product is the first baby shampoo special formulated with unique no more tears formula proven to be as gentle to eyes as pure water.
49	<b>Johnson`s (Baby Bed time Bath)</b> India-The product focus on comfort of baby in bed. USA-The product focus on disturbance free sleep for babies.	It is clinically proven that before bed if the baby take bath with the product, it would help the baby fall asleep easier. Gently massage with bed time lotion with natural calm aromas are also suggested by dermatologist	It shows that the product clinically proven to help a baby to sleep faster and help the baby stay asleep longer.

### ANALYSIS OF THE RESULTS

**Soft Drinks and Beverages:** In this study the advertisement of Coca-cola, 7up, Pepsi, Mountain-Dew, Sprite, Tropicana has been analyzed for both in India and the West. Most of the Indian advertisements of Soft drinks and Beverages mainly focus on young generation, couple, youth, college students and friend zone to promote their products. Indian ads showed break time at 3 o` clock is enjoyed by young girls with Coca-cola; Fido Dido of 7up gives better idea to rescue couples from neighborhood uncle; young boy of college student union breaks the hunger strike as he couldn` resist himself from Pepsi, the gangster took the adventure steps with Mountain-Dew; One gulp of Sprite refresh the boy in summer and Tropicana with Iron and Vitamin makes young lady strong. Advertisements of USA influence overall population at a wider range. Girl cheers with Coca-cola with her big gang; 7up invented vending machine to win customer`s preferences; no generation gap of consuming Pepsi; Mountain-Dew shows if there is a will there is a way; Sprite refreshed players along with audiences; Tropicana shows core feature of fruity and juicy with pro-biotic formula.

**Noodles:** Maggi and Top Ramen has been taken for this study. Indian advertisements are displayed by categorizing the emotional space of mother`s love for her children whereas Western advertisement shows the reason behind choosing smartly these products. Maggi gives instant relief to a mother of an independent daughter as she(daughter) learned the quick easy recipe of Maggi just like her mother. Again Top Ramen shows that mother brings back the happiness to her sons by cooking Top Ramen, the instant noodle which has the same great taste. The Western advertisement of Maggi shows the several reasons behind choosing it for its taste and fiber, healthy as it has iron and sunflower seeds oil, instant relief from hunger, pleasure in winter and convenient solution of family meal. Top ramen focus mainly on

the taste of salt that can be enjoyed by those whose favorite flavor is salt.

**Tea:**Both the Indian and Western advertisement of Nescafe conveys a strong message in an emotional way. Indian advertisement shows success comes with strong mind just like the strong bonding of father and son whereas Western advertisement conveys the message for those moments that always matter when close persons always stand by side though out the success. Tetley in Indian advertisement is seen as a substitute of healthy food that make people active from inside, whereas Tetley in Western advertisement shows the togetherness that makes anyone to talk. Lipton also shows as the healthy green tea that is necessary along with exercise in Indian advertisement whereas Lipton tea in Western advertisement shows the process of growing tea leaves in all natural way that gives the freshness.

**Toothpaste:** In Indian advertisement Colgate focuses the emotional attachment with consumer as the tagline of the advertisement states the great things can be started with a smile; rest of the toothpaste focuses mainly on the core feature of the product, such as Oral-B gives eight benefits in one toothpaste promoted by Bollywood stars and Sensodyne shares the review of one of its clients that shows the relief from sensitivity and helps to restore natural whiteness. Whereas Western advertisement of Colgate shows its anti-bacterial protection for healthier mouth; Oral-B in two variants of toothpaste and mouthwash and lastly the dentist review of repairment of sensitive teeth with Sensodyne.

**Shampoo:** The famous Bollywood star`s recommendation for L`Oreal Paris Total Repair 5 that won over damaged hair is the main focus to promote the product. Pantene focuses on advanced feature that gives freedom to open hair. Head and Shoulders only focus on removing dandruff. Dove in Indian advertisement showed the unbeatable damage repair of hair, and hair can be wore in own way.



Again Bollywood star in Indian advertisement promoted the TRESme pro-collection that gives salon like hair at home with Keratin and Argan Oil treatment, whereas TRESme Botanic in Western advertisement nourishes and replenishes hair with professional touch. L'Oreal shampoo focuses on gentle wash to colored hair; Pantene focuses on advanced feature to strengthen the hair and make it more beautiful. Head and Shoulders not only focus to dandruff free hair but also give 100% flake free nourished hair. Dove Nutritive Solution in Western advertisements has proven a clear difference by treating roses with Dove that repairs 90% of daily hair damage.

**Soap:** Indian ads of Dove soap focus to convert non user to a regular user by initiating 7 days test and putting forward the differences after using Dove soap, whereas Western ads shows the user loyalty as Dove can make skin soft, clean and moisturized and build up the confidence of every working women. Dettol teaches Indian kids to be germ free all the time by using hand washes in home and sanitizer outside. In Western ads show anti-bacterial Dettol gives 99.9% protection from germs than other ordinary hand wash and also launched automatic Dettol no touch kit. The advertisement induced kids to feature the product.

**Body care:** By modifying existing product with different variations Nivea introduced the Aloe Hydration Body Lotion for healthy looking skin in summer which is promoted by an actress. Vaseline focuses with advanced healing power that can moisturize the dry skin especially in winter. In Western ads its is seen Nivea came up with unique formula of Almonds Oil that moisturizes skin all day long, it also focused on Restoring Micro droplets of Vaseline jelly to moisturize dry skin. Indian and Western both focused on Men segment for the Pond's Men Face wash. Indian ads show recharging the energy of dull skin whereas Western ads show long lasting Oil Control in Pond's Men Face washes.

**Health Drinks:** Health drinks mainly focused to kids, children, adolescent boys and girls those are interested in every new sphere of life in both Indian and Western Ads. Indian Ads showed Horlicks make kids more tall, strong and sharp to increase their skills in everywhere like dance, sport also in education. Pediasure focused small playschool kids to gain better immunity and visible growth in season change with 37 vital nutrients. Milo focused on adolescent boys and girls to give energy for playing sports with milk, malt, vitamins and calcium. Boost focuses youths and young boys in sports to provide 3 times more stamina. Western ads showed Horlicks for wholesome goodness of family starting from kids to adult. Pediasure helps kids to gain weight just in 8

weeks. Milo shows that mother recommends Milo to her children for more calcium, more iron and more vitamin D. A lady photographer promotes Boosts as a Nutritional Drinks to be happy and healthy with more protein, vitamin and minerals.

**Chocolate-** Both the Indian and Western advertisement of Dairy milk conveys sensitive feelings of life. Indian advertisement shows hidden love between two brothers and they celebrate their love with sweets, where as Western advertisement conveys the message for love of mother and daughter. Kitkat in Indian advertisement shows independent woman express her feeling with happiness where as in Western ads shows happiness is follow in every situation. Oreo shows crunchy surprise in every situation in Indian advertisement where as in Western advertisement shows true bonding between different types of people. Snickers in Indian ads shows hunger of a person change his personality and in Western ads shows hunger can stop important jobs also.

**Snacks-** In this study the advertisement of Doritos and Lays has been analyzed for both in India and the West. Indian advertisement in Doritos shows a new taste of chips in the market where as Western advertisement shows the boldness after having the product. Lays chips in Indian advertisement shows a variety of flavours with various moods and emotions, and in Western ads spreads smile with happiness in every situation.

**Body Spray-** In Indian advertisement of Rexona protects every woman by ten times odour protection and saves skin from bacteria caused by sweat, whereas in Western ads shows three times stronger protection from sweat and body odour. In Indian ads Axe body spray for men may be needed in any moment and in Western ads it shows that one doesn't need to have good physique, needs only grooming.

**Cornflakes-** In Indian advertisement Kellogg's plain displayed emotional father's love for his daughter whereas Western advertisement shows healthy and wealthy family relationship. Kellogg's Special K in Indian advertisement is seen as a substitute for healthy food, whereas Western ads shows healthy and slim lifestyle. Kellogg's Chocos in Indian advertisement shows that mothers give Chocos every time for studying whereas, in Western ads shows two siblings have true friendship by sharing the product.

**Health Supplement-** Yakut and Red Bull has been taken for this study. Yakut in Indian ads shows that to kill the bad bacteria a yoga instructor takes this everyday whereas in Western ads shows all vitamins enrich the product. Red Bull in Indian ads shows the



power of imagination, where as in Western ads gives wings to imagination.

**Animals Food-** Whiskas and Pedigree has been taken for this study. Whiskas is mainly used for kitten and Pedigree is used for dogs. Whiskas in Indian ads shows the wet and dry food support daily life style of kitten and in Western ads it focuses on health of a kitten. Pedigree in Indian ads shows a friendly relationship between a kid and a dog, where as in Western ads show every dog enjoy this food.

**Washing Powder-** Ariel in Indian advertisement shows a single dad takes responsibility of a girl child and he enjoys it even when the child gets dirt in her dress, where as in Western ads shows a boy and a girl come home with tough stains on clothes and their mother washes their clothes with care. Tide in Indian ads show how to clean a dirty uniform with gentle care, whereas in Western ads show the quality of years.

**Diapers-** Huggies and Pampers have been taken for this study. Huggies in Indian ads shows a baby enjoying soft feelings, whereas in Western ads show natural care of every baby. Pampers in Indian ads shows a doctor recommending the product as safe for babies, especially new born babies, and in Western ads shows easiness to put on while maintaining dryness upto twelve hours.

**Baby Products-** Johnson's shampoo and Johnson's baby bed time bath has been taken in this study. In Indian advertisement Johnson's baby shampoo shows gentle care for babies, whereas in Western advertisement shows baby shampoo made in special formulation with unique no more tears formula. Johnson's baby bed time bath in Indian ads shows bath before bed gives sound sleep, whereas in Western ads shows no disturbance when a baby sleep faster and longer.

### CONCLUDING REMARKS

Advertisements are intended to attract consumer's attention, create awareness of the product and stimulate final sales. On analysis of advertisements of 49 FMCG products displayed through audio-visual media in India and the West, it is clearly found that the contents, visuals and messages are planned and designed to cater socio cultural demands of target population. The advertisements emphasize on core product features in both places in general but there are subtle differences in content of messages. Indian advertisements focus more on family bonding, love and affection, instant gratification, social approval and personal benefits. Western advertisements focus on social bonding, social status, delayed gratification, self approval and environmental benefits. It is also found that the

makers have modified the contents, visuals and process of delivery according to the cultural maturity of their target audiences. In conclusion, it can be stated that customization of advertisement to suit the tastes, preferences and mental state of audiences are followed by advertisers of the same FMCG products both in India and Western countries.

### WEBSITES CONSULTED FOR ADVERTISEMENTS

- 1 <https://youtu.be/8mKFF5K4aUI>
- 2 <https://youtu.be/5-ahnFYzMp8>
- 3 <https://youtu.be/hrPQfZSeC-Q>
- 4 <https://youtu.be/nkgQFOOrTug>
- 5 <https://youtu.be/CqYzIAE2LG8>
- 6 <https://youtu.be/0gHYd67OumQ>
- 7 <https://youtu.be/8I9Fm5CG24>
- 8 <https://youtu.be/Enew6dk8pQ4>
- 9 <https://youtu.be/Z0wOM-NITrc>
- 10 <https://youtu.be/JeFAx2fJnf0>
- 11 <https://youtu.be/xPaylywKN78>
- 12 [https://www.adsoftheworld.com/media/film/tropicana\\_feel\\_like\\_a\\_billion](https://www.adsoftheworld.com/media/film/tropicana_feel_like_a_billion)
- 13 <https://youtu.be/DyMtblMXfM>
- 14 <https://youtu.be/Xr0Aj3cPQqQ>
- 15 <https://youtu.be/t8XVHEN2VXA>
- 16 <https://youtu.be/Vx58QGbdzH0>
- 17 <https://youtu.be/T6rqWYcalcU>
- 18 <https://youtu.be/jZtEXMBbaZg>
- 19 [https://youtu.be/Gnyxd0fU7\\_w](https://youtu.be/Gnyxd0fU7_w)
- 20 <https://youtu.be/PE8gVb6DrAw>
- 21 <https://youtu.be/GbqZTIY3ppU>
- 22 <https://youtu.be/c0WD6ivxDdI>
- 23 <https://youtu.be/VCmOmrcPbyk>
- 24 <https://youtu.be/VAJDwIshn0U>
- 25 <https://youtu.be/gix4fVeO16U>
- 26 <https://youtu.be/lt0t82dmT2M>
- 27 <https://youtu.be/ibc-3pzlejQ>
- 28 <https://youtu.be/eu1JBtI1cWw>
- 29 [https://youtu.be/Z\\_J7Zeqye\\_k](https://youtu.be/Z_J7Zeqye_k)
- 30 [https://youtu.be/c4s9-\\_XiIPc](https://youtu.be/c4s9-_XiIPc)
- 31 <https://youtu.be/HRuKXjFIRIY>
- 32 [https://youtu.be/NCKqn\\_Aq5ik](https://youtu.be/NCKqn_Aq5ik)
- 33 <https://youtu.be/NTFONinqQpA>
- 34 [https://youtu.be/1DNhMmzDc\\_c](https://youtu.be/1DNhMmzDc_c)
- 35 <https://youtu.be/8t9Ksd2nFiU>
- 36 <https://youtu.be/CLWez0aBfvc>
- 37 <https://youtu.be/90KsVQfMeiM>
- 38 [https://youtu.be/6qP0M\\_h9phs](https://youtu.be/6qP0M_h9phs)
- 39 [https://youtu.be/gU\\_26k6-hy0](https://youtu.be/gU_26k6-hy0)
- 40 <https://www.ispot.tv/ad/I8xz/dove-beauty-bar-ironworker>
- 41 <https://youtu.be/CPcn9k7a1PU>
- 42 <https://youtu.be/7CXwUUB-cAY>
- 43 <https://youtu.be/MdT4IaLZbXY>
- 44 <https://youtu.be/9mBv6VRuB1k>
- 45 <https://youtu.be/Vbj99FpanEs>
- 46 <https://youtu.be/6ncXNwGH4Yk>
- 47 <https://youtu.be/6lQmr7k2rMA>
- 48 <https://youtu.be/8lqigTHO4Cw>
- 49 <https://youtu.be/Q9Sm8xdigo>
- 50 <https://youtu.be/OMxeldmKLC4>
- 51 <https://youtu.be/sjxQrHme-y4>



- 52 <https://youtu.be/Pqbhc1OLYSs>
- 53 <https://youtu.be/RmoXTMCZ1xo>
- 54 [https://youtu.be/WQ\\_eQmvECyw](https://youtu.be/WQ_eQmvECyw)
- 55 <https://youtu.be/VLN0zsd4mgQ>
- 56 <https://youtu.be/T1GgbxIRJOo>
- 57 <https://youtu.be/k80dLDDzkdY>
- 58 <https://youtu.be/10eEgeizNCA>
- 59 <https://youtu.be/5HrCt34fyG4>
- 60 <https://youtu.be/0zTkOhrBy6E>
- 61 [https://youtu.be/CjQJ\\_IYdsdo](https://youtu.be/CjQJ_IYdsdo)
- 62 <https://youtu.be/wOUHBS3bR8o>
- 63 <https://youtu.be/n3wBSrlcEB0>
- 64 <https://youtu.be/NIInvY8xDH0>
- 65 <https://youtu.be/ibGhJBZwKYE>
- 66 [https://youtu.be/Qh\\_gOK6xDNA](https://youtu.be/Qh_gOK6xDNA)
- 67 <https://youtu.be/gjbMDHdQfw8>
- 68 <https://youtu.be/1G7BFVCZrAU>
- 69 <https://youtu.be/yVmFNUnEHb0>
- 70 <https://youtu.be/KlxooVR31VM>
- 71 <https://youtu.be/FpTGiaoh-CI>
- 72 <https://youtu.be/aVxYSeZp8Z4>
- 73 <https://youtu.be/h5Avd0b9Mgo>
- 74 <https://youtu.be/DpyDa2FXAuU>
- 75 [https://youtu.be/\\_MgVOAEL2q4](https://youtu.be/_MgVOAEL2q4)
- 76 <https://youtu.be/TZNO8fj9AvY>
- 77 <https://youtu.be/PTD6qaBQcyo>
- 78 <https://youtu.be/X0EMYTFerMM>
- 79 <https://youtu.be/sFBmnS2n7n4>
- 80 <https://youtu.be/IxYd6Ky0oTM>
- 81 <https://www.redbull.com/in-en/videos/rally-in>
- 82 <https://youtu.be/WLyGLk2hDw4>
- 83 [https://youtu.be/zCPY\\_LsXDDo](https://youtu.be/zCPY_LsXDDo)
- 84 <https://youtu.be/-6FJRVnn1qk>
- 85 <https://youtu.be/85sn4a6AGTk>
- 86 <https://youtu.be/ZyQrdJ5iiAY>
- 87 <https://youtu.be/g8eHEB-KET4>
- 88 [https://youtu.be/cU8\\_\\_SHxTF0](https://youtu.be/cU8__SHxTF0)
- 89 [https://youtu.be/oxsHp196\\_Nk](https://youtu.be/oxsHp196_Nk)
- 90 <https://youtu.be/LReIPWUe3BY>
- 91 <https://youtu.be/KlI6FaJtMEM>
- 92 <https://youtu.be/za4841RvKY0>
- 93 <https://youtu.be/5G3HKD03XzE>
- 94 <https://youtu.be/u6yNuBTAtTI>
- 95 <https://youtu.be/bdXvZNdNCi0>
- 96 <https://youtu.be/CUMcTEeJ-s4>
- 97 [https://youtu.be/cZ57djJQ\\_3k](https://youtu.be/cZ57djJQ_3k)
- 98 [https://youtu.be/\\_BlxggtKoaw](https://youtu.be/_BlxggtKoaw)



# BASIC STUDY OF QUANTUM COMPUTER VS CLASSICAL COMPUTERS

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## ABSTRACT

*In this paper i cognizance on the primary distinction between quantum computers and classical computers. People who are not from the field of computer science couldn't recognize that what is quantum computing and what its uses are? It defines the basic differences, design problems of quantum computers. It also discusses the advantage and disadvantage of quantum computer over classical computer.*

**KEY WORDS** :Quantum computer, classical computer, quantum mechanics.

## INTRODUCTION

Classical computers are develop in early 19<sup>th</sup> century. Our first generation computer is based on vacuum tube and second generation is base on semiconductor transistor. From third generation the computer system is based on IC chip . As size of electronics component is decreases the size of the computer system is also decrease. Computer based on today's chip technology is not get cheaper and better.

The technology of quantum computers is very different from the classical computer. Quantum computer is based on physics quantum theory. Quantum computation transform the memory into quantum superposition. In early 1980s Quantum computing was proposed by physicist name paul Benioff. Quantum computing simulations are out of reach for classical computers.

Classical computer's units are referred as bits. Bits are represented by manner of 0 and 1. In quantum computer memory also use bits represents 0, 1 and some mixture of 0 and 1 (superposition state). Quantum computing bits are called qubits.. The power of forty qubits have equivalent to modern super computers i.e its can search a phone number in 25 to 30 secs from worlds phone book.

## ADVANTAGES AND DISADVANTAGE OF QUANTUM COMPUTERS

### ADVANTAGE

- Quantum computer is very faster than the classical computer.
- Quantum computer can give better performance than classical computer.

- In quantum computing qbits are the superposition state so, it can do calculation with exponential speed .
- Quantum computer can carry out classical algorithm very successfully.

## DISADVANTAGES

- In quantum computing the required technology which help to protect the electron is not available .
- Research work is in progress.

## ADVANTAGES AND DISADVANTAGE OF CLASSICAL COMPUTERS

### ADVANTAGE

- Classical computer can do complex calculations and does it fast but slower than quantum computer.
- Classical computer helps in storing data, retrieval, and security.
- Classical computers are helping into file sharing over large networks.
- Classical Supercomputers can simulate real-world events and display time-based progressions.

## DISADVANTAGE

- Using classical computer can make you physically susceptible and lazy.
- oing extra unwanted activities on classical computers can waste your time.



- By using classical computers for a long time, your blood circulation can become poor due to less physical activities.
- Classical computers can cause the disturbance in one's meal.
- Classical computers Can purpose heal th troubles like awful postures, aches, obesity, eye problems, etc.
- Classical computers also, it has a bad effect on training if it's far used improperly.

## CONCLUSION

Quantum computer revolutionize the computational world. Large companies and some starts up are working upon non error corrected quantum computer. It is critical that making a sensible quantum computing continues to be far in the future. Quantum computing programming method is different from classical computer. Quantum computer development is very costly. Even the best scientists can't clarify the questions of quantum computers logic. Quantum computer is based on quantum physics. Quantum computer systems easily resolve applications that can't be done with assist of today's computers. Although the future of quantum computing looks promising, so, we have to realize on quantum computer..

## QUANTUM COMPUTING AND FUTURE

Quantum figuring continues on being in its earliest stages, besides a few gadgets as of now exist that would bolster numerous bits. An essential quantity of studies attempt is currently committed to improving these capacities, and sooner rather than later quantum computer systems will take a leap forward. Recently IBM introduced its 50 qubit quantum computer , an brilliant feat of engineering and science. When quantum computers reach the order of hundred qubits, humanity will be geared up with exceptional computing power. Many cyber security techniques are primarily based on the incapacity of classical computer systems to carry out positive obligations in feasible times, making looking to surpass them impractical. These classically unsurmountable duties include those which may be made vastly more efficient by the usage of quantum computers. Cryptography is definitely below chance from quantum computers, and with it cutting-edge day gear like Internet banking, credit score card transactions, e-mail, chat offerings and greater. New encryption strategies and solutions are needed to make certain the continuing survival of the Internet infrastructure which makes our lives easier. Like a snake poison's antidote is regularly created using the deadly substance itself,

the answer to quantum hacking lies in the origin of the problem, quantum mechanics.

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## AFFECTION DIGITIZATION TECHNOLOGY

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### ANNOTATION

*The article presents a theoretical and practical analysis of the concept of kindness. The rating scale is represented by "indicators of kindness level assessment". Special attention is paid to the manifestation of kindness in social relations, as well as on digital technologies.*

*Further strengthening of the atmosphere of kindness in society, shown by members of society in relation to each other in interpersonal relations, strengthens social stability in society.*

*In humans, the first social relations are based on love. This is due to the mother's affection when the baby is born. In his nature there is a constant need for compassion.*

*A person always needs kindness, with the help of evaluating the level of kindness in social relations, expands the possibilities of goodwill in society for social stability. At the same time, humanity is increasingly integrating itself into the processes of globalization. At the same time, the level of peoples' self-awareness is growing, and there is a growing tendency to feel the national heritage, historical and cultural experience of their people.*

**KEYWORDS:** *kindness, manifestation of kindness, categories of kindness, globalization, social activism, freedom, social relations, indicators of kindness, information, affection, assertiveness, audio artist, visualist, kinesthetic, discretion, digital technology.*

### DISCUSSION

Kindness and compassion are characterized by complexity and versatility in the system of social relations. It manifests itself in maternal affection as the first form of social relationship. Mercy is simultaneously related to the processes of interaction of individuals, the exchange of information, the attitude of one person to another, the influence of one person on others, the ability of people to empathize with each other, the understanding of individuals.

Western democratization, which is an integral part of the globalization process in the world, is taking root in the lives of the peoples of the East. And sometimes we come across the exact opposite of the expected results. We can see this in the system of interpersonal relationships. At the same time, humanity is becoming more and more actively integrated into the processes of globalization. At the same time, the level of self-awareness of peoples is rising, and there is a growing tendency to feel the national heritage, the historical and cultural experiences of their people.

Globalization, which began in the middle of the twentieth century and became a widespread process, has created internal divisions and alienation in human and interstate relations. Especially the family social institution, which is the primary and

strong link of people, the traditional atmosphere of love, loyalty, mutual solidarity between spouses, brothers, sisters, close relatives in the family began to decline. In developed countries, the decline of human kindness and tolerance, the indifference of the new generation to the way of life of the older generation, in particular, to the customs and traditions of their parents occurred. In addition, they analyzed the literature they valued, their lack of mastery of the masterpieces of art, their indifference to science, and their tendency to destroy nature instead of respecting it. It is recognized that the only way out of the situation of "de facto" is the need to carry out activities in each area aimed at strengthening inter-organizational ties, inter-people solidarity.

Anthropological analysis shows that the world has now entered a phase of struggle for common morality, a spiritual image in a certain sense, a principle of global significance. Developed countries pursue a wide range of geopolitical policies not only through industrial products, information and ideological influence, but also consistently seek to integrate the nature, character and mentality of their people into the way of life of the peoples of the world. For the peoples of the world, a common etiquette, a common character, a common mentality are being compiled in a special and consistent way.



Political, economic and information globalization also contributes to the standardization of mentalities, mental identities, behavior.

The characteristics of our modern times are dynamic movement, intensity and enthusiasm, the joy of creation and creativity, reliance on the strengths of people, continuous improvement of professionalism, clear goal setting, completion of every work started, demonstration of patriotism on the basis of love for the people, commitment to national and spiritual values, recognition and strengthening of mutual friendship and cooperation as a guarantee of peace, responsible approach to human destiny, tolerance, compassion, strict adherence to justice in all areas and directions, strong social policy, making everyone's life happy and prosperous, preserving nature given by Allah, family values in all respects strengthening, relying on the personal example of a parent, educator, leader, community activist in the educational process, and so on.

Professor M. Bekmurodov makes the following analysis of periodic comparisons of social processes. "Analysis of previous work shows that human unity has been based on political consciousness, worldview and collective closeness. The picture of the situation during the implementation of the Strategy of Action can be seen in the formation of attention to the unity of people on the basis of kindness and goodness, in the comprehensive promotion of the understanding and development of unity as a fundamental human value. [4, - B. 70]

There is a struggle of two factors in the world, a culture of respect for power and a culture of respect for kindness and goodness. Respectful culture theorists operate on the principle that "any means can be used to achieve a goal because the outcome justifies the means," while proponents of a culture of respect for power demand that results be achieved only through honest means. Uzbekistan is a country that respects compassion, not anger. The basic theoretical basis of the strategy of action is manifested in the understanding of compassion, peace and cooperation as a priority policy of the state. In a person, the qualities of responsibility, kindness, solidarity, initiative become an integral part of our national mentality. Emotional, that is, union on the basis of love, ensures the true unity of society.

The content of the works of the President of Uzbekistan Shavkat Mirziyoyev is full of ideas that call our people to national unity, mutual kindness, brotherhood and friendship. In his speeches, he said, "In order for common sense and healthy power to prevail in our society, we must constantly think and work actively to improve our spiritual life, protect the population, especially our youth from various harmful influences, bring them up as mature people" [1, - B. 229].

The expansion of affectionate relationships in society leads to the development of qualities such

as commonality, similarity and harmony among people. The family environment and the relationships within it are among such active relationships.

Lack of love in a person causes a number of problems in society. One of the reasons for the emergence of aggression in the character of the child is the violence of maternal affection, the unmet need for parental upbringing.

A number of social problems that arise in society today can be studied in relation to the concept of compassion. This can be seen in interpersonal relationships, child rearing, spouses, teacher-student, mother-in-law, brothers, sisters, and the relationship of children to their parents.

The highest and most sincere peak of human kindness, according to many scholars and thinkers, is the mother's love for her child.

Further strengthening the environment of kindness in society, increasing the love of parents, children, grandparents, grandchildren, brothers-in-law, brothers, relatives and members of society in general, especially in today's society, strengthens social stability.

There is a constant need for compassion in society. Determining the state of the environment of kindness in society by assessing the level of kindness in social relations expands the possibilities of ensuring social stability.

A number of studies have been conducted on the possibility of strengthening compassion through volitional qualities. In particular, it is based on the study of the will from the point of view of the motivational properties that affection can change the state of formation to a certain degree. In particular, the researcher G. Sattorova said, "The use of the method of correlation analysis on the relationship between volitional qualities gives effective results. The willpower and personality traits of the student depend on the motivational spheres" [7, - B. 20].

Compassion is a multifaceted, mutual understanding process that manifests itself simultaneously as a process of interpersonal interaction, both as an information process and as their interaction with each other. Its main functions can be seen in the following:

- information and communication - the mutual knowledge of people involved in the reception and transmission of information;
- regulatory and communicative - in which people regulate each other's behavior, organize joint activities;
- affective-communicative - they are associated with the emotional spheres of man.

In the true act of kindness, all functions are closely intertwined, and in all its states there is a process of interaction. These interactions can be more or less, latent or direct, positive or negative. Its power depends on a person's spiritual wealth, as well as a person's personal qualities.



Assertiveness - attention is the analysis of research on the independence of man from external influences and assessments, independent regulation of his behavior and taking responsibility for it, "A. Solter in his scientific work studied assertiveness as a constructive means of interaction. A. Bandura, A. Lazarus, P. Zimbardo, S. Staut in their scientific researches are devoted to the study of biological aspects of assertiveness and issues of assertive behavior" [2, - B. 11].

Based on social research and the Law of Adequate Foundation, nearly a hundred concepts were based as categories representing compassion. Based on these categories, scales can be formed to assess the relationship of affection.

The following is an example of an indicator of the level of affection (mother's love for her child). This indicator is formed on the basis of an evaluation scale, and the representation of the action in numbers is important not by the researcher, but by the object itself, which is written or evaluated. The researcher

develops this based on the aggregation of respondents' opinions about a particular relationship system. Based on the recommended scale, it is possible to assess the level of kindness in interpersonal relationships. Of course, research is being done to further improve this. In the indicator, the concepts that express kindness in themselves are presented as units of scale. On the basis of the indicator, the degree of affection of one person (applicant) in the relationship with another is assessed. On the scale, 53 categories representing the mother's love for the child were selected. These concepts were formed in small groups based on the opinions expressed by group members. Experts' opinions were expressed on how these concepts express affection. In these categories, concepts representing mother's love for the child were analyzed according to the law of rationally sufficient basis for the purpose of scientific substantiation.



**AFFECTION ASSESSMENT INDICATOR:  
 (Mother's love for the child)**

APPLICANT:	FOR WHOM:
Identity: _____	Identity.: _____
Age: _____	Age: _____
Gender: _____	Gender: _____
Social status: _____	Address: _____
Job: _____	Date: _____ year
Address: _____	

No	Concepts	The number of daily actions (approximately)	Express your own attitude in 5 ball-system
<b>1. Contact forms of affection:</b>			
1.	Hugging		
2.	Handshaking		
3.	Kissing on the face		
4.	Sweeping the face		
5.	Sweeping the head		
6.	Feeding		
7.	Breastfeeding in time		
8.	Stumbling on the shoulder		
9.	Sweeping the shoulder		
10.	Kissing on the forehead		
11.	Sweeping on the forehead		
12.	Lifting		
13.	Lifting on the back		
14.	Caress up under the armpits		
15.	Role plays together		
16.	Dressing		
17.	Giting		
18.	Massaging		
19.	Lift up and put to bed when one sleeps		
20.	Kissing when one sleeps		
21.	Waking up carressing him		
22.	Seeing, watching		
<b>2. Non-contact form of affection:</b>			
23.	Smiling honestly		
24.	Put the hand on your chest and show sincere respect		
25.	Nodding (agreeing)		
26.	Saying goodbye by handshaking		
27.	Chatting (sincere, humoristic)		
28.	Saying his name affectionately		
29.	Walking together		
30.	Encourage exemplary work and action		
31.	Sincere conversation		
32.	Telling fairy-tales		
33.	Listeninng to the child		
34.	Saying "I love you", "My brave man", "My mom", "my dear"		
35.	Taking wills into the consideration		



36.	Applauding		
37.	Defencing		
38.	Dancing		
40.	Singing lullaby		
41.	Teaching a poem		
42.	Praying		
43.	Listening to the problems		
44.	Singing a song		
45.	Watching cartoons and films together		
46.	Giving useful advices		
47.	Concerning about their health		
48.	Sending SMS		
49.	Chatting by Telegramm		
50.	Sending smile jokes		
51.	Conversating through the internet		
52.	Walking together		
53.	Cooking together		

The person completing the questionnaire puts the daily average or overall average ratio on the scale in numerical order (i.e., how many times).

The numbers entered are summarized by the interviewer or electronic program and divided by 17. The result is an index of kindness shown by the applicant:

$$Ms / t = M$$

Where: Ms-number of affections, t-time, M-kindness index.

Example:

$$53/17 = 3$$

In our example, the number of operations performed by the questionnaire was 53. If we divide the result by 17 [1], the product is 3.1. So the kindness index is 3.1.

The average index on the scale is 7 points for 0-5 years, 3 points for 6-15 years, and 2 points for 15 years [2]. Recommendations are developed by the specialist or on the basis of an electronic program, based on the average of the client on the basis of the units on the scale.

For example, if the affection index is 3.1 points, as mentioned above, and the object is 4 years old, it is a low indicator. Because at this age the index is the norm when the average is 7 points. In this case, the specialist pays attention to the values of 0 and below in the scale parameters. By placing numbers on the cross-section of the scale units on how many times these indicators should be increased, the person filling out the questionnaire develops recommendations based on the missing contact and non-contact kindness directions towards the object.

The "Kindness Assessment Indicator" (above, only the mother's compassion for her child) can be used by anyone to assess their level of affection and gain the necessary information to improve their relationship in this regard. By applying it in family and work communities, it is possible to ensure activism and stability in society by increasing kindness and compassion in interpersonal relationships. In particular, in family relationships, marking the kindness level of :

- mother to her child	- child to his mother
- father to his child	- child to his father
- elder sister to her sister	- sister to her elder sister
-elder brother to his brother	- brother to his elder brother
- granddad to his grandchild	-grandchild to his granddad
- grandmom to his grandchild	- grandchild to his grandmom
- mother-in-law to her daughter-in-law	- daughter-in-law to her mother-in law

can help achieve stability in family relationships.

It is important to know how much the object understands the kindness given by the subject. It is therefore important to determine the difference between a given kindness and a received kindness on the basis of a comparative analysis and to determine

the dynamics of misunderstandings. The relationship with this indicator can be analyzed both quantitatively and qualitatively. Currently, the development of a system of indicators:

- to determine the content of the concept of kindness;

- self-assessment of the respondent's level of satisfaction with his / her activity, as well as an



assessment of his / her attitude towards another subject;  
- achieving quantitative assessment of quality indicators by digitization;  
- development of the ability of subjects to engage in social relations by increasing compassion in society;  
- allows you to fully activate the person and stabilize social processes by improving relationships based on kindness.

#### Notes:

[1] *A day and night is 24 hours, of which the average sleep time is 7 hours. This was marked as a period of daily expression of kindness.*

[2] *In doing so, average indices such as 7, 5, 2 were obtained. As one grows older, the distance between interpersonal social distances increases. This in turn leads to a decline in the index of expression of kindness. Also, the average ratio of the results obtained from the respondents was taken as the average normative indicator and the rate of differentiation according to age was determined. In generalizing the units of scale, the types of auditory, visual, kinesthetic, discrete personality of the subject's perception of information from the outside world were taken into account.*

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# TO STUDY THE IMPACT OF THEATRE IN EDUCATION TECHNIQUE ON FUNDAMENTAL DUTIES

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## ABSTRACT

*The purpose of this study was to study the impact of theatre in education technique on fundamental duties. There are 11 fundamental duties in Indian constitution which is taught teachers trainees at Education College. Collaborative learning and Activity based learning attracts the learners. Both are included in the theatre in education technique. It was experimental work and single group pre-test post test design was selected for this study. The sample was purposive. Forty nine trainees of F.Y.B.Ed was the sample. Total 13 sessions were allotted for this study. Pre-test was given in first session to know trainees' achievement score on fundamental duties. Eleven sessions were allotted for 11 fundamental duties. All duties were taught by theatre in education technique. The post-test was conduct in the last session. The average score of pre test was 7.28 and the average score of post test was 44.08. It was found that there was significance difference between the result of pre-test and post-test at 0.01 levels in T-test. The result gave a clear message that theatre in education technique was effective.*

**KEY WORDS:** *Theatre in education technique, Fundamental Duties*

## INTRODUCTION

Duties are more important than rights that are why fundamental duties are written in the beginning of every text-book. It is taught teachers trainees also. The researcher has been teaching fundamental duties every year to the teacher trainees. Various teaching techniques were used to teach the various topics. The researcher likes to study impact of teaching techniques. He wants to examine the theatre in education teaching technique. Fundamental duties were the appropriate topic for that. So it was decided to implement the theatre in education teaching technique on fundamental duties.

## OBJECTIVES

1. To study the impact of the theatre in education teaching technique on fundamental duties.

## HYPOTHESIS

There will be no significance difference between mean score teacher trainees achievement of pre-test and post-test on fundamental duties.

## SIGNIFICANCE OF STUDY

This study will be helpful the teachers who want to know the impact of the theatre in education teaching technique.

## LIMITATION

1. The teacher made test was used in pre-test and post-test. It was not standardized.
2. The sample was purposive. Forty nine students were in sample which was from the teacher education college where the researcher works.
3. The data was collected by pre-test and post-test only, no other techniques for data collection were used.

## RESEARCH DESIGN

It was experimental research work and single group pre-test post-test experimental design was used in this study.

## SAMPLE

Forty nine B.Ed. trainees of the academic year: 2017-18 from V.T.Choksi Sarvajanik College of Education, Surat were selected for sample. It was purposive sample.



## TOOLS

1. Test
  - a. The teacher made test which were used in pre test and post test was developed to know the trainees' achievement score on fundamental duties.
  - b. There were 25 multiple choice questions and 5 essay type questions

in the test which were develop to know the trainees' achievement score on fundamental duties. The 25 multiple choice questions contained 25 marks and 5 essay type questions contained 25 marks. It was 50 marks teacher made test and time duration was 1 hours.

## RESEARCH DESIGN

Session	Session	Time
1	Pre-Test	1 hr.
2	First Duty: To abide by the Constitution and respects its ideals and institutions, the National Flag and the National Anthem;	1 hr.
3	Second Duty: To cherish and follow the noble ideals which inspired our national struggle for freedom;	1 hr.
4	Third Duty: To uphold and protect the sovereignty, unity and integrity of India;	1 hr.
5	Fourth Duty: To defend the country and render national service when called upon to do so;	1 hr.
6	Fifth Duty: To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;	1 hr.
7	Sixth Duty: To value and preserve the rich heritage of our composite culture;	1 hr.
8	Seventh Duty: To protect and improve the natural environment including forests, lakes, rivers and wild life, and have compassion for living creatures;	1 hr.
9	Eighth Duty: To develop the scientific temper, humanism and the spirit of inquiry and reform;	1 hr.
10	Ninth Duty: To safeguard public property and to abjure violence;	
11	Tenth Duty: To strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;	1 hr.
12	Eleventh Duty: To provide opportunities for education by parent or the guardian, to his child or a ward between the age 6-14 years as the case may be.	1 hr.
13	Post Test	1 hr.

\*Constitution of India: Section 51-A

## DATA COLLECTION

The teacher made test was given as a pre-test was given to the trainees in first session and the same test was given as post-test the last session. The answer sheets were collected and examined properly.

The mark sheets were developed. The research data was collected in this way.

## DATA ANALYSIS

The collected data was in numerical for so Mean, Standard Deviation and T-test statistical technique were used for data analysis.

	Number of trainees	Mean	S.D.	T-test
Pre- Test	49	07.20	0.11	Significant at 0.01 level
Post- Test	49	44.08	1.03	

The teachers' trainees mean score in pre test was 07.20. It indicated that trainees were not aware about fundamental duties. The mean score of post test was 44.08. It reflected that the theatre in education teaching technique was an effective teaching technique. The data presented in table clearly

indicated that there is significant difference between the result of pre-test and post-test. The mean score of post test is 36.88 marks higher than pre test. Thus the null hypothesis was rejected. So it can be said that the theatre in education teaching technique was an effective teaching technique.



## DISCUSSION

This study proves that the theatre in education teaching technique was an effective teaching technique. It is a student centred teaching technique. Teachers can use it in their teaching to make class room live. It was also found in previous researches Babi(2006), Pandya(2008), Kunjariya(2011), Deshmukh(2012), Dave(2013), Thaker(2014) and Kolsawala(2017) that dramatization technique was very popular in classroom teaching. A researcher can compare this technique with other teaching technique. Activity based learning and collaborative learning is a demand of 21<sup>st</sup> century and the theatre in education teaching technique is one of the solutions.

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# EMISSIONS, TEMPERATURE AND ECONOMIC GROWTH: AN EMPIRICAL ANALYSIS OF EUROPE

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## ABSTRACT

*This Paper looks at the economic and ecological behavior behind the release of greenhouse gas emissions by thirty-three countries in Europe over a time interval from 1990-2016. We use a time-series clustering analysis on the data. We find significant results between average temperature, the average change in temperature over the years, and the level of economic growth as against greenhouse gas emissions between clusters. The above exercise further helps to analyze the policy implications of different countries and the economic development in the region by proving the environmental Kuznets curve hypothesis using clustering results.*

**KEYWORDS:** *European Union, Time Series, Clustering, Carbon Emissions, Economic Growth, Temperature*

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## 1. INTRODUCTION

The United Nations remark that climate change is the defining issue in today's world. Several calls have been made for immediate and drastic action to save the future. While several factors like changing weather patterns and rising sea levels have been focal points, economics and environmental policy lie at the core of addressing solutions towards climate change. With increasing population and industrialization, there has been a significant increase in greenhouse gas emissions, causing severe damage to the environment and livelihoods. On the policy front, this Paper aims to give a comprehensive review and analysis of core variables of environmental and economic behavior such as temperature and gross domestic product per capita vis-a-vis emission levels in Europe.

Specific Objectives:

- To assess the performance of countries in Europe from the period 1990-2016 on the indicators as mentioned earlier.
- To group countries based on their emission data to observe trends and behavior economically and environmentally.
- To understand the development patterns around different parts of Europe.

The Paper is organized as follows: Section 2 reviews the literature; section 3 discusses our data and methodology; section 4 explains our results and analysis, and section 5 concludes.

## 2. LITERATURE REVIEW

The relationship between temperature data, greenhouse gas emissions, and economic development is the focus of literature under the environmental policy regime. The Paris agreement says that emissions must



be cut by 7.6 percent to keep the temperature increase at 1.5 degrees ("Rise in global temperature will bring more destructive climate impacts: UN report," 2019). Another study remarked that pollutants in the air increased with increased temperatures, particularly during heat waves with ozone increase of more than 50% due to an increase in temperature (Kalisa et al., 2018). On the economic front, there is a positive relationship between economic growth and CO2 emissions in sectors like electricity (Ntanos et al. 2015). Chalikias & Ntanos (2015) conducted a clustering analysis for around 140 countries and concluded that the developed countries are significant polluters where they find a high positive correlation between economic development and carbon emissions. Lapinskienė et al. (2014) give insights on the EKC hypothesis in European regions- We found that the EKC hypothesis holds for GHG and GDP from 1995-2010 in twenty-nine countries using a regression framework.

The originality factor of this research lies in the addressing of the above-reviewed indicators through time series clustering. We focus on Europe, establishing research on the correlation between the above-discussed variables and particular analysis of the environmental policy of the EKC hypothesis through time series clustering helps us to arrive at growth clusters. Mainly we look at relative change in temperature (delta) and cluster the data around it to gain more insights.

### 3. DATA AND METHODOLOGY

Our exercise to analyze the impact and behavior of ecological and economic variables surrounding our crucial concept of greenhouse gas emissions has been

Cluster	No of countries	% of the total
Cluster A	19	60%
Cluster B	7	21%
Cluster C	6	19%

The names of the countries are as follows:

**Cluster A:** Belgium, Czech Republic, Denmark, Germany, Ireland, Spain, France, Croatia, Italy, Luxembourg, Hungary, Netherlands, Austria, Poland, Portugal, Slovenia, Slovakia, United Kingdom, Liechtenstein

done through a time series clustering analysis using agglomerative and K-means techniques. We look at how different pockets in the region are performing by helping us to group similar performing countries. It gave us a clear indication of the different development stages in Europe and geographical development. The exercise further explains the relationship between the variables in focus. Variables for economic value assessment are GDP per capita, temperature, and change in average temperature for ecological assessment and greenhouse gas emissions as the primary variable of analysis.

The dataset comprises a time series of emission data of 33 countries in Europe from 1990 to 2016. 1990 is taken as the base year (marked as 100), and every year is a relative figure of 1990. The data source for the same is from Eurostat. The dataset also comprises the data for temperature comprising over the same timeframe taken from the European environmental agency. Data for GDP per capita (for measuring economic value impact) is from World Bank statistics for the same period.

### 4. RESULTS AND ANALYSIS

We perform two levels of cluster analysis to look at the behavior of emissions and temperature variables:

1. To look at the effect of temperature data, we conduct a clustering analysis of the average temperature change from 1990 to 2016. Using the hierarchical clustering process and the elbow method, we fix 3 clusters as optimal K to employ the K-means clustering method. The following were the clustering results:

**Cluster B:** Bulgaria, Greece, Cyprus, Malta, Iceland, Switzerland, Turkey

**Cluster C:** Estonia, Latvia, Lithuania, Finland, Sweden, Norway



The following are the characteristics of the cluster profile:

	Avg Change in Temp (Delta)	Avg Temperature
Cluster A	0.048	9.99
Cluster B	0.057	14.14
Cluster C	0.021	4.37

The first cluster has the maximum number of countries followed by the second and third. Most of the European countries exhibit an average temperature of around 10 degrees with ranges from 8-12 degrees. At the same time, some countries lie above the specified range (Cluster B), and cluster C lies below the range. Clusters overall that show a greater average change in temperature over the period also show the higher average temperature in the region. Hence, a hotter area experiences comparatively higher variance in the temperature over the years. A good point of observation in the case of an outlier, Iceland. Iceland is one of the coldest countries in Europe, but the average change in temperature (marked by delta) is on the higher side leading to the position in cluster B. There can be external reasons for this behavior. In the next

section of the analysis, we introduce the clustering of emissions and examine its behavior concerning temperature data.

- Cluster Analysis of the time series data is performed on the greenhouse gas emissions variable, analyzed along with the temperature and GDP per capita as substitutes for ecological and economic indicators. We fix the appropriate number of clusters to the data after employing the hierarchical clustering process and the elbow method. We find that 3 clusters exist for the data clustered on emissions. With three as the optimal number, we do K-means clustering to arrive at clusters. The following were the results:

Cluster	No of Countries	% of Total
Cluster 1	8	24%
Cluster 2	19	58%
Cluster 3	6	18%

The names of the countries are as follows:

**Cluster 1:** Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Romania, Slovakia

**Cluster 2:** Belgium, Denmark, Germany, Ireland, Greece, France, Croatia, Italy, Luxembourg, Netherlands, Austria, Poland, Slovenia, Finland, Sweden, United Kingdom, Liechtenstein, Norway, Switzerland

**Cluster 3:** Spain, Cyprus, Malta, Portugal, Iceland, Turkey

Cluster 1 comprises all east European countries. Cluster 2 comprises West European countries and Scandinavian countries. Cluster 3 is a mix of countries from different regions, which will be essential in our further analysis. The following is the characteristic of clusters' emissions and temperature:

**Cluster Profile (Temperature and Emissions):**

Clusters	GHG Emissions		Temperature	
	Mean	Std. Deviation	Mean	St.Deviation
Cluster 1	62.69	10.88	8.42	2.06
Cluster 2	98.27	8.7	9.15	4.48
Cluster 3	133.23	14.72	13.72	6.39

The first cluster has the lowest average emissions, and the third cluster has the maximum. The six countries in the third cluster almost emit twice as the countries in the first. Another clear relationship we see from the table is the hypothesis between emissions and temperature data. As per literature reviews implying on the positive correlation between emission and temperature, we can see a similar behavior wherein higher average emissions correspond to higher average temperatures over the three decades in Europe. We can

observe that almost twice the amount of emissions produced has led to a 1.5 times higher temperature in countries in the third cluster compared to the first.

The next step of the analysis between temperature and emission is the analysis of economic growth across clusters. Economic growth analysis across clusters will give a detailed account of how production and consumption-based emissions are impacted by the increasing value of goods and services from economic activities that impact temperatures.

The following is the **GDP Cluster Profile**:

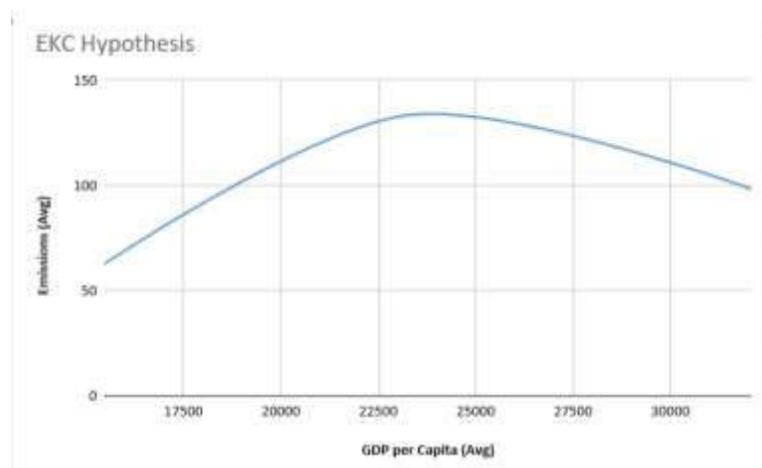
Clusters	Average GDP per capita
Cluster 1	15471.76
Cluster 2	320709.18
Cluster 3	23205.23

The above table is an inquiry into the development aspect of the countries' emission data. The above table shows us the GDP per capita of each cluster averaged over the years of study. From the data, Eastern Europe, comprising countries mostly in the first cluster, has a lower GDP compared to the other clusters over the years. We note that these countries have lower emissions compared to other clusters. The poorer countries in the European region have the least GDP and, in correlation, have the lowest temperature in the region. The developed world comprises the second cluster with the highest GDP in the region on an average (almost twice as the first cluster) but still does not form the worst emitters in the EU. The previous statement is a significant result in terms of the ecological and economic impacts of carbon emissions.

Out of them all, Turkey is the worst-performing country in this GDP to emission index comparison, and

Luxembourg in the second cluster is one of the best performing countries comparatively on the GDP to emission index. Third cluster countries do not represent countries with high GDP as the developed world. They fall in between underdeveloped Eastern Europe and the developed West and Scandinavian Europe. Therefore, this shows that in the development process, these developing countries face drastic environmental degradation due to the release of high amounts of emission and temperature, as seen through the clusters.

The above analysis leads us to an essential hypothesis of the Environmental Kuznets Curve. We can prove using time series clustering analysis on the validity of the analysis, as we learned from our review about the validity of the EKC hypothesis. The following is the EKC curve plotted using clusters data of GDP per capita vs Emissions(Avg) taken from above tables:



We have seen that environmental degradation rises for around twenty-six years (third cluster) before falling in an inverted U shape (second cluster). More developed countries can effectively flatten their level of emissions by employing effective scientific and technological measures, whereas, in the starting stages of development, countries face a tradeoff with environmental causes. Poorer countries emit least emissions and express lower temperature, with gradual economic expansion and development, they face more substantial degradation due to the lack of efficient technology and tools to control carbon emissions. As a result, they face an overall rise in temperature.

## 5. CONCLUSION

A European study shows the validity of the EKC hypothesis. We can find significant results concerning the relationship between variables of economic growth and environmental impact from carbon emissions in the last 26 years. More significant changes in temperature is a result of a higher temperature in the regions. On the one hand, we find that environmental factors like temperature are correlated with emissions and as well as affect the emissions level in the ecosystem. Using clustering on emissions, we extend our argument on the impact it has on economic variables like GDP per capita. We can divide the whole region into three parts- lower development stage countries (Cluster 1) lies on the lower rising part of the curve. Developing countries (Cluster 3) lie above the Cluster 1 countries- produce highest emissions with increasing GDP per capita (closer to the turning point) and highly developed countries (Cluster 2) lie on the falling part of the curve signifying efficiency. Policy-wise, we can conclude that "grow now, clean up later" has proven to be consistent with the data over the timeframe.

We have seen the recent implementation of mechanisms like carbon tax employed by countries in an attempt towards a cleaner Europe. So, the question

is if this approach will prove to be useful in the future. With the advent of different market mechanisms under drastic changes in the economic world, countries face a significant tradeoff where the turning point from the third to the second cluster might not be the same under the "grow now, clean up later" approach. Different factors are holding the key to the control of environmental degradation from literacy, governance, rights, trade. (Jacoby et al., 2019). Internal and external conditions complicate environmental policy. We raise the question of looking at environmental policy and regulations away from the economic value of it and more towards socio-economic variables, which can create a shift from the consistent approach observed in the European region.

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# STUDYING THE INFLUENCE OF SOIL SALTING ON THE GROWTH, DEVELOPMENT AND PRODUCTIVITY OF TOMATO IN THE CONDITIONS OF THE REPUBLIC OF KARAKALPAKISTAN

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## ABSTRACT

*The article discusses the issues of soil salinization and their influence on the growth, development and productivity of tomato. As a result of the study, soil salinization has an effect on seed germination. When salinization occurs, there is a low percentage of germination, emergence and passage of the phase of plant development are delayed, the fruits ripen on 10-14 days later compared to control plants. There is a decrease in the number of fruits and plant productivity. It is recommended to use the most salt tolerant and productive in production zoned varieties: Volgogradsky 5/95, Dark Red 2027, Andijan, October and from hybrid varieties Inkos (Inkos) F<sub>1</sub>, AK-TOR F<sub>1</sub>, Shedi-Lady (Shady Lady) F<sub>1</sub>.*

**KEYWORDS:** Varieties, hybrids, plants, phenology, growth, development, seed germination, emergence of seedlings, budding, flowering, fruit ripening, fruit, fruit formation, productivity, yield, salinity of the soil, vegetation, vegetative organs.

## INTRODUCTION

The main vegetable culture of Uzbekistan is tomato. Tomato fruits are valued for their high taste and dietary qualities, serve as one of the most important sources of biologically active substances and antioxidants that protect the human body from oxidative stress and inhibit aging processes. Due to the increasing demand of the domestic market and export opportunities for fresh fruits and tomato products, there is a need to increase tomato production mainly due to increased yields.

The Republic of Karakalpakstan is located on the northern lowland part of Central Asia and is administratively part of the Republic of Uzbekistan.

The region is characterized by a sharply continental climate: intense insolation, increased air dryness, low rainfall. The main irrigated land fund of the region is located on meadow, meadow-takyr, meadow-desert, meadow-alluvial soils. The total irrigated land area in the Republic is 510.40 thousand hectare, of which 360.54 (71%) thousand hectare are saline to varying degrees. Because bioecology and methods of tomato cultivation are not well understood, scientific research on the selection of varieties and improvement of tomato cultivation technology is an urgent problem that is important for the development of vegetable production in the country.



### The purpose and objectives of the study.

The purpose of this study is to select more salt tolerant  $F_1$  varieties and hybrids and to study the effect of soil salinization on the growth, development and yield of tomato in the open ground in the region. To achieve the intentional goal, the following research tasks are formed:

- Definitions of the experimental site by the degree of salinity of the soil
- Studies of the salt tolerance of tomato varieties and hybrids.
- Studies of the effect of soil salinization on seed similarity
- Studies of the effect of soil salinization on plant growth, development and productivity.

### METHODS OF CONDUCTING THE EXPERIMENT

**Research methods.** When performing the work, the following methods and guidelines were used: "Methods of field experience in vegetable growing and melon growing" [12,] "Methods of agrochemical, agrophysical and microbiological research in irrigated cotton areas" Union of NIHI [13], B.R. Armor "Methodology of the field experiment", Moscow "Kolos" [4], B.Zh. Azimov, B.B. Azimov "Sabzavotchilik, polischilik va potato chilikda tazhribalar kãstkakish methodikasi" [1], B.Zh. Azimov, B. B. Azimov "Tazhribanatizhalining statistics hid" [2].

**Place of research.** The place of research and the experimental part of the work was carried out at the departments "Fruit growing, vegetable growing and melon growing" of the Nukus branch of the Tashkent State Agrarian University and in the "D.F.K. Kattagar plot" (Nukus district). The soil of the experimental plot is meadow-alluvial, old-irrigated, medium loamy, slightly saline (chloride-sulphate type) in mechanical composition. Groundwater occurs during the growing season at a depth of 1.5-2.2 m from the soil surface. Before laying the experiment After irrigation, the arable horizon contained: humus 0.7-1.25%, gross nitrogen 0.068-0,079%, gross phosphorus 0.114-0.155%, nitrate nitrogen 15.7-17.5 mg/kg, mobile phosphorus 14.3 - 8.5 mg/kg and exchange potassium 242.5-285.0 mg/kg of soil weight.

Research on the topic being developed was carried out on the following field experiments:

1. Study of the effect of soil salinization on the growth, development and productivity of tomato on open ground; (cultivar Volgogradsky 5/95)
2. Selection of highly salt tolerant and highly productive varieties and hybrids of tomato on the open ground.

### Experience Options

1. A plot of non-saline soil (the salt content in the soil is chloro-ion 0,010% and a solid residue of 0,239% - control).

2. A plot of slightly saline soil (the salt content in the soil is chloro-ion 0,017% - a solid residue of 0,342%).

3. A plot of medium-saline soil (the salt content in the soil is chloro-ion 0,030%, the solid residue is 0,536%).

4. A plot of strong saline soil (the salt content in the soil is chloro-ion 0,113%, density 1,033%).

The area of the registration plot is 5 m<sup>2</sup>. The experiment was repeated four times. Sowing was carried out on April 25, 2018-2019 year, the sowing scheme was 90x25sm. Starting from the phenophase of the appearance of the first true leaves, the plants were fed with mineral fertilizers. Systematically watering, loosening and combating pests.

### RESEARCH RESULTS AND THEIRDISCUSSION

The process of soil salinization is a serious environmental factor affecting the development and productivity of almost all economically important plants; therefore, it has been the subject of study by many researchers [10, 11, 8]. Soil salinization is intensive in areas where upstream soil currents groundwater consumed by evaporation and transpiration prevail over the level of downstream currents, provided that the mineralized groundwater levels are close and their outflow is difficult [5].

V.A. Kovda (1947) identified four types (provinces) of salt accumulation in soils: chloride, sulfate-chloride, chloride-sulfate and sulfate-soda [10]. Most of the territory of Central Asia, including the lower reaches of the Amu Darya River, to the provinces chloride-sulfate, sulfate, sulfate-chloride.

P.A. Genkel (1954) distinguished two main groups of plants with respect to soil salinization: halophytes (plants of saline habitats) and glycophytes (plants of fresh habitats) [3]. N.V. Orlovsky (1951) proposed his classification of crops by signs of salt tolerance: especially, medium and unstable [14]. According to this classification, sugar beet, fodder and table beet are particularly resistant; winter rye, spring wheat, double row barley, oats, tomatoes, cabbage, turnip are classified as medium resistant, radish, turnip, tour with carrots, potatoes, to unstable - sunflower, lettuce, spinach, chicory, beans, green beans, peas, onions, garlic, cucumbers, vetch, radish.

Studies of the effects of soil salinization on vegetables and melons are also devoted to studies [5, 7, 16, 15, 6,].

E.M. Kovalskaya (1958) established that chloride salinization is most harmful to tomatoes, especially when it suddenly acts and does not adapt to it [9]. Tomatoes have the lowest salt tolerance at an early age and during flowering; at other periods, more stable.

Observations showed that varying degrees of salinization of the soil affects the field germination of tomato seeds (1 table).



As can be seen from Table 1, seed germination in saline soil is 57-69% (in the control plant 87%), seedlings are absent in highly saline soil. The concentration of salts in the soil negatively affects the growth of young plants.

It was found that various degrees of salinization of the soil affect the passage of the phenological phase of plant development (2-table).

**Table 1**  
**The effect of soil salinization on field germination of tomato seeds**  
**(cultivar Volgogradsky 5/95, 2018-2019 year)**

Soil salinity	The salt content in the soil, %		Sowing date	The beginning of the emergence of seedlings, days	Germination, %
	chlorine	Residue density			
Not saline (control)	0.010	0.239	25.04	4	87
Weak	0.017	0.342	24.04	6	69
Average	0.030	0.536	25.04	8	57
Strong	0.113	1.033	29.04	No seedlings	

**Table 2**  
**The effect of soil salinization on the passage of the phenological phases of tomato development (number of days from germination, 2018-2019 year)**

Soil salinity	The salt content in soils, %		Seedlings	Appearance of 1-2 true leaves	Butanization	Flowerin g	Ripening fruit
Not saline (control)	0.010	0.264	29.04	5	34	50	80
Weak	0.017	0.342	1.05	6	33	53	90
Average	0.030	0.536	3.05	8	36	57	94

As follows from the data in Table 2, under saline soil, seedlings appear 1-3 days later, delay flowering for 3-8 days, the ripening phase of the fruits is delayed 10-14 days compared to control plants.

As a result of the study, it was found that a low degree of salinity contributes to an increase in the number of ripened fruits and their mass, and therefore the total yield of plants increases. With saline soil, the yield was 30.1-47.9 t/hectare, in control plants it was 56.2 t/ha. This means that when cultivating tomato in the region, it is necessary to sow on non-saline and slightly saline soils.

It was found that salinization of the soil affects the formation of fruits and tomato productivity (table-3).

**Table 3**  
**The effect of soil clogging on fruit formation and tomato yield**

Soil salinity	The number of ripened fruits, pcs	The average weight of the fruit, g	Plant productivity, g	Productivity, t/hectare
Not saline (control)	11	115	1265	56.2
Weak	10	109	1080	47.9
Average	7	97	679	30.1

When cultivating tomato in the region, the selection of highly salt tolerant and high-yielding

varieties and hybrids of tomato is of great importance (4 table).



**Table - 4**  
**The effect of soil salinization on the productivity of various varieties and hybrids of tomato**

№	Varieties and hybrids of tomato	Productivity. t/hectare			yield reduction	
		non-saline	slightly saline	saline	t/ha	%
1.	Volgograd 5/95	51.1	45.2	32.0	19.1	37.3
2.	TMK-22	36.0	32.7	23.9	12.1	33.6
3.	Dark red 2027	47.5	41.6	31.1	16.4	34.5
4.	Peremoha 165	44.2	37.5	27.5	16.7	37.7
5.	East 36	53.2	46.8	33.8	19.4	36.4
6.	Progressive	42.4	36.9	23.3	19.1	45
7.	Andijan	51.9	39.5	25.0	26.9	51.8
8.	October	74.0	56.9	32.6	41.4	55.9
9.	Otranto F <sub>1</sub>	44.8	38.0	20.6	24.6	54.9
10.	Classic (Classik) F <sub>1</sub>	40.8	35.1	28.5	12.3	30.1
11.	Shady Lady (F <sub>1</sub> )	51.9	43.7	23.3	28.6	55.1
12.	Somma F <sub>1</sub>	25.2	211	17.7	7.5	29.7
13.	Incos F <sub>1</sub>	62.0	49.9	30.6	31.4	50.6
14.	AK-TOR F <sub>1</sub>	53.2	47.1	27.4	25.8	48.4
15.	Linde F <sub>1</sub>	46.6	40.4	25.9	20.7	44.4

As can be seen from the data given in Table 4, tomato salinity decreases during soil salinization. Domestic varieties proved to be more salt tolerant compared to hybrid plants. In saline soils in zoned varieties, the yield decreased by 33.6-51.8%. Among hybrid varieties, they turned out to be unstable hybrids of Shady Lady (F<sub>1</sub>), (decrease in yield 55.1%), Otranto (Otranto) F<sub>1</sub> (decrease in yield 54.9%) and Inkos (Incos) F<sub>1</sub> (decrease in yield 50.6%).

### CONCLUSIONS

The total area of irrigated lands of the Republic of Karakalpakstan is 511.40 thousand hectares (2019), of which 360.54 thousand hectares (71%) are saline. In these conditions, agricultural crops require special agricultural practices. Field germination of tomato seeds was saline in soils 57-69% (control plants 87%), under highly saline soils there are no seedlings. Salinization of the soil affects the phenological phases of plant development. When salinization of the soil, the emergence of seedlings is delayed by 2-4 days, compared to control plants. flowering begins in lightly saline soils on day 53, on medium saline soils on day 54, in control plants on day 50 from emergence. Fruit ripening begins in saline soils 10-14 days later, compared to control plants. Soil salinity negatively affects the formation of fruit elements. In saline soil, productivity decreases by 8.3-26.1 t/ha compared to control plants. In the cultivation of tomato in saline soils, the

selection of highly salt tolerant varieties and hybrid races is important. The total yield of domestic varieties for non-saline soils was 36.0-79.0 t/ha, for lightly saline soils 32.7-56.9 t/ha, and for medium-saline soils 23.9-33.8 t/ha, hybrid varieties 25.2-51.9 t/ha, 21.1-49.9 t/ha, 17.7-28.5 t/ha, respectively.

### Recommendations to production

1. On saline soils, carry out irrigation of lands: the norm of irrigation irrigation for lightly saline soils is 2000-3000 m<sup>3</sup>/ha, for medium saline soils 3500-4000 m<sup>3</sup>/ha, for highly saline soils 5000-6000 m<sup>3</sup>/ha.
2. Widely use the most salt-tolerant and productive zoned varieties Volgogradsky 5/95, Dark Red 2027, Andijan, October and from hybrid varieties Inkos (Inkos) F<sub>1</sub>, AK-TOP F<sub>1</sub>, Shady Lady (Shady Lady) F<sub>1</sub>.

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# DEVICE FOR GEOPHYSICAL EXPLORATION OF THE EARTH'S CRUST BASED ON A DETONATION GENERATOR

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## ANNOTATION

*The article describes the principle of operation of the device for geophysical exploration, which is based on the action of detonation waves to a limited area of the earth's surface at a shallow depth (up to 100 m), a block diagram and timing diagrams explaining the principle of the device.*

**KEYWORDS:** *geophysical exploration, device, block diagram, principle of operation, timing diagram, detonation generator, phase shift, harmonic component of echo signals.*

## INTRODUCTION

The most important factors that increase the reliability and safety of the construction process in complex hydrogeological conditions, the accuracy and reliability source data when conducting survey works.

One of the most important parts of buildings and structures, is the Foundation, which is designed to transfer the load from all of the building structures on the base. But for the selection of constructive decisions of the Foundation must be clearly and know exactly what is the basis of what the engineering-geological elements it is represented, what mechanical and deformation properties [1]. The problem of finding different items, voids, and other inhomogeneities located beneath the surface of the earth, is very relevant during construction and archaeological work, as well as in many other spheres of economic activity [2].

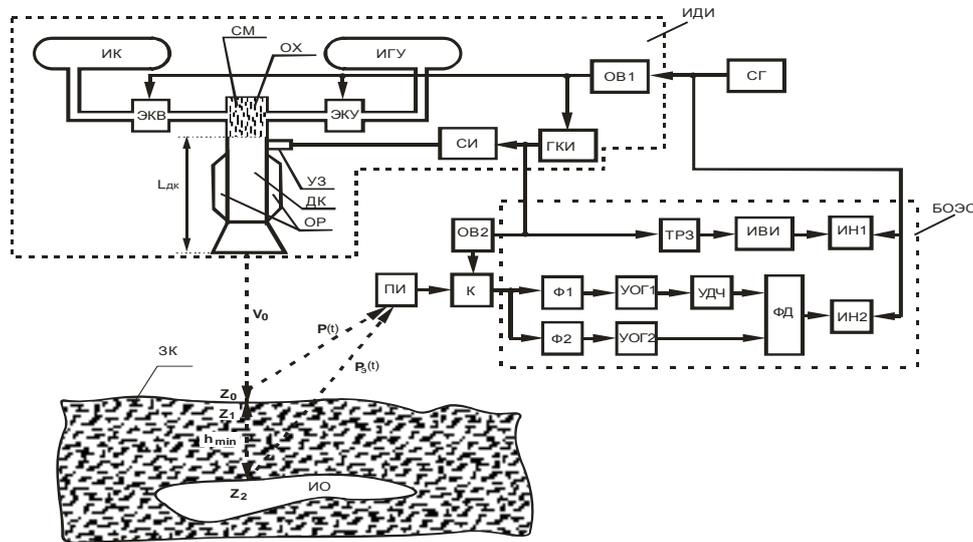
In this regard, quite urgent is to develop a device for geophysical prospecting of the earth's crust, which provides sufficient performance registration information and the possibility of their repeated use.

The main part. For performance reasons, registration information and more reusability the authors developed a device for geophysical prospecting of the earth's crust on the basis of detonation generator block diagram is shown in Fig.1.

The device operates as follows. The synchronizing generator SG generates a sequence of short rectangular pulses with a repetition period (the maximum depth of exploration; - the speed of propagation of acoustic waves in the medium, Fig. 2, a time  $t_1$ ) which acts on the trigger input of the source of acoustic radiation of IAS, ИH1 first indicator and the second indicator ИH2. In which the first and second ИH1 ИH2 indicator reset information and is prepared to receive regular information, at the same time the release of the first single-shot OV1 is formed a rectangular pulse (Fig. 2, b) which is supplied to the trigger input of the generator of short pulses GKI, solenoid gaseous hydrocarbon fuel ESC and solenoid valve compressed air EQ. At the same time, the open state of the solenoid valve EQ and ESC corresponds to the duration of the rectangular pulses generated by the first one-shot OV1, which is sufficient to completely fill uglevodorodnogo a mixture chamber of a detonation generator of DK.

With the trailing edge of the output pulse of the first single-shot OV1 (time  $t_2$  Fig. 2) is the generator of short pulses of GKI, the result at its output is formed a short square pulse, which simultaneously affect the input

of the initiation system SI, the second one-shot OB2 and trigger with separate start SFS. Further, at the output of the latter is a logical "1" and is fed to the input of the meter time intervals EVIE.

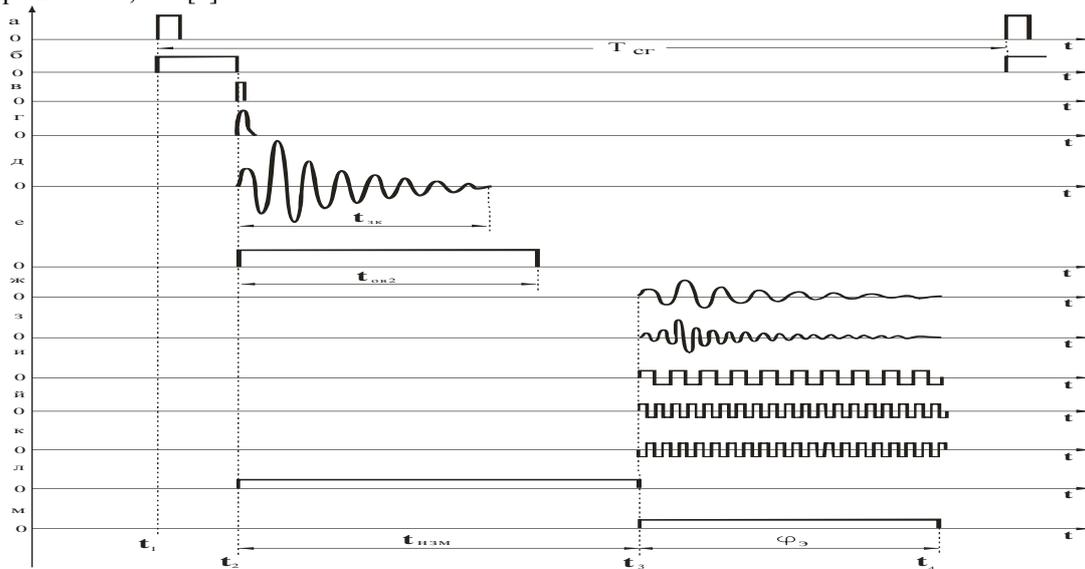


**Fig. 1. Block diagram of a device for geophysical exploration of the earth's crust based on a detonation generator.**

The impact of a short pulse from the output of the GKI short pulse generator to the input of the SI initiation system generates a high-voltage voltage pulse in its output (Fig. 2d). A high-voltage pulse from the output of the initiation system acts on the input of the ultrasonic ignition device and leads to ignition of the hydrocarbon-air mixture inside the detonation chamber. Further, due to the acceleration of the flame front inside the detonation chamber of a recreation center, a shock wave is formed at its output and acts on the earth's surface. At time  $t_2$ , a rectangular pulse is generated at the output of the second one-shot OB2 (Fig. 2f), the duration of which is longer than the envelope of a multi-frequency damped oscillation, i.e.,  $t_{OV2} > t_{33K}$ .

A rectangular pulse formed at the output of the second one-shot OB2 acts on the input of switch K and blocks the input of the BOES echo processing unit from the PI radiation receiver.

The impact of a shock wave on the earth's surface excites multi-frequency harmonic, damped seismic waves (Fig. 2, e), the waveforms and frequency composition of which depend on many factors, such as the nature of the impact pulse absorbing the properties of the medium, as well as structural features of the interface on the path waves, etc. [3].



**Fig. 2. Timing diagrams of the device.**

In modern seismic exploration, powerful explosive sources are used, which have a pulse duration of several hundred milliseconds, and the frequency band of the spectrum of excited seismic waves is 1 - 200 Hz [4].

It is known that the frequency band of the spectrum of multifrequency, damped, seismic waves excited by a shock wave, with an increase in the pulse duration, narrows and vice versa with a decrease - expands, therefore when using detonation generators as an excitation source, the frequency band of excited seismic waves expands several times, so how the duration of the exposure pulse in detonation generators, depending on the length of the detonation tube, can range from several tens of microseconds to several milliseconds [5].

The required length of the detonation chamber is determined from the condition  $L_{\text{ок}} \leq \frac{V_{\text{д}}}{V_3} 2h_{\text{min}}$ , где:

$h_{\text{min}}$  - minimum depth of the desired object;  $V_{\text{д}}$  и  $V_3$  - the propagation velocity of the detonation wave and seismic waves at the depth of the prospected portion of the earth's crust, respectively [6-8].

According to [9,10] and the foregoing, the formed harmonic, damped, seismic wave on the earth's surface has the form:  $P(t) = P_1 e^{-\alpha_1 t} \sin(\omega_1 t) + P_2 e^{-\alpha_2 t} \sin(\omega_2 t) + \dots + P_n e^{-\alpha_n t} \sin(\omega_n t)$  (1)

Where:  $P_1, P_2, \dots, P_n$  - maximum amplitude of harmonic components at frequencies

$\omega_1, \omega_2, \dots, \omega_n$  respectively;  $\omega_1 = 2\pi f_1, \omega_2 = 2\pi f_2, \dots, \omega_n = 2\pi f_n$  - circular frequency;

$\alpha_1, \alpha_2, \dots, \alpha_n$  - media attenuation coefficients that correspond to frequencies  $\omega_1, \omega_2, \dots, \omega_n$  respectively;  $t$  - time.

From the theory of flaw detection, it is known that the main information about the nature of the desired object is contained in the phase shift of the echo signals [9, 11]; therefore, the formed wave propagating along the earth's surface travels the distance  $hc$  and reaches the surface of the desired object, reflected from it, undergoing changes of the phase of each harmonic component, the distance  $hc$  passes once more and reaches the surface of the earth where the PI radiation receiver is installed (Fig. 2g), while the wave acting on the PI radiation receiver has the form.

$$P_{\text{э}}(t) = P_{\text{э}1} e^{-\alpha_1 t} \sin[\omega_1(t - \tau_3) + \varphi_1] + P_{\text{э}2} e^{-\alpha_2 t} \sin[\omega_2(t - \tau_3) + \varphi_2] + \dots \dots + P_{\text{э}n} e^{-\alpha_n t} \sin[\omega_n(t - \tau_3) + \varphi_n] \quad (2)$$

Where:  $P_{\text{э}1}, P_{\text{э}2}, \dots, P_{\text{э}n}$  - maximum amplitude of harmonic components of echo signals at frequencies  $\omega_1, \omega_2, \dots, \omega_n$  respectively;

$\varphi_1, \varphi_2, \dots, \varphi_n$  - frequency shift of echoes at frequencies  $\omega_1, \omega_2, \dots, \omega_n$  respectively;  $\tau_3$  - delay time of echoes corresponding to the distance -  $2h_{\text{д}}$ .

The electrical signal generated at the output of the PI radiation receiver has the form.

$$U_{\text{э}}(t) = U_{\text{э}1} e^{-\alpha_1 t} \sin[\omega_1(t - \tau_3) + \varphi_1] + U_{\text{э}2} e^{-\alpha_2 t} \sin[\omega_2(t - \tau_3) + \varphi_2] + \dots \dots + U_{\text{э}n} e^{-\alpha_n t} \sin[\omega_n(t - \tau_3) + \varphi_n] \quad (3)$$

Where:  $U_{\text{э}1}, U_{\text{э}2}, \dots, U_{\text{э}n}$  - maximum voltage amplitude of the harmonic components of the echo signals at frequencies  $\omega_1, \omega_2, \dots, \omega_n$  respectively.

According to the theory of acoustic control methods, to assess the nature of the desired object, it suffices to measure the phase shift between two adjacent harmonic components of the echo signals, which differ in frequency [9,11].

The choice of the corresponding pair of harmonic components of the echo signals is made according to their more intense amplitude, which in seismic exploration using powerful explosive sources corresponds to the frequency range of 20-80 Hz [3,4].

It has been experimentally established that when using detonation generators, which have a pulse duration in the order of one millisecond, the frequency range at levels of 0.5 of the maximum amplitude of the echo signals is 20 - 400 Hz, which allows the use of more high-frequency, harmonic, components of the echo signals for determination and classification the desired object at a depth of 100 m.

It is known that in phase metering to measure phase shifts between a component of harmonic signals, it is necessary to bring them to the same frequency by multiplying their initial frequency.

Then the phase shift between the selected harmonic components at a frequency of their frequency according to is defined as

$$\omega_m = k\omega_0, \omega_{(m+1)} = (k+1)\omega_0$$

Bringing them to the same frequency, for example  $\omega = k(k+1)\omega_0$ , by multiplying frequencies  $\omega_1$  and  $\omega_{(m+1)}$  respectively on  $(k+1)$  and  $k$ , allows you to determine the phase difference between the harmonic components of the echo signals.

$$\psi = (k+1)\varphi_m - k\varphi_{(m+1)}$$

Where:  $m = 1, 2, \dots$  - number of the selected harmonic component.

When the frequencies of the selected harmonic components  $\omega_m$  and  $\omega_{(m+1)}$  slightly differ from each other, then you can take  $\varphi_m = \varphi_{(m+1)} = \varphi_3$ .

Therefore, the phase difference between the harmonic components will be equal to the phase shift of the echo signal  $\psi = \varphi_3$  (Fig. 2 m).

The implementation of this method of measuring the phase shift between the harmonic components of the echo signals is performed in the block processing of the echo signals of BOES (Fig.1).

This electric output signal of the radiation receiver PI is applied through the switch To the input of the processing unit of the echo of BOES.

The electrical signal corresponding to the reflected acoustic signal from the surface of the earth P(t) is blocked by switch To period of time of a damped oscillatory process on the earth's surface (Fig. 2. W), and the electric signal corresponding to the reflected echo from the surface of the object re(t) passes through the switch after a time interval t OB2 switch is in the locked state by the output pulse of the second one-shot S (Fig. 2. e).

Passing through the switch an electrical signal which corresponds to the reflected echo from the surface of the desired object IO, are simultaneously energized on the input of the first F1 and second F2 filter. The electric signal (Fig. 2) corresponding to the frequency output from the first filter F1 passes through the amplifier limiter YOF1 (Fig. And 2) is then fed to the second input of the trigger with separate run SFS and through the frequency doubler ADC to one of the inputs of the phase detector FD (Fig. 2. th). To the second input of the phase detector PD is fed a corresponding electrical signal (Fig. 2) with a frequency which is received through the second amplifier limiter YOF2 output from the second filter F2.

Thus, the output of the phase detector PD is formed an electric signal proportional to the phase shift between harmonic components of the echo (Fig. 2 m), and the output of the trigger with separate run, is formed a rectangular pulse whose duration corresponds to the distance to the desired object z, and is measured on the meter of time intervals EVIE. Signal corresponding to the distance z is displayed on the display IH1, and the display IH2 shows a signal corresponding to a phase shift  $\psi = \varphi_3$

**Conclusion** The use of the proposed device in geophysical exploration based on detonation generators in the construction industry makes it possible to determine and classify underground formations, objects, voids and other inhomogeneities at a depth of up to 100 m, which is due to the use of higher-frequency harmonic components of echo signals in the range of 20 - 400 Hz. Improving the accuracy of measurements is achieved by eliminating the influence of reflected signals from the earth's surface on the control result.

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# PHYSICO-CHEMICAL AND PHYSICO-MECHANICAL COTTON SEED INDICATORS

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## ANNOTATION

*The article provides information on the physico-chemical and physico-mechanical cotton seed performance. The physico-mechanical properties of cotton seeds are necessary for calculating storage facilities, bunkers, transport devices, preparatory workshop machines and, in some cases, for adjusting equipment operating modes.*

**KEY WORDS:** *cotton seeds, core, gossypol, storage, transportation, premises, industrial varieties, ventilation.*

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## DISCUSSION

Cotton seeds consist of a seed coat (husk) and a kernel, separated from the shell by an air layer. The composition of the husk mainly includes fiber. The core is largely composed of oil and protein substances. There are two types of cotton - medium fiber and fine fiber. The seeds of fine fiber cotton differ from the seeds of medium fiber cotton with low pubescence, somewhat increased amounts of oil and gossypol.

A characteristic feature of cotton seeds is the presence in the tissue of the core of a yellow pigment - gossypol, the content of which in the seeds varies widely and depends on many factors: seed growing conditions, maturity, varietal characteristics, etc. The

walls of the glands of the nucleus, in which gossypol and its derivatives are localized, consist of cellulose impregnated with pectin, hemicellulose and unidentified substances. Gossypol is toxic and is a cellular vascular and nerve poison. The coloration and toxicity of gossypol determine the color, nutritional or feed value of processed products (oil, oilcake, meal). Both of these factors completely change during seed processing. In addition to gossypol, cotton seeds contain proteins, phosphatides, nitrogen-free extractives, carbohydrates, etc.

The chemical composition of cotton seeds is shown in table 1.



**Table 1.**

<b>№</b>	<b>Name of indicators</b>	<b>Unit of measurement</b>	<b>Limit values</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1	Seed content		
	the cores	%	35-71
	shell	%	29-65
2	Fatty oil content		
	the seeds	%	15,9-28,6
	the cores	%	34,1-46,8
	in the shell	%	0,32-1,24
3	Crude Protein Content	%	16,8-29,4
4	General content P <sub>2</sub> O <sub>5</sub>	%	0,76-1,77
5	Content P <sub>2</sub> O <sub>5</sub> phosphatides	%	0,11-0,15
6	Fiber content	%	12,4-18,7
7	The content of mineral elements (gold)	%	2,3-4,7
8	The content of nitrogen-free extractive substances	%	26,3-29,0
9	Gossypol to dry weight		
	the cores	%	0,002-1,710
	free	%	0,002-1,64
	related	%	0,08-0,7
10	Tannins	%	8,5-9,5
11	Carbohydrate content	%	24,0-31,0
12	B <sub>2</sub> (riboflavin)	%	0,23
13	B <sub>5</sub> (pantothenic acid)	%	1,1
14	PP-B <sub>5</sub> (nicotinic acid)	%	1,6

The physico-mechanical properties of cotton seeds are necessary for calculating storage facilities, bunkers, transport devices, preparatory workshop machines and, in some cases, for adjusting equipment operating modes. Physico-mechanical indicators for the most common varieties of cotton seeds are shown in table 2.

**Table 2.**

<b>№</b>	<b>Name of indicators</b>	<b>Unit of measurement</b>	<b>Limit values</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1	Linear dimensions		
	length	мм	9,0
	width	мм	5,0
	thickness	мм	4,2
2	Seed density, кг/м <sup>3</sup>		
	apparent	кг/м <sup>3</sup>	1,05-1,06
	true	кг/м <sup>3</sup>	1,11-1,6
3	True core density	кг/м <sup>3</sup>	1,04-1,05
4	True husk density	кг/м <sup>3</sup>	1,34-1,36
5	Bulk mass of seeds with pubescence 7,7 %		
	minimal	кг/м <sup>3</sup>	350,0
	maximum	кг/м <sup>3</sup>	363,0
	average	кг/м <sup>3</sup>	356,5
	The angle of repose for pubescence 7,7 %	град.	51-52
	Coefficient of internal friction	Кт	0,81
	Traction force	кг/см <sup>2</sup>	0,125

Cotton seeds are stored in bulk in warehouses, under a canopy or open specialized sites that are equipped with active ventilation, in accordance with the sanitary rules and storage conditions, approved in the established procedure.



May be short-term, up to 5-10 days storage seeds in open areas, not equipped with active ventilation.

During storage and transportation is not allowed to mix seeds and fibrous upland breeding varieties and industrial grades. Processing of industrial seed varieties of cotton is in the mix.

Before the arrival of the new crop seeds to the oil and fat enterprise workers the raw materials Department and the laboratory should develop a plan of reception and placing of seeds, where account should be taken of the need to reduce unnecessary rendition of seeds at part-time jobs and serve in production.

Plan reception of the seed should be tailored to the activities that will be used for the preservation of seeds. The plan must be approved by the plant management.

Before sending the seed to the storage, consider the state of seeds in appearance. Seeds damaged by spontaneous combustion, unripe, moldy, sprouted, having a musty or mouldy odor or other, are not peculiar to seeds smell, store separately, without mixing these seeds with the normal.

Upon acceptance and placement of seeds should be taken into account that the seeds previously subjected to damage, can't be stored for a long time and they need to process first.

In the factory should be separate storage of the seeds, depending on variety. Is the separate storage of the seeds at three groups of industrial grades: 1st and 2nd, 3rd, 4th.

The entire inventory of the store must be operational and be located in specially allotted places.

To maintain cleanliness in storage and prevent skidding in the mud and storage pests at the entrance of each vault must have devices for cleaning shoes.

All storage should be equipped with installations for the remote control of the temperature of the seeds. In their absence, the temperature control of the seed is portable thermostats.

A basement and a basement warehouses oilseeds, galleries and tunnels, intended for transportation of oil seeds and pits deeper than 1 metre, where the equipment for transportation of seeds, must be equipped with supply and exhaust mechanical ventilation.

At a failure of ventilation of the basement and basement warehouses oilseeds, galleries, tunnels, intended for transportation of oil seeds and pits, which house equipment for transportation of seeds, the entrance to them is allowed only after checking their air medium in the presence of carbon dioxide, the contents of which must not exceed 0.5 % by volume. The presence of carbon dioxide in the basement and basement warehouses oilseeds, galleries, tunnels and pits associated with the transportation of oil seeds should be controlled by

fixed and portable devices according to a schedule approved by the chief engineer of the enterprise.

Where the possible emergence of carbon dioxide must be marked with warning inscriptions and provided with hose masks FS-1, FS-2.

Storage of cotton seeds should be done in covered warehouses with a flat bottom, under a canopy, and in the absence or insufficient capacity of warehouses in densely Packed pyramids (riots) in open areas.[7]

Open areas for storage of cotton seeds should be placed with a gap not less than:

- a) from the axis of the railway to 4 m;
- b) from buildings I and II degree Flammability 8 m;
- in) from buildings 0 degree of Flammability of 10 m;
- g) from buildings 4-5 degree Flammability 12 M.

Fire breaks between the riots of cotton seeds (between the longitudinal and the front faces of the riots) at the factory must be coordinated with the local (national) bodies of fire supervision. Fire breaks between the groups of the riots should be 25 m.

Discophrenia seeds (with pubescence 2% and below) are stored in automated storage systems with conical bottom or closed warehouses with a flat bottom. Pad pitch on an elevated site with a low ground water table. The base of the pad shall be sloped on both sides at an angle of about 5°C and a coating of a waterproofing layer preventing the penetration of groundwater. Around the Playground throwing pans for drainage of rain water outside the site. When the compacting pubescent cotton seeds in the upper layers of the riot form a crust that prevents the penetration of moisture inside the riot.

Organize warehouses around the drainage channels must be kept in good condition.

Tunnels, receiving pit warehouses etc. should be dry, well ventilated and accessible for inspection.

Against mechanized warehouses and elevators, in addition to the above requirements, must also have the following:

a) of the transfer belt, head and boots of the bucket elevators, ladles, semiochemically machines and other equipment of mechanized warehouses contain in full working order and regularly cleaned of dust and spilled seed;

b) emphasizes a thorough systematic cleaning of galleries, pits the entire premises of the warehouse.

The territory in which the warehouse and annexed the territory, keep the city clean. After the liberation from the seed store or individual cell is subjected to cleaning and disinfection. Equipment storage and inventory keep clean, and, if necessary, disinfected.

Part of a complex for the rational storage of seeds is aeration, which allows to reduce the temperature and seed moisture content by aeration



with dry air, provides the latest composition of air in megamanny spaces without moving the seed mass, creates the conditions for post-harvest ripening of seeds.

For the implementation of active ventilation of seeds, it is expedient to build a stationary purge pad size 25x10 under the seed or in warehouses. The purge unit consists of fans, ductwork taps, concreted channels, gratings and dampers. Channels is closed by a metal mesh with a thickness of 5 mm with a hole size of 4 x 50 mm. cross-Section of the working part equal to 400x 400 mm Effective height of the mound of seeds with active ventilation is a maximum height of 10 m. the Stationary blow-off stage can be build anywhere. Purging should be performed in the cold days, as this significantly reduced the temperature of seed mass and prevent spontaneous heating. Specific consumption of air per 1 ton of seeds is 35 m<sup>3</sup>/t. C. All ductwork to protect from discharges of static electricity must be grounded.

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# COVID 19 : INDIA'S LOOMING MIGRANT AND CRISIS OF MIDDLE CLASS PEOPLE

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## ABSTRACT

*This paper aims to highlight the situation and condition of migrants and middle class people in the time of COVID-19. As we all know that the year 2020 has pen down its name in the history. As it is being believed by many people that this year has brought unfortunate with it. People are living their life by locking themselves in their houses. Somehow, this year also bring some positivity with it as the life of people become normal. In addition to it, planet also recover itself. However, its drawbacks overweight its benefits. The point which I am going to consider while writing this paper is how the middle class and labour class are trying to combat the situation. No doubt, for some people it brings happiness as people get an opportunity to spend quality time with their family. In contrary, there are some people, who are suffering to even have a single meal in their life. Such people even are unable to live with their families as they are already living far away from their families due to work and other reasons. In particularly, this paper would not only describe the condition of migrants but also tries to analyze the measures that has been implemented by the government for these people along with some suggestion that can be proved beneficial to handle the situation.*

**KEYWORDS:** migrants, middle class, combat, covid-19, suffering, families, condition

## INTRODUCTION

The year 2020 has commenced and unfortunately, it has a stormy start. The year brought many disasters, tragedies, demise, conflicts (National and International) and the most dangerous virus corona virus with it. This virus has put the world on the shock as with its arrival the whole world stopped its movement, it just stagnant at a place. The whole world lives under the four walls of their place, economic growth of countries has been started declining. Not only this, students are suffering as their future are also at stake. Though the half year has almost passed yet people are waiting for a little hope to survive and waiting for any miracle to be happened so that ray of sunshine could be enjoyed.

## OBJECTIVE

This paper tries to

- analyse those people who are being affected the most
- find out the way to combat the suffering
- checkout the validation of the policy which are exercised by the Government to help the sufferers

## RESEARCH METHODOLOGY

The author has used primary and secondary both methods to write this paper. The primary

concept has been taken by having word to word conversation with all kinds of people and secondary data is collected through articles, journals, books and magazines.

## Who are suffering the most ?

Well, to write about particular person or community would not be appropriate to describe in reality who is suffering or not. In such a situation, almost each and every sector has been affected. However, I personally opine that middle class and migrants are among those people who are suffering the most. Large proportion of migrants have lost their job. As a result, they started moving back to their home town which has created a chaos everywhere. The middle class have also suffered at large. Mostly middle class are those who do jobs in private companies or some of them have their own companies or business. Due to lockdown, the reduction in salary and loss of work resulted imbalance and disturbance in the position of middle class. For these reasons, I believe that Migrants and middle class are the people who are suffering the most.

## Who are Migrants ?

The main source of officially used data on migration in India comes from the 2011 Census<sup>1</sup>, which found that 455 million Indians, or over one-

<sup>1</sup> Data obtained from censusindia.gov.in



third of the population could be classified as "migrants". The Census defines a migrant as a person who is at a different place from his or her "usual place residence" at the time of the Census enumeration. However, the vast majority of these "migrants" are women who have moved out of their village or town to get married. Economic migrants make up less than a tenth of all migrants at just over 45 million.

If the government was expecting that India has just 45 million economic migrants, the number walking on roads, highways, and train tracks would have caught it off guard. When Finance Minister Nirmala Sitharaman<sup>2</sup> announced support for stranded migrants, she said that their number had been estimated at 80 million, already nearly twice the Census estimates for economic migrants. The 2016-17 Economic Survey estimated that the total migrant workforce could have been over 100 million in 2016.

Migrants are those people who move to other region for work, education or for some other reasons. Migrants are basically of two types: Long-term based and Short-term based.

## CONDITIONS OF MIGRANTS

Condition of migrants are like those who have no place to live. The migrants are unable to survive in other regions as they are jobless and unable to pay rents and finding difficulty to meet both ends meet. Tens of thousands of daily-wage migrant workers suddenly found themselves without jobs or a source of income when India announced a lockdown on 24 March. Overnight, the cities they had helped build and run seemed to have turned their backs on them, the trains and buses which should have carried them home suspended. So with the looming fear of hunger, men, women and children were forced to begin arduous journeys back to their villages - cycling or hitching rides on tuk-tuks, lorries, water tankers and milk vans. For many, walking was the only option. Some travelled for a few hundred kilometres, while others covered more than a thousand to go home. They weren't always alone - some had young children and others had pregnant wives, and the life they had built for themselves packed into their ragtag bags.

More than a story of the Great Indian Dream, the story of short-term migrants is one of desperation. Without the social capital of well-established long-term migrants, they found it hard to stay put in India's big cities. For the past two months, if the government has often seemed like it was surprised by the number of migrants on the road, it might just be true. Official estimates undercount short-term migrants who are the most vulnerable, and differ significantly from more stable long-term migrants.

Driven by a distress the rulers of the land have been impervious to, the group of men and women had started walking from Jalna, in Maharashtra<sup>3</sup>, towards Madhya Pradesh, on Thursday (May 7) evening. Adding to the civilisational journeys of the dispossessed that have become synonymous with the lockdown.

After walking for 45 km, weary to the bone, they lay down to sleep on the rail track at about 3:30 am. They must have thought it was completely safe. After all, they knew from bitter experience that passenger trains were not running; it was why they were walking all the way to Bhusawal, a couple of hundred kilometres away, in the hope of catching a Shramik special that would take them closer home to their destination in Madhya Pradesh.

In the absence of the train they so desperately wanted to board, the track must have seemed oddly comforting. As someone mentioned, they call those planks 'sleepers'.

At 5:15 am, they were killed as a goods train ran over them. A newspaper report says they were aged between 20 and 35.

What was left unsaid was that everything has a cost. The cost of the lockdown at midnight was clear - the inexorable descent into despair of the country's vulnerable migrant workers. Because work had ground to a halt, they were expendable till the lockdown lasted. If they were not needed, they did not exist.

They should have taken it on the chin. Even when all avenues of survival were closed to them, poverty and privation were curses they were used to. It was their lot to be invisible. That was the expectation - both during the early days when they were bereft of work, shelter, money and food, and later, when industries opening up, wanted the labour captive.

## Who are Middle Class people ?

The McKinsey Global Institute<sup>4</sup>, which defines India's Middle class as household with real annual disposable income between 200,00 and 1 million rupees. The Indian Middle class constitutes 300-350 million of the population.

## How middle class is also suffering ?

The condition of survival can be easily observed through the way of their living standard. During the lockdown period, the circle of money has been stopped but the demand has not stopped. The expenses such as spending on bills and on other essential items remain same. Even inflation can be observed during the period of lockdown. School fee, Electricity bill, Essential items, Grocery, and many more expenses are there which a person has to pay.

<sup>2</sup> Minister of finance of India, speech on budget

<sup>3</sup> story of a women, broadcasted on BBC news

<sup>4</sup> Data available at [www.americasquerty.org](http://www.americasquerty.org)



Without any circulation of money and business, it has become very difficult for a person to pay these bills and help his family. Consequently, this situation has increased the death rate, suicide attempts and even depression among those who have a responsibility to foster their family.

Ongoing lockdown, which has crippled the economy for more than a month and sparked unprecedented distress, has turned the so-called lower middle class into the new poor identities of the society.

Teachers in unaided private schools, office assistants, data entry operators, salespersons, receptionists, beauticians, those who run small mobile phone service and repair shops and other service providers who fall in ₹5,000 to ₹15,000 monthly income group, are the badly hit. Most of them have not received the salaries for two months and they hardly have any savings to fall upon. Many of them fear job loss post-lockdown.

It is not just the socially poor and the migrant workers who are facing the brunt of coronavirus<sup>5</sup> induced lockdown. Activists say lower middle class families with meager income are badly hit but the problem is not getting due attention because of lopsided priorities.

While those categorized below the poverty line are getting some sort of assistance in the form of cooked food, ration or financial aid from the central and state governments or NGOs and philanthropists; an overwhelming majority of the lower middle class are left high and dry. The middle class is caught in a dilemma as their dignity holds them back from extending their hands to seek aid while the NGOs and philanthropists will be reluctant to give any assistance lest they feel bad about it. Mazher Hussain<sup>6</sup>, Executive Director of Confederation of Voluntary Associations (COVA) told IANS.

"These people don't seek help from anybody. They don't stand in queues for aid. They have been working hard and carrying on with their life but the crisis has suddenly made them vulnerable. Many have not received salary for March and may not get for a couple of months more,"<sup>7</sup> he said.

### **Rules made by Government for Migrants and Middle Class: Virtual or Real**

Prime Minister Narendra Modi on Friday lauded the Reserve Bank of India's (RBI) decision to cut benchmark interest rates, three-moratorium on payment of installments, along with other measures on term loans will help the middle-class and the

businesses deal with the 21-day nationwide lockdown in the wake of COVID-19 pandemic.

"Today RBI has taken giant steps to safeguard our economy from the impact of the Coronavirus. The announcements will improve liquidity, reduce cost of funds, help middle-class and businesses," Modi said in a tweet.

Among the measures the finance minister announced were 2 months' worth of free food grain supply for migrants who aren't covered under National Food Security Act or who don't hold a ration card. The Centre's move, which will cost Rs 3,500 crore, is expected to benefit around eight crore migrants. The migrants will get 5kg of grain per person and 1kg of chickpeas for a family<sup>8</sup>.

The measures comprise the second tranche of a Rs 20-lakh crore bailout package equivalent to 10 per cent of India's gross domestic product announced by Prime Minister Narendra Modi in a nationwide televised address aired Tuesday.

The government hopes the actions will reboot India's economy which has been devastated by the Covid-19 pandemic. "This shall not be just a financial package but a reform stimulus, a mindset overhaul and a thrust in governance," the government said.

Sitharaman on Wednesday unveiled the first part of the package called "Atmanirbhar Bharat (Self-reliant India)" which targeted small business, non-bank "shadow" lenders and the electricity distribution sector. She offered an array of credit lines for small business and shadow banks as well as money for electricity distributors.

To facilitate the use of ration cards by migrants, technology is being installed to allow them to access the public distribution system for purchasing their rations at any fair price shop in the country, Sitharaman said Thursday.

The government has taken the step of implementing of the scheme that it calls "One Nation One Ration Card" because many migrants moving back to their home states have been unable to access food supplies there. The One Nation One Ration Card scheme has been in the works for some time but its introduction has been accelerated by the Covid-19 crisis.

The action should benefit some 67 crore people in 23 states representing 83 per cent of the people who use the public distribution system, or PDS, by August of this year. By March 2021, the government hopes to have introduced 100 per cent national portability for the PDS scheme.

In a bid to silence critics who have said that the government response to the Covid-19 crisis so far has been inadequate, Sitharaman said that the

<sup>5</sup> livmint.com

<sup>6</sup> CEO, Confederation of Voluntary Association (COVA)

<sup>7</sup> Ibid.

<sup>8</sup> Package announced by Minister of Finance of India to combat the pandemic



“government has not been sitting idle” during the nationwide lockdown, now in its eighth week, aimed at containing the spread of the virus.

### RENTAL HOUSING SCHEME

The government also plans to create an affordable rental housing accommodation scheme for migrant labourers and urban poor. It will convert government-funded housing in cities to rental complexes through a public-private partnership.

The government will offer incentives to manufacturing units, industries and institutions to develop affordable complexes on their private property. The Centre will also provide incentives to state government agencies to take similar action.

“The relief announced by Honourable Finance Minister Nirmala Sitharaman Ji will provide immediate relief to millions of farmers, street vendors and people from different walks of life,” said Union minister Nitin Gadkari.

But the Opposition Congress party slammed the finance minister’s bailout as a “jumla package.” Congress leader Anand Sharma said the economic package “is way short of what the Prime Minister had promised the nation and is deeply disappointing.”

### LOANS FOR STREET VENDORS

The government will provide special loans of up to Rs 10,000 that street vendors can use as working capital to re-launch their businesses. The government hopes that some 50 lakh street vendors will benefit from the scheme that aims to provide an overall cash flow of up to Rs 5,000 crore.

There will also be a 2 per cent interest subsidy for 12 months on all MUDRA-Shishu loans below Rs 50,000. Mudra-Shishu loans are the smallest ones provided under the Micro Units Development and Refinance Agency or MUDRA.

Sitharaman said the government’s rescue plan is intended “to spur growth and to build a very self-reliant India.” She said the focus of the programme is on “factors of production which are land, labour, liquidity and law.”

Critics worry though that the government is focusing too much on injecting liquidity into the economy rather than offering measures that will stimulate demand.

### HOME LOAN SUBSIDY PROGRAMME

A credit-linked subsidy programme subsidising interest rates on affordable home loans for middle-income families will be extended until March 2021 from March 2020. The subsidy scheme is aimed at those earning between Rs 6 lakh to Rs 18 lakh annually.

Some 3.3 lakh middle-income families have already taken advantage of the scheme and the

extension is seen helping another 2.5 lakh families. The result will be an investment of over Rs 70,000 crore in housing.

### REALITY

Well, if one looks at all these plans, it seems like that the Government is doing its best to secure its citizens. However, all these things look like a trap to seal the mouth of people. Migrants have to wait on a long queue to get the food. In addition to it, the worst part of it is the food which is being served is of low-quality and sometimes it is half cooked. On the other hand, the facilities which is being assumed that would be beneficial for the middle class, is worth less. As EMIs are being deducted from the bank. Fees are demanded by the school. And other bills are also being paid by them. Loss in the business is also being witnessed at a large scale. Many industries have been closed. Tourism and Hotel industries are almost disappear. As huge loss is faced by them. The questions which arise here in my mind are that , "Is really there is a need to make such policy?"

"Do these policies have any vital role in improving the condition of migrants and middle class?"

Certainly, in country like India, where politics is much dominant than the safety and welfare of the people; really need people to come together and free their country from such manipulative and virtual speakers.

To conclude, I would like to pen down by saying that undoubtedly, the condition and pandemic is very hazardous. People need to combat this situation by coming together . Rich and others who can help others must provide support to the weak. Along with that, Government should also try to make such policies through which assistance is given to those who are actual in need and should also try to have a keen eye on the people who are doing corruption and in spite of giving help , they are just filling their pockets.

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# TEACHING LANGUAGE TO THE SPECIAL CHILDREN: CHALLENGES AND POSSIBILITIES

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## ABSTRACT

*Since communicating people is one of the first and foremost obstacles to autistic children, it is a basic need for them to get vigilant and appropriate nurture for language acquisition. Moreover, to develop the language skills of special children appropriately, it is essential to ensure effective language teaching. The primary objective of this study was to identify the challenges that the teachers face in the class and to bring out the possibilities of teaching the mother tongue to the special children as a part of special education. As language learning is the leading step of special education, the study aims to contribute to the field by pointing out the challenges and the possibilities. The study was conducted by collecting data from three different schools of special children by following a qualitative method. The findings revealed that inadequate understanding, proper classroom facilities, lack of awareness and insufficient language training created a great challenge for the teachers in teaching the language to the special children. The study also exposed that special training, a well-decorated classroom, regular speech therapy, and change of outlook minimized the challenges and made language teaching more effective.*

**KEYWORDS:** Autism Spectrum Disorder (ASD), Special Education Needs (SEN), Communication, Language Proficiency

## 1. INTRODUCTION

Autism is not a disease; it is a lifelong developmental disability. Autism is such a disability that makes a child specialist with a unique and different specialty. Autism and 'autism spectrum disorder' both are general terms for the people who have disorders of brain development. Children with Autism Spectrum Disorder (hereafter, ASD) need proper mind development through special education to learn. This paper was conducted on children with special educational needs (SEN) who are suffering from ASD and have significant language challenges from an early age. Moreover, as the oral expression has become the first and foremost way of communication, it is very essential to bring up special children in a special communicative manner of

learning. To ensure the rights of education to the disabled children equally, there is no other alternative way to make them skilled first in language learning, because, a major characteristic of the autistic population is the abnormal development of speech and language (Ritvo & Freeman, 1978; Rutter, 1978). Hence, their mental growth and the skill of communicating people are seemed to be delayed for a lack of proper verbalization.

Since communicating people is the predominant obstacle to autistic children, it is a basic need for them to get careful and proper nurture for language acquisition. Moreover, to develop the language skills of special children appropriately, it is essential to ensure effective language teaching to them. The goal of this study is to identify the



challenges that the teacher faces in the class and to bring out the possibilities of teaching the mother tongue to the special children as a part of special education. As language learning is the leading step of special education, the study aims to contribute to the field by pointing out the challenges and the possibilities with the belief of making a bridge between the special children and the mainstream children in society.

ASD is a lifelong developmental disorder that affects a child's communication and behavior. Children with ASD usually have significant language delays, challenges with communication and social functioning, and unusual behaviors and interests. They have poor eye-contact, poor socialization, poor communication, and poor attention. Although the symptoms can be diagnosed at any age, usually they tend to emerge between 2 and 3 years of age. ASD affects brain areas controlling language, social interaction, and language thoughts, (Bridgette, 2005). ASD "is a complex developmental disability that essentially affects the way a person communicates and relates to people," (Autism Working Group, 2002, p. 1). "The term spectrum is used because the characteristics of the disorder occur along a continuum, with severe symptoms at one end and very mild behaviors at the other," (Wills, 2009, p. 81). Dr. Leo Kanner in the 1940s was the first to identify Autism in the US (Furniss, 2008). Furniss (2008), states though at first psychopathology was thought to be its cause but now it is thought to have neurological origins.

'Special Educational Needs' (SEN) is a term that refers to children who have challenges with learning. Due to having learning problems or disabilities, children with special educational needs find their learning harder for them to learn than most other children of the same age. They may have problems with schoolwork, language learning, communication, or behavior.

## 2. OBJECTIVES

Since the children with ASD have the challenges in language acquisition, teaching language to these special children is undoubtedly quite challenging. Hence, they are taught through the special education system. So, to create a new dimension in acquiring education, it is very essential to bring out the challenges that the instructors face in teaching languages to special children. Considering all the facts, the research was conducted based on two objectives. They are:

- i) to find out the challenges in teaching languages to the special children
- ii) to point out the possibilities in teaching languages to the special children

## 3. LITERATURE REVIEW

All the elements related to the effectiveness of the process of teaching productive skills are given here for getting a better understanding of the topic. These helped in completing the research systematically. Moreover, a deeper understanding of the process of educating a child with ASD both in-home and outside the country also helped to better realize the present scenario of Bangladesh where special education is essential for children with ASD for their fast-psychological development.

Akhter (2015) attempted to take a deeper look at the teaching process of productive skills concerning Autistic children mainly children with Asperger Syndrome and measure its effectiveness in Bangladesh. She mentioned that the country was quite backward in the field of special education. The researcher found that insufficient certified teacher and speech therapist, lack of implementation of technological aid, early intervention, no distinct curriculum, lack of funding and benefits, unawareness of parents and society are vital reasons for its ineffectiveness. She also found that parents are not conscious about their role regarding their children's development hence they are not active in their development and teaching process. Suitable environments and settings of the school are other factors obstructing their progress. She recommended that more effort and promotion is needed in this field to raise the consciousness of cities around the country. Propaganda should be made to raise the consciousness of the citizens towards these children so that people do not hesitate in conversing with them and behave appropriately this will help in their developmental process consequently in their teaching process as well.

Wilson (2010) states that during the year 1950s and 60s, schools for special children emerged in different parts of the country some established by the parents, frustrated due to the lack of services offered for children with autism. Now almost "two dozen schools" are serving children with ASD with therapists and special teachers to help these special children cope with their disorder with ASD across Massachusetts, with dedicated teachers and therapists working to help these kids cope with their disorder and above all educate and teach them to function in this world (p.22).

Padurean (2014) discussed the most appropriate methods and techniques used for Teaching L1 to children with special educational needs. She also mentioned that the teachers can teach regular children simultaneously with mainstream children, though these were reluctant regarding the education of children with special educational needs in mainstream education. She also found that language can be taught to children with SEN without placing them in special schools. Though certain teachers believe that a foreign language should not be



taught to children who still have difficulties with their mother tongue, it is a bad decision. Learning a new language opens their minds, helps them create cognitive relations, organizes their mind, and brings satisfaction. Teachers should adapt their lessons to children with SEN, should engage them in classroom activities, and use interactive methods. These methods are beneficial for regular students too because they are challenging, favors communication and interaction.

Sultana, Ferdous, and Munir (2002) mentioned that Rights to education should be applied to both disabled and non-disabled children. To reach the goal of "Education for All", an inclusive school system has been observed in Bangladesh. The study described the efforts made by the *Bangladesh Protibondhi Foundation* and the effectiveness of inclusive schools as a pilot scheme is also evaluated. They have found that most of the parents of disabled students opined that the negative attitude of the society of excluding their children from mainstream education formed the biggest barrier to language education like mainstream education. But the teachers expressed that the inclusive schools made the disabled children gain independence and become socially relaxed with the environment. Their observation was that both the disabled and non-disabled students were improving satisfactorily. Severely disabled children however required much individual attention, yet they also gradually became part of the inclusion group.

The study of Randi, Elina and Tina (2010) examined what made reading for understanding especially challenging for children on the autism spectrum. They reviewed reading comprehension interventions for children on the spectrum. The paper first summarized the research on reading comprehension with a focus on the cognitive skills and processes that are involved in gaining meaning from text and then reviewed studies of reading comprehension deficits in children on the spectrum. The paper concluded with a review of reading comprehension interventions for children on the spectrum. The children could especially benefit from interventions addressing particular cognitive processes, such as locating antecedent events, generating and answering questions, locating referents, and rereading to repair understanding.

#### 4. METHODOLOGY

A qualitative method was used to measure the effectiveness of teaching language to children with ASD. Interview and classroom observation were used to bring out the result of the research questions. The interview was conducted encompassing subjective questions to a deeper insight. The qualitative method was used to get authentic data and finding an in-depth problem regarding the teaching process of children with ASD.

#### 4.1. Subject

The study was conducted from three different schools of special children located in Dhaka city by following a qualitative method. This method mainly includes interviews of six teachers where two were male and four teachers were female from the selected schools. Apart from the teacher, data was collected from one speech and language therapist. Data was also collected from classroom observation. Three classes were observed from three special schools.

#### 4.2. Instrumentation

The research instruments employed to collect data for this study were interviews and class observation. The interview was conducted in an informal setting with six teachers in their school premises. And the speech and language therapist were interviewed in his chamber in a formal setting. They had to answer seven questions and justify their claim.

However, enough time was given by the teachers though, they were all in a rush. A mobile phone was used to record the interview taking the permission of interviewees. Together with the interview, the researchers used class observation to see how the teachers carried out classes with special children, how the teachers handled them, and what problems the teachers encountered in language teaching. The researchers observed three classes, one period for each class.

#### 4.3. Data Analysis

After obtaining the data through interviews and class observation, the researchers need to point out how the gathered data is analyzed. The researchers used The Data Analysis Spiral which is proposed by Creswell (1998) that in this research as follows:

*Data managing:* In this first step, the researcher organizes the data gathered by using the techniques of collecting the data into folders then converts them into sentences.

*Reading and memo writing:* In the second step, the researchers read and write memos related to the field notes from the direct observation and transcription from the interview.

*Describing, classifying, and interpreting:* In this part, the researchers give a clear description of the data found in detail. Besides, the researcher classifies and chooses which data meet to the researcher's purposes in this research as well as interpret the data

*Representing and visualizing:* After the above three steps, the researcher displays the data found in terms of text.

#### 5. FINDINGS AND DISCUSSION

The findings of the study are discussed in the following sections based on the objectives of the study. Firstly, the challenges that the teachers face in teaching language to the special children are



discussed based on the responses from the interview and the class observation. Secondly, the possibilities are shown.

### 5.1. Challenges

Teaching special children is not like teaching regular students. Teachers usually face difficulties in teaching language to special children. The first challenge that the teachers face is communication. Most of the time teachers fail to communicate the children with ASD. One of the teachers said, "It is very difficult to get the verbal response from the children. It takes at least two to five months or sometimes up to one year to get a minimum response." From the class observation, it was also found that the teachers had to give more time and effort to get the students' attention for minimum communication. In most of the cases, teachers fail to understand what the children do want and what they do not want. So, inadequate understanding creates problems in communication in teaching language to special children.

The teachers mentioned some other basic challenges that they face at the beginning of handling a special student such as sitting habits. The children are unwilling to sit in a place properly. They don't want to sit in a fixed place for a certain time. They like to move and turn back and make noise and unnecessary sounds. Another problem the teachers mentioned is delayed coming. Some of the children come to school at a late age. As a speech therapist told, "Most of the parents can't identify that their child is born with special qualities and sometimes they do not want to agree that their child is special." As a result, most of the students are late in school. The children who come late in school are less responsive in the classroom. Moreover, from the response to the interview and the class observation, it is found that the non-cooperative attitude of the parents, lack of sufficient equipment, and proper language therapy for the students at the institutions for the special children are the major problems in teaching language to the special children.

In response to a question regarding the teaching facilities in the classroom, they mentioned that some facilities, for instance, modern technology, enough equipment, and skilled language therapist and educators should be provided to get a fruitful result in the students' language learning from such kind of special language learning classes. One of the teachers told, "Lack of regular special training for the teachers and the staff creates a big challenge to teach the special children."

Ahmed (2015) found that most of the teachers noted that speech and language therapy functioned with child for evaluating, diagnosis, providing specific and group therapy in order to child's speech, language and improvement of communication". The teachers of the current study also mentioned the

similar idea and told that special training in teaching language to children with autism is quite important and essential for the teachers who are related to such a special teaching profession. They also emphasized on the implication of modern equipment in teaching language to special children. Hence, they all think the authority should take prompt action in arranging special training and providing the necessary equipment for the teachers. Moreover, they also expect the necessary steps and assistance from the government as well.

### 5.2. Possibilities

From the interview and class observation, the researchers have found some possibilities in the field of special-children language education. Teachers are able to communicate and interact with the special children in the classroom in some new and different manners. They use pre-verbal skills like using rhythm, variations of tone, eye-contact, and vocalization to communicate with the special students. Among the six teachers, everyone agreed that special language learning classes are important or would be more effective for the students in learning a language or be responsive in the language classroom rapidly. They added that special language classes are very fruitful for both the teachers and the students. According to the speech therapist, regular special classes with language therapy is needed to improve their language ability and their behavior. As she said, "If they (the special children) are given regular speech therapy, at least once in a week, and at the same time special language classes are held, it is possible to get the positive and fruitful result within a short time."

In answering the question regarding the possibilities, the teachers have informed that, in Bangladesh, educators who are willing to teach at a school of special children must have special training. They have also the opportunity to do a certificate course on Bachelor of Special Education (B.S.Ed.) from some government and non-government institutions in the country. Moreover, some national and international NGOs are also emerging with a helping hand to train up the teachers of special education. Most importantly the speech and language therapy activities can get success if the collaboration and patronage are functioning among the teachers, parents, administrators, psychotherapist, and the civic to comprehensive tutoring in school (De Boer, Pijl & Minnaert, 2011).

## 6. RECOMMENDATIONS

Based on the findings and the profound discussion, the following suggestions could be considered for the advancement of teaching language to the special children by overcoming the challenges and utilizing the possibilities in a better way:



- Changing our attitude to the autistic children
- Decorating the classrooms attractively to the students
- Arranging special training for both the teachers and the caregivers as Mader (2017) thought that the capable teachers with proper knowledge to teach special children is more serious now-a-days than before
- Arranging special language classes for the students
- Arranging of regular language therapy by a special language therapist
- Providing modern and essential tools for the language classes
- Recruiting expert teachers for conducting the language classes
- Regular counseling with the children
- Regular counseling with the parents

Moreover, regular moderation of authority is a must in the implementation of the above suggestions. Additionally, with the government and other non-government organizations' help, teaching language to the special children can be developed in many ways and can reach to success in developing the children's disabilities.

## 7. CONCLUSION

Education is a basic right to all. Children with ASD need special education to have proper brain development. Only special education with special care can bring out their latent talent. Relevantly, language is the first and foremost way of communication and since communication is the biggest problem for the children with ASD, focusing on the point, the study found that teachers have to face very crucial challenges in teaching language to the students which are certainly a very difficult task. Based on the interview question-answer and the analysis, the study indicates that the possibilities that already have been discussed can make a new era in ensuring the special education to the special children. The disabilities of these children which is a curse to them can be turned into a blessing by providing them quality education and language learning is the first step of that quality education. In this context, this is high time we should change our outlook towards the special children, we should take their responsibilities as an important part of our future days. The recommendations that the study mentioned also can play a vital role in the development of the present condition of teaching language to the special children in the Bangladesh context. In conclusion, it can be asserted that with a good combination and coordination among all, teaching language to the special children can be fruitful and effective.

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# MULTIMODAL METHODS IN THE DIAGNOSIS OF CHANGES IN THE ORGAN OF VISION AT ATHEROSCLEROSIS

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## RESUME

**Background.** The study of the parameters of optical coherence tomography with angiography (OCTA) broadens the understanding of the state of hemodynamics for the early detection of vascular disorders of the organ of vision in atherosclerosis (AS).

**Purpose.** To study the parameters of OCTA with changes in the organ of vision against the background of AS.

**Material and methods.** 26 patients (41 eyes) with changes in the organ of vision in AS. The age contingent of patients ranged from 32 to 78 years, the average age was  $47.5 \pm 2.0$  g, of which 10 were women, 16 men. Depending on the damage to target organs, all patients were conditionally divided into 2 groups: group I (19 eyes) included patients without damage, and group II (22 eyes) consisted of patients with target organs damage.

**Results.** The registration of OCTA in patients of group I, a decrease in the density of capillaries of the superficial vascular network was 15% and amounted to  $45.21 \pm 2.62\%$  ( $p < 0.05$ ), of the deep vascular plexus by 19%, which amounted to  $45.89 \pm 2$ , 71% ( $p < 0.05$ ). In the macular region, the area of the hypoperfused retina was  $1.07 \pm 0.14$  mm<sup>2</sup> ( $p < 0.05$ ). In the region of the optic nerve disc, areas of hypoperfusion were noted in the superficial layers in 7 eyes and in the deep layers in 4 eyes. Analysis of OCTA in patients of group II revealed a sharp decrease (by 48%) in the density of capillaries in both the superficial and deep vascular plexuses of the retina, which amounted to  $33.91 \pm 3.01\%$  ( $p < 0.05$ );  $33.65 \pm 2.89\%$  ( $p < 0.05$ ), respectively. In the macular region, the area of the non-perfused retina was  $2.19 \pm 0.21$  mm<sup>2</sup> ( $p < 0.05$ ). In the area of the optic nerve disc, areas of nonperfusion were noted both in the surface layers and in the deep layers in 4 eyes.

**Conclusion.** The use of OCTA allows to detect changes in hemoperfusion in all layers of the retina and optic nerve in the early stages of AS development, which will allow early diagnosis and monitoring of the disease.

**KEY WORDS:** optical coherence tomography with angiography, ischemic diseases, organ of vision, atherosclerosis, hemoperfusion, vascular plexuses, retina and optic nerve.

## INTRODUCTION

In recent years, atherosclerosis (AS) is considered to be a pathological process that most often affects the elderly and senile, but there is a tendency to "rejuvenate" the disease [1, 2].

Disruption of blood patency along the aperture and venous vascular bed leads to ischemic changes not only in the posterior, but also in the anterior segment of the eyeball with the development of secondary dystrophies [4, 5, 6]. At the same time, ophthalmic manifestations may be the only predictors of the development of acute circulatory disorders of

the brain and heart. Therefore, early detection of disturbances in the hemocirculation of acute respiratory infections is an important task that will prevent the development of formidable diseases that threaten the patient's life.

In ophthalmology, methods for evaluating the hemodynamics of the eyeball have been widely used in recent years. one of the highly informative, easily accessible and non-invasive methods is optical coherence tomography with angiography mode (OCT-angiography (OCTA)). This method is characterized by calculating changes in the amplitude



of optical rays reflected from tissues. The method is based on measuring the degree of amplitude decorrelation at a certain point in the optical B-scan when performing several consecutive b-scans (split-spectrum amplitude-decorrelation angiography-SSADA), which is the result of changes in the characteristics of scattering and absorption of the beam at a particular scanning point over time.

The study of OCTA parameters expands the understanding of the state of the vascular network of the retina, optic nerve and choroid, which contributes to a detailed study of hemodynamics for early detection of vascular disorders of the organ of vision at AS without the introduction of dye [1-3].

**Purpose of research.** To study the parameters of optical coherence tomography with angiography for changes in the visual organ against the background of atherosclerosis.

## MATERIAL AND METHODS

A total of 26 patients (41 eyes) with changes in organ of vision at AS were examined. The age group of patients ranged from 32 to 78 years, while the average age was  $47.5 \pm 2.0$  g, of which 10 were women and 16 were men. The criterion for inclusion of patients in this study, according to the recommendations of WHO experts, was: the presence of dyslipidemia (increased levels of total cholesterol, triglycerides, lipoproteins), increased body mass index, smoking index, the ratio of the waist and hip circumferences, as well as AS (echographically, angiographically or coronarographically proven) damage to the vessels of the target organs. The exclusion criteria from this study were: the presence of diabetes mellitus, diseases of the organ of vision, acute disturbance of cerebral circulation, malignant and autoimmune diseases.

The diagnosis, as well as damage to target organs in atherosclerosis, was established by cardiologists, neurologists and angiologists.

For scientific research, the approval of the Ethical Commission for Medical Research of the Ethical and Pharmaceutical Committee of the Republic of Uzbekistan was received in accordance with the Helsinki Declaration of the World Medical Association. Also, for inclusion in the research work, voluntary informed consent of the patients was obtained.

Depending on the damage to the target organs (brain and heart), all patients were conditionally divided into 2 groups: the first group (19 eyes) included patients without target organ damage, and the second group (22 eyes) consisted of patients with organ damage - targets.

All patients underwent a comprehensive examination, including a study of central visual acuity, kinetic and computer static perimetry, tonometry, gonioscopy, biomicroscopy, fundus ophthalmoscopy, ultrasound dopplerography of the vessels of the eye and brachiocephalic trunk.

For multimodal assessment of the (morphological and hemodynamic) parameters of optic nerve head and the retina, all patients were examined on the optic nerve head region (ONH protocol) and the macular region (RNFL, GCC) on an optical coherent tomograph with the TOPCON Triton plus angiography function (Ver. 10.13) (Swept Source OCT).

Scanning was carried out at a speed of 100,000 scans per 1 second. This mode allows you to receive OKTA-grams in the following sizes:  $3 \times 3$ ,  $4.5 \times 4.5$ ,  $6 \times 6$  and  $7.5 \times 7.5$  mm with a resolution of  $304 \times 304$  pixels. The retina scans were automatically segmented into "superficial", "deep" layers of the inner retina; outer retina and choriocapillary layer.

A statistical analysis of the data was carried out using the software package Statistica 6.0. The mean value (M), standard deviation (s) were determined. To compare the variational series, the Mann - Whitney, Wilcoxon, and Z-criteria were used. The critical significance level was 5% ( $p < 0.05$ ).

## RESULTS AND DISCUSSION

In the study of visual acuity, the indicators were within normal values and amounted to a maximum correction of  $0.87 \pm 0.18$  ( $p < 0.05$ ) with an average correction, intraocular pressure within  $17.41 \pm 0.21$  mm Hg ( $p < 0.05$ ). When examining the visual fields in 6 eyes, relative scotomas were determined, in 5 eyes a concentric narrowing, 8 eyes without pathological changes in the visual fields.

When recording computer perimetric data, a decrease in retinal photosensitivity was noted - MD -  $2.51 \pm 0.11$  dB, PSD  $3.59 \pm 0.09$  dB ( $p < 0.05$ ), relative scotomas were observed, an increase in the blind spot area while maintaining high acuity view.

A study on an optical coherence tomograph revealed a thickening of the layer of retinal nerve fibers (RNFL) of the upper and lower segments in 11 eyes, a thinning of the neuroretinal girdle (NRG) in 7 eyes, and a thinning of the para- and perifocal region in 8 eyes.

When registering OCTA in patients of the first group, there was a decrease in the density of capillaries of the superficial layer - the superficial vascular network by 15% and amounted to  $45.21 \pm 2.62\%$  ( $p < 0.05$ ), of the deep layer - of the deep vascular network by 19%, which  $45.89 \pm 2.71\%$  ( $p < 0.05$ ). In the macular region, the area of the hypoperfused retina was  $1.07 \pm 0.14$  mm<sup>2</sup> ( $p < 0.05$ ). In area optic nerve head, hypoperfusion sites were noted in the superficial layers on 7 eyes, in the deep layers on 4 eyes (Fig. 1-see Appendix).

During ophthalmodynamometry, hemodynamically insignificant asymmetry of blood circulation was registered spasm of the ophthalmic artery (OA), Central retinal artery (CRA) and posterior short ciliary arteries (PSCA), the resistivity



index (RI) was within normal values and amounted to (OA, CRA, PSCA) – 0.69; 0.65; 0.60 (respectively) ( $p < 0.05$ ). The condition of collateral blood circulation in the superficial temporal artery (STA) was within normal values.

In the study of patients of the second group, indicators of visual acuity with maximum correction were within  $0.07 \pm 0.002$  ( $p < 0.05$ ), intraocular pressure within  $21.31 \pm 0.09$  mm Hg ( $p < 0.05$ ). With kinetic perimetry, absolute scotomas were determined on 7 eyes, concentric narrowing on 7 eyes, and sectoral loss of visual fields on 8 eyes. The category of these patients showed a steady decrease in both central, peripheral and peripheral vision.

A study of the photosensitivity of the retina on computer perimetry recorded its decrease and amounted to - MD  $-13.11 \pm 0.42$  dB, PSD  $7.81 \pm 0.21$  dB ( $p < 0.05$ ). Also, a decrease in the photosensitivity of the paired eye was observed in patients of this group while maintaining high visual acuity.

The next category of patients showed changes in the parameters of OCT in the form of an increase in the area of the NRG (14 eyes) and a thickening of the RNFL in the peripapillary zone. The presence of areas of high neuroretinal edema (12 eyes) was also recorded here. High cystic edema of the macular area was registered in 9 eyes, which were subsequently recommended anti-VEGF therapy.

The analysis of OCTA in patients of the second group with damage to target organs revealed a sharp decrease (by 48%) in the density of capillaries in both the superficial –S and deep –D vascular plexuses of the retina, which amounted to  $33.91 \pm 3.01\%$  ( $p < 0.05$ );  $33.65 \pm 2.89\%$  ( $p < 0.05$ ), respectively. In the macular region, the area of the non-perfused retina was  $2.19 \pm 0.21$  mm<sup>2</sup> ( $p < 0.05$ ) (Fig. 2 see Appendix). In the area of the optic disc, areas of nonperfusion were noted both in the surface layers and in the deep layers in 4 eyes.

During dopplerography, hemodynamically significant asymmetry of blood circulation parameters in the main vessels of the eye and extracranial parts of brachiocephalic material was registered. Thus, the stability index of eye vessels was increased and amounted to RI (OA, CRA, PSCA) - 0.74; 0.71; 0.69 (respectively) ( $p < 0.05$ ). When studying the consistency of collateral blood circulation in STA, a decrease in hemodynamic parameters was registered ( $39.14 \pm 2.19$  cm/S ( $p < 0.05$ )) and an increase in the stability index (RI STA-0.72), which predicted an unfavorable course of the ischemic process [5].

In addition, in patients with target organ damage, a concomitant pathology was revealed in the form of grade I - II arterial hypertension (9 patients), chronic brain ischemia (7 patients), coronary heart disease (5 patients), which was not observed in patients without organ damage - targets.

To date, there are few works in the literature on the use of OCTA in vascular pathology of organ of vision [2, 9, 12, 13]. Thus, the authors used the OCTA method for occlusion of the retinal veins, where they revealed the least perfusion in the ischemic type of occlusion of the retinal veins. There was a difference in perfusion indices with ischemic and non-ischemic types only with a scan area of  $3 \times 3$  mm. The authors, in addition to hypoperfusion in both the superficial and deep vascular network, observed the presence of microaneurysms and telangiectasias in the examined patients [12]. This proves that OCTA allows detecting perfusion disorders in all vascular layers of the central zone of the retina, as well as microvascular abnormalities in patients with retinal vein occlusion.

Gendelman I. and co-authors found an increase in blood flow deficit in choriocapillaries with its increase closer to the macular area in patients with diabetic retinopathy [13].

The authors of [16] note the high sensitivity (89.2%) and specificity (93.3%) of OCTA in detecting types of neovascularization of age-related macular degeneration, where the newly formed vessels are located under the pigment epithelium with a latent form of chronic neovascularization and classical with localization of the neovascular complex above pigmented epithelium.

## CONCLUSION

This study revealed hemoperfusion disorders in all layers of the retina and optic nerve head in the early stages of the development of the AS process, when the target organs were not yet involved. This condition demonstrates the possibility of using the OCTA method for early identification of atherosclerosis in the early stages of the disease, which will prevent the disability of the population and prevent deaths.

With the generalization of atherosclerosis and damage to target organs, the use of OCTA allows monitoring of the ischemic process, which contributes to a more adequate management of patients with hemodynamic impairment of organ of vision in AS.

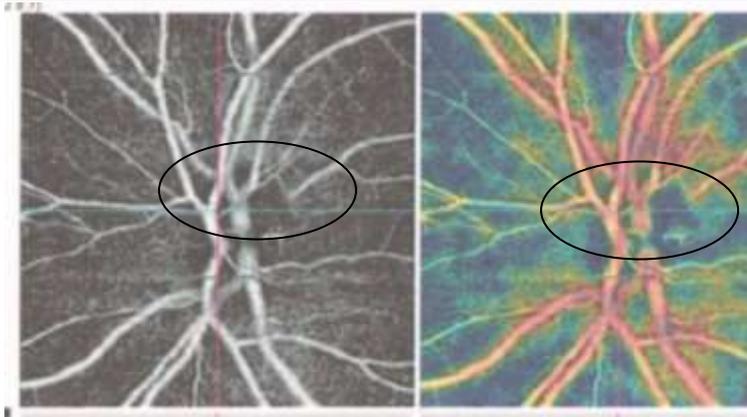
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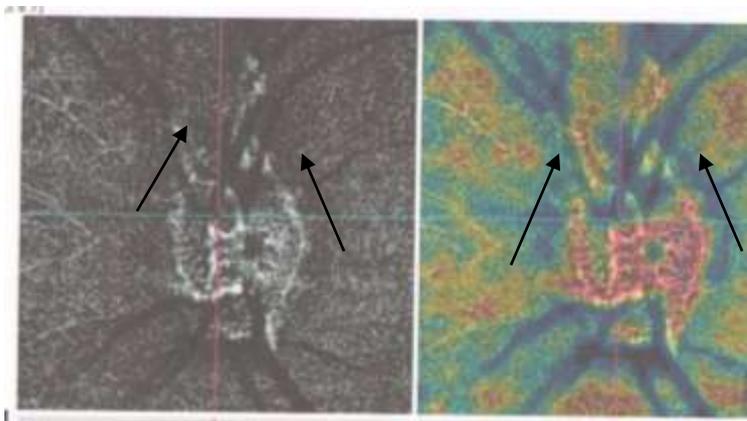


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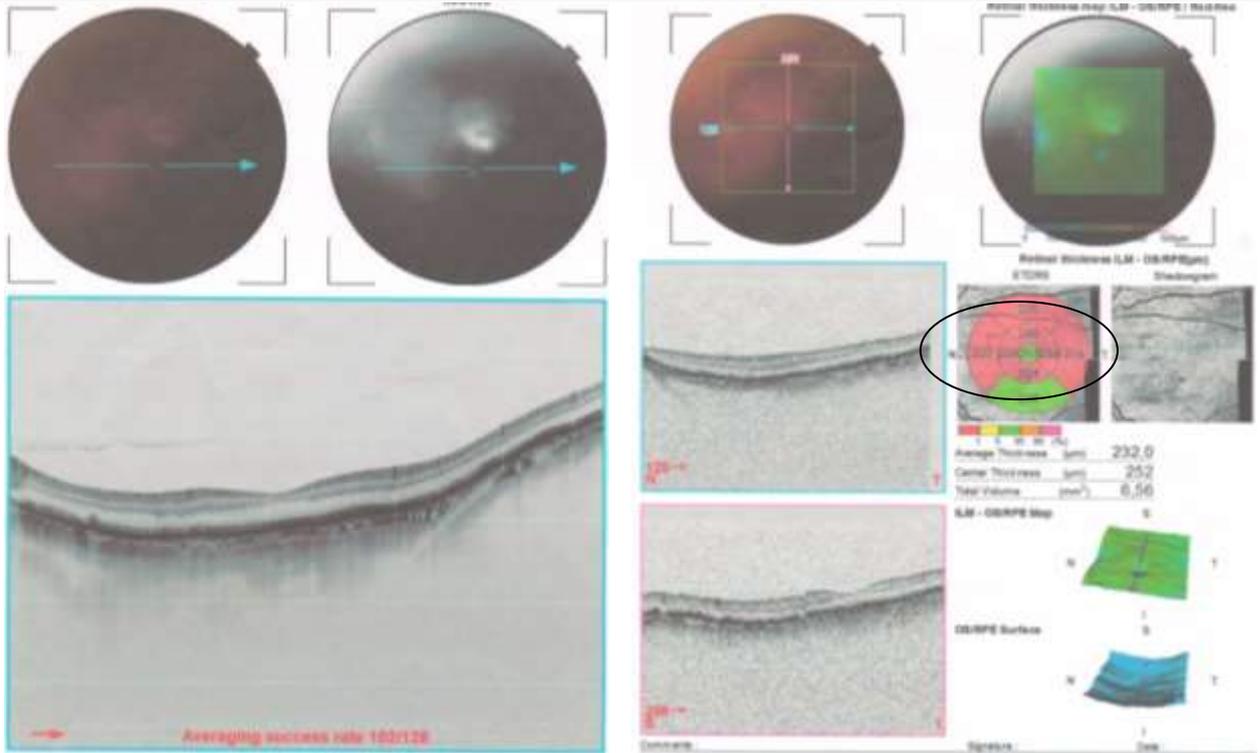


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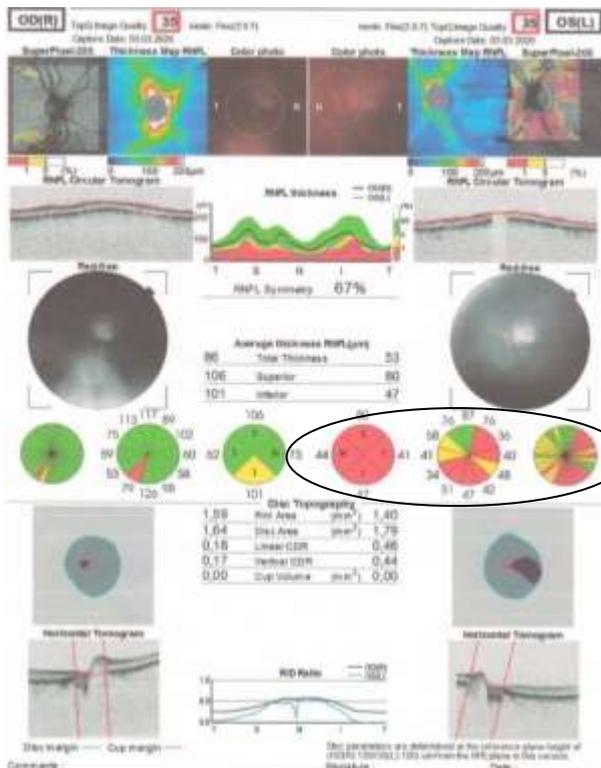
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*Fig. 1. Optical coherence tomography with angiography of a patient of the 1st group (without damage to target organs) A - E. A - OCT in redless mode, visualized thinning of the foveal region (scan area  $6 \times 6$  mm), B - visualized of thinning of the neuroretinal girdle of the peripapillary region, C , G - recorded hypoperfusion of the foveal region of the superficial (B) and deep (G) vascular plexuses (scanning area  $3 \times 3$  mm), D, E - recorded hypoperfusion of the optic nerve region of the superficial (D) and deep (E) vascular plexuses (scanning area  $3 \times 3$  m).*

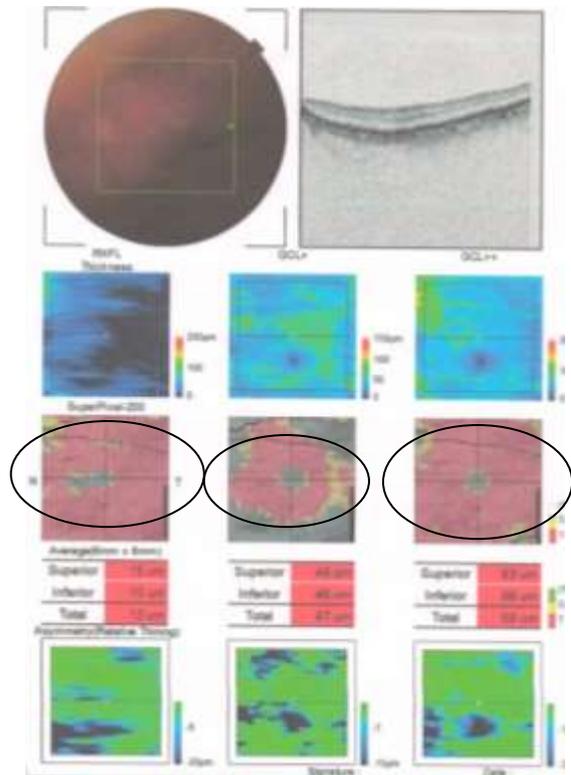


A

B



B



Γ

Fig. 2. Optical coherence tomography with angiography of a patient of group 2 (with damage to target organs) A - G. A, B - OCT in redless mode, a sharp thinning of the parafoveal and perifoveal region, as well as the choriocapillary layer (scan area 6 × 6 mm) is visualized, B, D - the thinning of the neuroretinal girdle and retinal nerve layer of the peripapillary region, a significant decrease in the thickness of the complex of retinal ganglion cells in the central zone (scan area 6 × 6 mm) are visualized.



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# STOCK MARKET CRASH: A COMPARATIVE ANALYSIS BETWEEN SUB-PRIME CRISIS AND COVID-19

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## ABSTRACT

*The Covid-19 pandemic and Sub-Prime Crisis are major incidents that happened to the world in almost 13 years. The stock market crashed to the new heights during both incidents. The study made here on five global stock indices represents the intensity of fall and the correlation between the indices globally. The intensity was greater for the Covid-19 pandemic phase but the returns on an average tanked more in Sub-Prime Crisis. The stock indices were all positively correlated showing the simultaneous change occurring throughout the globe while the ANOVA showed that the average returns were not different from each other for all five indices confirming the coordinated movements.*

**KEYWORD:** Stock Market Crash, Covid-19, Sub-Prime Crisis, Stock Indices, ANOVA

## 1. INTRODUCTION

The Sub-Prime Crisis was a major incident in the U.S. economy from 2007 to 2010. The crisis led to severe consequences for the economy which came to be known as the Great Recession afterwards. During the period of mid-2006, the house prices in the U.S. declined to a great extent which led to a rise in interest rates of mortgage adjusted securities. The rise caused higher monthly payments leading to default situations for many borrowers at large. This finally made the Housing bubble burst as the institutions collapsed one after the other due to a shortage of funds to operate and pay their dues. The investors globally were affected because of this and a massive fall in investment was witnessed. The crisis had affected most in the U.S. and the European region. According to a report, the U.S. Stock Market fell more than 50% during 2006-2009. The country faced unemployment which came back to normal during 2014. The U.S. economy received bailout packages worth 626 billion \$ which got recovered by 2018. The European region was also inflicted with heavy losses.<sup>1</sup>

The Covid-19 is a name given to the new coronavirus disease by the World Health Organization

which was first detected in Wuhan city of China in December 2019. The disease is a pneumonia type contagious in nature. After the unstoppable force of the novel virus was witnessed it became a global emergency in no time. The disease has spread to every continent now as of mid-2020 apart from Antarctica. The disease is not only a health issue for the various countries but also a reason for social, political, and economic crisis which may lead to a long-term economic deficit. The only way of not getting affected by the virus at the initial stage was solidarity, hence, lockdowns in many countries were imposed. This led to unemployment and massive losses in business units. According to the International Labor Organization around 195 million jobs could have been lost worldwide and the number is still increasing. Thousands of lives have been lost worldwide and millions have been affected. This has resulted in it becoming a situation of the highest challenge after World War II according to the United Nations Development Program.<sup>2</sup>

A study, hence, becomes essential to know which out of the two given phases had more drastic effects on the indices worldwide as it would reflect the

<sup>1</sup> <https://www.wikipedia.org/>

<sup>2</sup> <https://www.who.int/>, <https://www.undp.org/>



overall economy too, in a specific manner.

## 2. LITERATURE REVIEW

**Castellanos, A. M. et. al** (2011) found that NYSE movements exerted a great influence, during the first two working days, in a limited group of countries such as Mexico, Chile, Peru, Canada, Germany, Hong Kong, Czech Republic, and Austria. After eight working days, it is observed that 21 stock exchanges (see the map of the world) were significantly affected. The most important concluding remark is that the stock market is synchronized all over the world in an approximated period of two months. They used the Pearson parameter for their research.

**A Shirvani** (2020) studied the bivariate kinematic time series for the 11 years of daily price return and roughness for the S&P 500 index and found that the probability distributions exhibit a significant negative skewness relative to that of a normal distribution that might be attributed to the effect of long memory in the time series. The long memory effect of the stock market crash of 2008 is featured by that the number of degrees of freedom in the empirically observed distributions fell while the tail coefficient of the joint distribution increased after the crash, indicating the presence of a heavy-tail in distributions traditionally attributed to the effect of long memory in the time series. These results significantly feature the long memory effect of the crash. The researcher examines the dependence structure of return and roughness using stock market data and asymmetric copula method. Research purposes were expanded to meet the primary objective of this study, and results were derived through a proper procedure to reach the conclusions. The author has identified a few limitations, and he has given three suggestions for future researchers to overcome those limitations. The study was conducted for S&P 500 stock price data, so the results can be generalized for other indices, especially for Real Estate indices.

**D McMinn** (2020) found the Decennial Cycle which suggested that a major market decline and the US recession were distinctly possible in the year 2020 (McMinn, 2020). A DJIA bear market commenced on February 12 and a severe world recession is now highly likely.

**D Zhang et. al** (2020) provides a simple but original statistical analysis of the impact of the COVID-19 pandemic on stock market risk. The virus has already claimed thousands of lives and brought significant challenges to countries from all over the world. The financial markets have seen dramatic movement on an unprecedented scale. The present results show that

global financial market risks have increased substantially in response to the pandemic. Individual stock market reactions are linked to the severity of the outbreak in each country. The great uncertainty of the pandemic and its associated economic losses has caused markets to become highly volatile and unpredictable.

## 3. OBJECTIVE OF STUDY

The Comparative Assessment utilizes various statistical tools and techniques for the analysis. This study aims at using them to reach a certain conclusion. The primary aim of this study is to determine or ascertain which phase-out of the two given had a larger effect during the given interval. Various other objectives of the study are listed below:

- To compare the performance of stock indices during the two periods.
- To analyze the intensity of fall between the two phases and compare them.
- To determine the most efficient stock index in comparison to the former crisis.
- To determine the most affected stock index in the Pandemic phase.
- To help investors and others overview the extent of fall comparatively.
- To analyze the volatilities in comparison to the previous crash.
- To ascertain whether any index performed differently from others.

## 4. RESEARCH METHODOLOGY

The study is based on secondary data available from the data source Yahoo Finance<sup>3</sup>. The data includes the daily Adjusted Close of the stock indices from different countries. The population could be stated as all the stock indices globally but for the research purpose a sample of 5 stock indices has been chosen, each from a different country. The following stock indices have been worked upon: S&P 500, BSE Sensex, German DAX, NIKKEI, and Hang Seng. The following tools were used for analyzing the data: -

- a) Mean: A measure to determine the average of data.
- b) Variance: A measure to determine variations.
- c) Standard Deviation/Volatility: A measure to determine deviations from the mean in the unit same as the data availed.
- d) Correlation: A measure representing the degree and direction of the relationship between two variables.
- e) One-way ANOVA: A statistical test which checks the equality of means between two or more than two groups.

<sup>3</sup> <https://in.finance.yahoo.com/>



Following hypothesis was formulated for the test: -

**H0:** There is no significant difference between the mean returns of five stock indices in the given period.

**H1:** There is a significant difference between the mean returns of stock indices in the given period.

## 5. DATA ANALYSIS AND INTERPRETATION

The comparative assessment of the same set of stock indices from 5 different countries was analyzed statistically for six months taken from the Sub-Prime Crisis of 2007-2010 and Covid-19 Pandemic 2019-2020. The duration of six months was selected such that the bottom during both the periods would have touched in the fifth or sixth month in analysis making the data more appropriate for comparison.

The software used for collecting the data was Python

2.7 and the source being Yahoo Finance. Prices availed were of Adjusted Close nature for all the indices allowing for more precision in analysis. The number of observations availed on daily basis ranged from 115-125 for each index. Tickers were used for availing the data from the source, hence, a brief introduction about the tickers is given below: -

**^GSPC** = S&P 500 (the stock index from the U.S. covering 500 major companies)

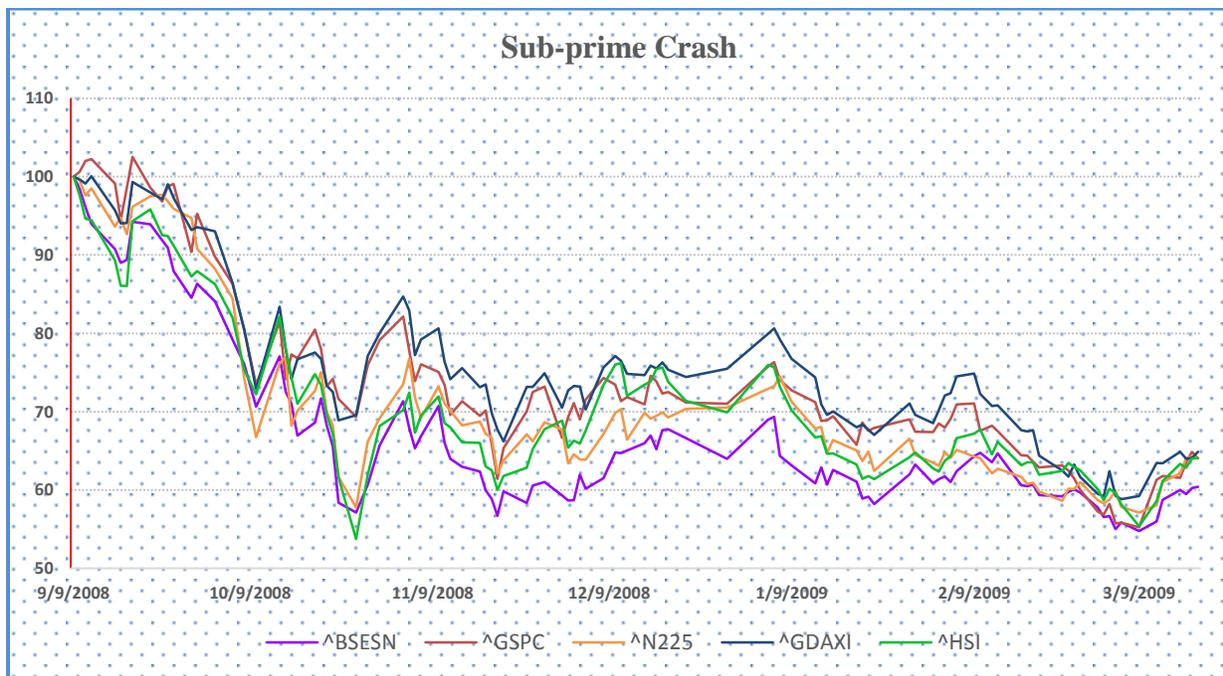
**^BSESN**= BSE Sensex (the stock index from India covering 30 major companies)

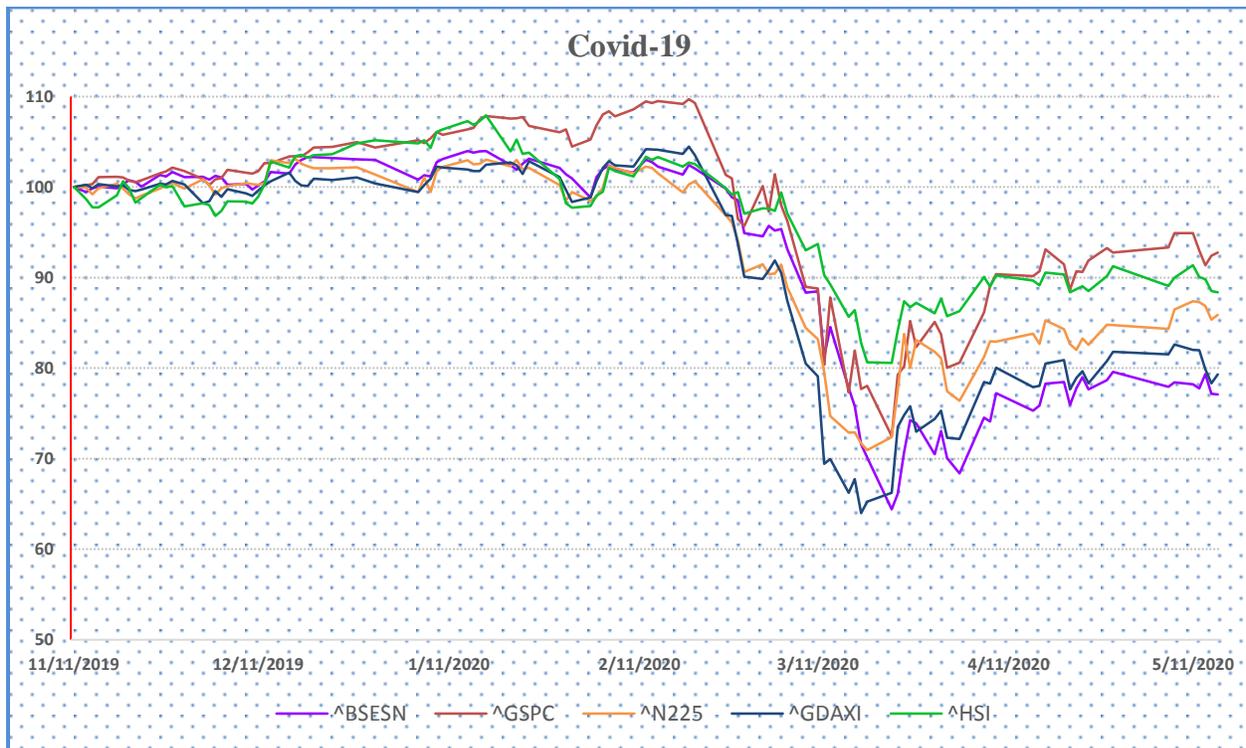
**^N225** = NIKKEI (the stock index from Japan covering 225 major companies)

**^GDAXI**= DAX (the stock index from Germany covering 30 major companies)

**^HSI** = Hang Seng (the stock index from Hong Kong covering 50 major constituents)

### 5.1. SIMPLE RETURNS GRAPH (NORMALIZATION TO 100 WITH BASE = DAY 1): -





The graphs above have been obtained from Python 2.7 and are based on [Adjusted Close/Adjusted Close(base) \* 100] keeping the first day of the six months as a constant base for each calculation. It can be seen from the first graph i.e., the Sub-prime crash that the returns fell on a relatively lower yet constant pace than the Covid-19 crash during these six months but the fall was greater than the latter as the bottom fell below 60 in the former one. The Covid-19 crash depicts a sudden and major decline during the March and April months of 2020. This can be viewed because of growing fear in the minds of investors due to the non-availability of any medicines which can stop the pandemic to occur and the rising cases on an exponential form leading to

deaths. The graph of Sub-prime crisis hits low in October-November as well as March months of 2008 and 2009 respectively which was the result of several FIs collapsing. Considering the graphs, it can be seen that Hang Seng which fell the most during 2008-09, held strong in the Covid-19 period, whereas, the German Dax which was least affected out of the five during Sub-prime crash has been among one of the most affected ones in the pandemic. The massive fall of German Dax during the second phase can be related to the outburst of Coronavirus cases in Europe on the highest scale at initial stages. The rest of the indices have also shown a fall in both cases depicting a positive correlation among them.

### 5.2. MEANS AND VARIANCES

Daily Log Returns (Mean Values)			
Sub-Prime		Covid-19	
^BSESN	-0.4096 %	^BSESN	-0.2099 %
^GSPC	-0.3041 %	^GSPC	-0.0555 %
^N225	-0.5533 %	^N225	-0.1178 %
^GDAXI	-0.4001 %	^GDAXI	-0.1861 %
^HSI	-0.3213 %	^HSI	-0.0510 %

The mean values shown above are based on log return values obtained from Python 2.7 of both the periods daily. Both the tables show that the indices have generated negative returns on a daily average. The percentage fall of Nikkei was highest on an average during the former six months, whereas, in the pandemic

phase the six months have shown that Sensex fell the most out of these five. The reason why the former is showing higher values can be related to the constant fall which occurred throughout the six months while in the latter, there was a sudden major fall in a single month gap and the previous months not being so major



which lead to an averaging effect of lower falls comparatively. A month-only comparison might have shown a different result from what can be seen here due

to the massive fall as depicted from the graphs previously.

Variances (in squared %)			
Sub-Prime		Covid-19	
^BSESN	10.72	^BSESN	6.88
^GSPC	13.66	^GSPC	7.78
^N225	14.20	^N225	4.15
^GDAXI	11.56	^GDAXI	6.53
^HSI	15.12	^HSI	2.76

The above-given tables show the variances of five stock indices over the two phases. The data makes it clear that variances were higher for all the indices during the six months of the sub-prime crash. The interesting thing to note is that Hang Seng which had the highest variance during the first phase has shown

the least variance during the second phase, ultimately, leading to confirmation of graphs availed. While the German Dax which had a low variance among the group formerly is showing a little bit high comparatively during the pandemic phase.

### 5.3. VOLATILITIES/STANDARD DEVIATIONS

Daily Standard Deviations			
Sub-Prime		Covid-19	
^BSESN	3.2745 %	^BSESN	2.6226 %
^GSPC	3.6963 %	^GSPC	2.7896 %
^N225	3.7678 %	^N225	2.0384 %
^GDAXI	3.3997 %	^GDAXI	2.5560 %
^HSI	3.8889 %	^HSI	1.6623 %

The standard deviations, commonly known as volatilities have been obtained on the similar log return values from the observed data as before. These deviations are representing the average daily volatility in stocks. From the data availed, deviations occurred on a greater scale for the prior six months period. This might be due to the constant fall occurring in the prior one for months continuously due to one or the other incidents happening. For the latter one, the sudden ups and downs occurred for a relatively shorter period than the prior one, hence, averaging may have affected the results. The data shows that Hang Seng which was having the highest volatility during the Sub-prime

Crisis has the least volatility during the Covid-19 outbreak. The reason might be the low effects of Coronavirus in Hong Kong, still, the effects of globalization is inherent and thus, fall sentiments can be observed with negative means and high volatilities availed. The S&P 500 which includes the top 500 companies from the U.S. has shown considerable volatility in both the scenarios, as, in the latter period the volatility is highest which might have resulted from the fear emerging in the minds of investors due to uprising cases of the novel disease with no cure still in hand.

### 5.4. CORRELATION ANALYSIS

The Correlation Co-efficient has been among the major tools for determining the degree and direction of the relationship between two variables. The data below shows the Correlation matrix obtained using Python 2.7 between the five stock indices in both the six months.

There is no single negative number obtained showing that all the stock indices move in the same direction up to a certain degree. Following output was obtained when the test was run: -



Correlation Output											
Sub-Prime						Covid-19					
	^BSESN	^GSPC	^N225	^GDAXI	^HSI		^BSESN	^GSPC	^N225	^GDAXI	^HSI
^BSESN	1.000000	0.516038	0.550308	0.599716	0.719967	^BSESN	1.000000	0.535216	0.526381	0.650548	0.747711
^GSPC	0.516038	1.000000	0.275135	0.718153	0.504353	^GSPC	0.535216	1.000000	0.357336	0.763153	0.457538
^N225	0.550308	0.275135	1.000000	0.563615	0.734242	^N225	0.526381	0.357336	1.000000	0.609727	0.749384
^GDAXI	0.599716	0.718153	0.563615	1.000000	0.579209	^GDAXI	0.650548	0.763153	0.609727	1.000000	0.672642
^HSI	0.719967	0.504353	0.734242	0.579209	1.000000	^HSI	0.747711	0.457538	0.749384	0.672642	1.000000

The correlation data shown above in both the quadrants is positive which means that there is a simultaneous and similar increase to an extent in one index with an increase in the other one and vice versa. During the Sub-prime Crisis, the highest correlation is observed between Nikkei and Hang Seng, which is 0.734242, a moderately strong correlation. While the least correlation is observed between the S&P 500 and Nikkei, which is 0.275135, weak correlation. The stock indices BSE Sensex and Hang Seng as well as German Dax and S&P 500 are also showing a moderately strong correlation while all other pairs have moderate correlations. In the pandemic phase, the data shows that

there is a moderately strong correlation between Hang Seng and Nikkei as well as Hang Seng and BSE Sensex just like the previous crisis period. A significant change can be observed that the German Dax and S&P 500 have the highest correlation in the pandemic phase which can be a result of Europe and the United States getting affected the most in initial stages due to the novel virus. From a bird's eye view of both the tables, it can be said that the correlation between the global stock indices has increased during the decade due to the effects of increasing acceptance of globalization policies and increasing technological trade and developments.

### 5.5. ONE-WAY ANOVA

One-way ANOVA			
Sub-prime		Covid-19	
Fvalue1, pvalue1= stats.f_oneway(ind_returns_1_melt['^BSESN'], ind_returns_1_melt['^GSPC'], ind_returns_1_melt['^N225'], ind_returns_1_melt['^GDAXI'], ind_returns_1_melt['^HSI'])		Fvalue2, pvalue2= stats.f_oneway(ind_returns_2_melt['^BSESN'], ind_returns_2_melt['^GSPC'], ind_returns_2_melt['^N225'], ind_returns_2_melt['^GDAXI'], ind_returns_2_melt['^HSI'])	
print Fvalue1, pvalue1		print Fvalue2, pvalue2	
<b>F-value</b>	= 0.05504430039128091,	<b>p-value</b>	= 0.994345460375282
		<b>F-value</b>	= 0.1063341122902684,
		<b>p-value</b>	= 0.9802872796400264

ANOVA is used for testing the equality of means when there are two or more than two groups and is a popular measure around the world used for Financial, Statistical, and many other types of studies. The standard One-way ANOVA is used here for testing purposes, conducted through Stats Module of Scipy Package in Python 2.7. The test was conducted on 92 observations in each variable out of approximately 120 observations available in each. The difference is due to the problem of missing observations for which the whole row of observations was dropped out for the test. The data from both the tables show that the p-value is greater than 0.05 (which is a default value in such tests). This makes it clear that we fail to reject the null hypothesis and thus, there exists no significant difference between the mean values in both the phases. The F-values also is less than the table values, therefore, indicating the failure of rejection for the null hypothesis. Concluding the results, it can be said that no two groups are different from each other which should also not mean that the groups are the same completely.

### 6. SUGGESTIONS

The study incorporated six months only which can be extended for further studies and more generalizable results. The selection of bases has been made randomly which can be more precise if based on some relevant event or impulse. The assumptions of ANOVA test like Homogeneity of Variance and Normality check could be done by using other tests like Bartlett's/Levene's Test and Shapiro Wilks Test respectively. The study is based on only five indices while many other such indices can still be used to obtain further precision. The factors resulting in such results can be further studied to get an in-depth view of both the scenarios. The result here is obtained in specificity and thus, shouldn't be generalized for parameters different from the one used above

### 7. CONCLUSION

The study showed that the stock indices have generated negative returns on an average leading to an overall negative or bearish trend. The data available from Graph and Correlation Matrix have helped in



deciphering the similar movements in stock indices globally. All the stock indices have been affected globally to some extent due to the change in one or two. Behavioral finance is also working here, as, it is seen highly in existence during the pandemic phase. Graphs showed how drastic fall occurs when people are uncertain in recent times due to the increase in transparency, technological development, and education. The constant decrease in stock indices shows how the money flew out from the investment zone whether be it domestic investors or foreign ones. The ANOVA helped in determining that groups or indices had no significant differences between them leading to a conclusion that all indices have moved in tandem due to the increased effect of globalization.

Both periods of Crisis have shown similar results up to a certain extent though not completely the same. The Sub-prime Crisis had a more constant fall occurring on a daily basis while the Covid-19 Crisis witnessed a sudden massive fall for one month. The average daily fall during the half-year period was also high during the former one. The index Hang Seng has shown the biggest change during the decade as it has sustained relatively better during the latter phase. On the other hand, the most tragically affected index was Dax during the assessment which performed considerably better in the former crisis but was beaten up in the latter one. To conclude it can be said that the Pandemic had an adverse effect on stock indices globally on a larger scale and the induced lockdown due to unstoppable novel virus may lead to much worse results in upcoming periods but for the critical six months duration under study we can see that the Sub-prime Crash had a greater effect on the indices as a whole for the period under consideration.

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## COVID -19 A GREAT PANDEMIC: ROLE OF FCI

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### ABSTRACT

*The Covid-19 corona virus outbreak has affected population across the world. In short time we were exposed to a critical situation faced with numerous medical, social and economic challenges many international borders are closed which limited the supply of goods, including Food. This paper throws a light on the role of the FCI, importance of such as pandemic situation. Corona virus has put the whole world in a war like situation. This paper also explains the various Food security schemes which is announced by prime minister during this critical crisis.*

**KEYWORDS:** Covid-19, FCI, Government schemes.

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### INTRODUCTION

Ensuring Food security should be an extra ordinary significance for a nation like India. During this pandemic its only (FCI) which is standing with the government for like saving commodities like wheat and rice . After green Revolution to ensure Food for all, the FCI has been set up under the FCI act 1964 to be the nodal central government agency responsible for the purchase, storage, inter-state movement, distribution, Transportation. FCI is providing wheat and rice daily to state government without going through the e-auction mode at open market sale rate to ensure continuous supply of food grains. FCI has been able to ensure availability of sufficient Food grain in all status by proper planning on an average of food 40 to 42 million Tonnes of Food grain are transported by across the country in a year. Even in this challenging operational environment FCI is able to meet the increasing demand of food grain by supply of wheat and rice throughout the country.

### OBJECTIVES

1. To understand the importance of FCI.
2. To assess the meaningful role of FCI
3. Also understand government schemes during (Covid-19) and their benefits.

4. To know how the Lockdown situation has hit the basic needs of the people.
5. To discuss the various suggestions for ensuring food security.

### RESEARCH METHODOLOGY

The method used to analysis this paper is both primary and secondary.primary data has been taken from the general takes and statements given by person.

### REVIEW OF LITERATURE

1. Rituraj Tiwari<sup>1</sup>: In her article she explained the situation during lockdown. She talks about the role of FCI which is standing with the government for life saving commodities like wheat and rice. The author also explain FCI working strategy which is very efficient and ensure to people about the sufficient Food grain. FCI distribute wheat and rice 40 to 42 million tonnes of food grain across the country in a year .during this crisis FCI unloaded 4.6 MMT stocks are disturb 9.8 MMT to state government under various schemes including (PMGKAY).

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<sup>1</sup> Rituraj Tiwari, " FCI operation hit in lockdown",  
Published in Economic Times dated 25-March-2020.



2. H.E. Tijjani Muhammad Bande<sup>2</sup>: The above statements delivered on 74<sup>th</sup> session of the united nation general assembly during this session talk about small and medium enterprises in the food sector including retailers who are highly vulnerable to economic shocks and also talk about the result of this pandemic create mass unemployment and also further threatens millions of Jobs resulted depression and various health issues This Pandemic disrupt our lives, but U.N.O. Food program have been protested of zero hunger.
3. CSU SEAKR<sup>3</sup>: In this article, the author talks about Covid-19 effect on Indian economies. The continuing Lockdowns across the country, affecting labour and input availability for agriculture operations. The stoppage of transport networks will seriously disrupt food supplies. The author also discuss about income of farmers perishable crops and poultry products are going to be much lower due to crop losses. The fall in prices due to lack of demand will further aggravate these problems.
4. Sheela Jain<sup>4</sup>: In her article she talks about such problems which are related to food security. As we all know India currently has the largest number of undernourished people in the world i.e around 195 million. The author not only talk about problems but also discuss about inadequate distribution of food through public distribution mechanism. moreover, she explores the role of the government in this direction over past two decades various schemes have been introduced like – PMGKAY, RKVY, E – Market place, Subsidized grain, NFSA.

<sup>2</sup> H.E Tijjani Muhammad Bande, “The impact of Covid-19 on global food security and nutrition: Preventing a health crisis from becoming a food crisis”, published in General Assembly of the United Nations President of the 74<sup>th</sup> session.

<sup>3</sup> CSU Seakr, “Ensuring food security during the pandemic”, published in economic times on 11-May-2020.

<sup>4</sup> Sheela Jain, “Food Security in India: Problems and Prospects” published in OIDA International journal of Sustainable Development, Ontario International Development Agency, Canada.

## COVID-19 AND INDIA

Ensuring Food security for the country has been a major pre occupation of the government since Independence.<sup>5</sup> As we know Covid-19 the biggest global issue. The impact of the 2020 Covid-19 pandemic in India has been largely disruptive. It has created a global health crisis that has had a deep impact on the way we perceive our world and our everyday lives. The Covid-19 Pandemic has spread to more than 114 countries.

The government of India announced a variety of measure to tackle the situation, on 26 march a number of economic relief measures for the poor were announced. The government said Covid-19 effect the global economy and if proper measures are not taken, it could have serious implication. India has already implemented nationwide lockdown since march 25,2020 with the vision to “break the chain” of infection and control its transmission.

### FCI operation during Covid-19 Emergency

India the second most populous country in the world is under tremendous pressure. As we all know Covid-19 is the biggest issue for the whole world. The Covid-19 pandemic could have a divesting impact on the livelihood and food security of millions of people across India. Food security implies access by all people all time to sufficient of Food to lead active and healthy life. <sup>6</sup>The ordinary lives of every Indian took when a nationwide lockdown was declared. This situation have a drastic effect on the lives of people and local food system on that time food stock of FCI will be an important factor in helping the government to avoid a potential crisis in these difficult times, when many countries are likely to comfort Food shortage, beside India having enough stock and FCI which is standing with the government for like saving commodities .

Food corporation of India set a new bench mark an 22-4-2020 when it moved 102 train loads carrying about 2.8 laky metric Tons (2.8LMT) food grain maximum movement was from Punjab. The total food grain stocks moved by FCI during the Lockdown period crossed 5MMT at a daily average of 1.65 lakh tm if we talk about FCI Labour they have faced problem during this pandemic because while loading and unloading a single Rack the contractor has to arrange number of trucks and Labour for these

<sup>5</sup> Uma Kapila, “Indian economy – Issues in development and planning and sectoral aspects”, Academic foundation, New Delhi, 2002-2003, p.313.

<sup>6</sup> P.V. Srinivasan, “Agriculture and food security”, in Shovan Ray (ed.), Handbook of Agriculture in India (New Delhi, 2007), p. 130.



operations on this time social distancing is meaningless.

### **FCI collaborations with N.G.O for relief work during lockdown**

During this pandemic crisis the government of India allows NGO to buy Food grain directly from FCI for relief works. The ministry of consumer Affair, Food and Public distribution asked FCI to provide wheat and rice to such organization at the open market sales scheme (OMSS) rates without going through e-auction process. From the day of the lockdown, the government said the FCI has delivered 32 million tonne of food grain to status for PDS distribution as per the allocations specified under the National food security Act (NFSA).<sup>7</sup>

### **FCI ensuring Food security through PMGKAY in national capital during lockdown**

In this pandemic time India biggest challenge ensuring food and nutrition security to its masses<sup>8</sup>so the government of India has announced one of the most important initiatives called (Pradhan Mantri Garib Kalyan Yojna) PMGKAY that provides free Food grain to the needy population through FCI giving ensurity for us that no one suffers on account of non-availability of Food grain due to lockdown. Government of India has ensured that all under NFSA gets double their usual allocation during 3-month April, May and June 2020.<sup>9</sup>

### **Is India prepared to meet the supply requirement of Food stuffs**

Poverty itself is both a cause and consequence of undernourishment from chronic food in security<sup>10</sup>. As we all know the migrant workers often need their day's income for Food and consumer goods and the Covid-19 crisis hit them hard.

In his first address to the nation on dealing with covid-19, the PM said that all necessary steps would be taken to ensure no shortage of essential items. But as

we saw poor and hungry workers walking back hundreds of kilometers to their town and villages. Media reports tells us that, lakhs of workers still stuck at their places of work in Delhi, Mumbai, or Surat are struggling to even access food. No doubt FCI and many more N.G.O. help the people. The labour class play the biggest role in India's development today. They have been the backbone of P.M Modi Make in India “ long before the even coined the term. So, the state and center government should take 5 steps to make their lives better not just during this Lockdown period but also for future. I propose the five R's.

\*Recognize

\* Register

\*Responsibility

\*Ration card

\*Residence

### **Glitches of FCI at times of crisis**

There are few serious short comings to be overcome by the FCI to play an efficient and meaningful role at time of crisis. On the eve of a new round of procurement with bumper harvest of wheat, it was observed that FCI was facing a serious shortage problem. There is not only shortage of modern storage facilities but the FCI also lacked a “Pro-active liquid policy”.

As we know in the month of march lot of rabi crop has already been harvested but the crop still standing, there could be shortage of farm Labour after the crop harvested it has to be packed and transported to markets which again needs workers, vehicle, drivers and uninterrupted movement.

### **ONE NATION ONE RATION CARD SCHEME HELPFUL IN FUTURE FOR MIGRANT WORKERS**

Jan 20,2020 Union Minister Ram Vilas Paswan announced that NDA government ambitious project “One nation one ration card” scheme will be rolled out the whole of India form 1-June -2020. However, COVID-19 crisis has delayed the process but also made it inevitable. This scheme will be very helpful in future to face any kind of pandemic. Under one nation one ration card scheme a beneficiary will be able to get benefits across the country using the same ration card.

Recently, the supreme court had ordered the center to consider the feasibility of “temporarily” adopting the one nation one ration card scheme during the ongoing covid-19 lockdown period to enable the migrant workers and economically weaker sections (EWS).

<sup>7</sup> R. RadhaKrishna, “Feed and Nutrition security of the poor”, Economic and political Weekly, April 30, 2005, 1817.

<sup>8</sup> Dr. Sultan Singh Jaswal, “Challenges to Food Security in India”, IOSR Journal of Humanities and Social Science (IOSR-JHSS), Vol. 19, Issue 4, Ver. 11 (April 2014) available at [www.iosrjournals.org](http://www.iosrjournals.org).

<sup>9</sup> A. Gulati, J. Gujral, T. Nandakumar, National Food Security Bill – Challenges and options. New Delhi: Commission for Agricultural Costs and Prices, Government of India, 2012.

<sup>10</sup> S. Broca, Food Insecurity, Poverty and Agriculture: A concept paper, ESA Working paper No.02-15, FAO, 9 2002.



## CONCLUSION

This is no doubt that FCI needs to overhaul its operation and modernize its storage post pandemic and in the long term. However, it can't be denied that the relevance of an organization such as FCI, thousands of contractors and their lakhs of workers attached with FCI who are earning through this organization. The organization holds the key of warding off a looming crisis of hunger and starvation. I would like to wind up by the words of Mahatma Gandhi:

“There are people in the world so hungry, that God cannot appear to them except in the Form of Bread”.

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## Importance of *Prosopis cineraria* (L.) Druce as a Medicinal Plant: A Review.

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### ABSTRACT

*Prosopis cineraria* (L.) Druce (Family Leguminosae, Sub-family Mimosoideae) is known as “Khejri tree”. It is a deep rooted, nitrogen fixing, multipurpose endemic tree to the hot deserts of India. It has been used since ancient times, particularly for medicinal purposes, traditionally and socially. Traditionally paste, gum, smoke from leaves and pods are applied for antidiabetic, anticancer, anti-inflammatory and antimicrobial purposes. Phytochemical component of *Prosopis* such as flavonoids, tannins, alkaloids, quinones or phenolic compounds demonstrate various biofunctions, such as analgesic, anthelmintic, antibiotic, antitumor, microbial antioxidant, antimalarial, anti-protozoal, antipustule and antiulcer activities. Dry pods of *Prosopis cineraria* are also known as sangria pods and it is the main part of Rajasthani dishes and also have a broader range of pharmaceutical applications like in pain, high cholesterol level, diabetes, an anemia, kidney and liver disorders. The *Prosopis cineraria* plays an important role in the socio-economic development of the farmers. The review explores the use of *Prosopis cineraria* across the all disciplines for its medicinal value and deals with cultivation, nutrition, commercial and prominent pharmacological properties of the “wonder tree”.

**KEYWORDS:** - *Prosopis cineraria*, antimicrobial activity, phytochemicals, khejri tree, sangri pods, pharmacological properties.

### INTRODUCTION

*Prosopis cineraria* belongs to mimosoideae sub-family, commonly known as “khejri” or “shami tree”. It is also known as king of thar desert forest. It is an endemic tree which is majorly found in Rajasthan in India. *Prosopis cineraria* is a small tree, leaves are

bipinnate, branches are thorned along the internodes. Flowers are small and yellow and seeds are pods. *Prosopis cineraria* indicates the presence of a deep-water table [ Vyas R.V. *et al.*, 2017]. Dry pods of the *Prosopis* is the main part of Rajasthani dishes and it has also ancient medicinal properties which are helpful



pharmaceutically [Vandana Pathak *et al.*, 2017]. Unripened pods are nutritious and they are also used into making pickles [Vandana Pathak *et al.*, 2017]. *Prosopis cineraria* has also play a historical part in Rajasthan. During India's Rajputana famine, many people's lives were spared using the sweetish bark as a food [Vyas R.V. *et al.*, 2017]. The smoke of *Prosopis cineraria* leaves is also good for eye trouble. The bark tonic is also used for several diseases like asthma, bronchitis, leukoderma, piles and wounding of mind [P. Saritha *et al.*, 2018]. *Prosopis cineraria* pods and leaves have anticancer, anti-diabetic, anti-inflammatory and antimicrobial properties. Stem and bark have anti-inflammatory and antirheumatic properties too. The sangria pods contain various phytochemicals/phytoconstituents like alkaloids, carbohydrates, steroids, proteins, flavones, flavonoids and phenol etc. [Preeti Khandelwal *et al.*, 2016]. The plant material works as one of the herbal remedies for snake bite and scorpion sting. *Prosopis cineraria* is the national tree of the United Arab Emirates where it is known as "ghaf" [Anirudh Khatri *et al.*, 2010].

**Classification of *Prosopis cineraria*:** - (According to Bentham and Hooker)

**Kingdom:** - Plantae

**Sub Kingdom:** - Phanerogames

**Division:** - Angiosperms

**Class:** - Dicotyledons

**Sub-class:** - Polypetalae

**Series:** - Calyciflorae

**Order:** - Rosales

**Family:** - Leguminosae (Fabaceae)

**Genus:** - *Prosopis*

**Species:** - *Cineraria*

### Pharmacological effects of *Prosopis cineraria*

- **Antioxidant activity:** According to Abhishek Gupta *et al.*, 2015, the presence of phenolic compound suggests that the polyphenolic content is responsible for the antioxidant activity exhibited by this plant. The wound healing activity of PCEE (*Prosopis cineraria* ethanolic extract) was studied using excision wound model and the extract showed the significant wound healing activity.
- **Antibacterial activity:** According to Indhiramuthu Jayshree *et al.*, 2014, the presence of flavonoids and tannins are responsible for the antibacterial activity in *Prosopis*. The ethanolic extract showed the maximum activity against staphylococcus

aureus and klebsiella pneumonia and the aqueous extract showed maximum inhibitory effect against proteus mirabilis.

- **Antidiarrheal activity:** According to Narendra Naik *et al.*, 2012, the stem and bark in methanolic extract of the plant part was utilized to evaluate the antidiarrheal activity.
- **Analgesic activity:** Arvind Kumar *et al.*, 2011, studied using tail immersion test and hot plate methods on rats. The ethanolic extract of root showed the presence of alkaloids, tannins and steroids. The presence of metabolites is responsible for the analgesic activity.
- **Antihyperglycemic activity:** Deepika Sharma *et al.*, 2013, concluded that the *Prosopis* have abundant activity in lowering blood sugar level. Study showed that blood sugar level increase and body weight decrease in diabetic rats become normal when treated with the plant extract of *Prosopis*. Thus, *Prosopis* extract activates the surviving of the  $\beta$ -cells of the islets and reduce the blood sugar level by producing an insulinogenic effect.
- **Anti-cancer activity:** According to Sumathi sundaravadivelu *et al.*, 2012, "cancer" is a disease in which a group of cell divides in uncontrolled manner with invasion and metastasis. The methanolic activity of the leaves of *Prosopis cineraria* (L.) Druce were used, which showed significant radical scavenging activity. The extract inhibited cell proliferation by inducing cell death and the extant of cell proliferation
- **Antitumor activity:** According to Maideen N. *et al.*, 2011, study showed reduced glutathione when compared to liver tumor bearing animals. The leaves extract also increased the levels of mitochondrial enzymatic antioxidants superoxide dismutase, catalase and glutathione peroxidase and non-enzymatic antioxidants in Hydro-alcoholic extracts.
- **Bronchodilatory activity:** According to Pareek A. K., *et al.*, 2015, concluded the plant extract shows concentration dependent relaxant effect on both carbachol and  $K^+$  induced contraction causes blockade of the  $Ca^{+}$  channel hence it also provides the vasodilatory effect.
- **Skeletal muscle relaxant:** According to M. George *et al.*, 2012, concluded by the study that *Prosopis cineraria* possess significant skeletal muscle relaxant activity and the activity is due to the presence of alkaloids,



tannins and flavonoids which are present in the leaves extract.

- **Anticonvulsant activity:** According to V. Velmurugan *et al.*, 2012, concluded by the study that the methanolic extract have good anticonvulsant activity. *Prosopis cineraria* shows good anticonvulsant activity against seizure induced maximum electro shock (MES) and Pentylentetrazol in a dose dependent manner. Inhibition of the maximum electro shock is observed against generalized tonic-clonic and cortical focal seizure.
- **Bronchodilator activity:** According to Khalid Hussain Janbaz *et al.*, 2012, concluded that *Prosopis cineraria* is used for the treatment of respiratory disease like asthma, cough and bronchitis. He used methanolic extract to test the bronchodilator activity on carbachol. The extract shows concentration dependent relaxant effect on both carbachol and  $K^+$  induced contraction. The bronchodilator activity is due to the blockade of  $Ca^+$  channel.
- **Detoxifying Activity:** According to Sivarathri Siva Rajesh *et al.*, 2013, proposed the detoxification effect of the aqueous, methanol and petroleum ether extract of medicinal plant *Prosopis cineraria* against *Naja naja*. The aqueous bark extract of *Prosopis cineraria* has substantial antivenom potential. The aqueous extract with the dose of 14mg/kg have ability to neutralize the lethal activity completely. Aqueous extract not causes any type of adverse effect that are most common with other detoxifier and antidotes.
- **Activity against multidrug resistant and fungal strains:** According to Rosina Khan *et al.*, 2010, concluded the extract of the *Prosopis* shows significant activity against most of the recently investigated microbial strains. The phytoconstituents present in the plant play a major role and act like phytomedicine to act against microbes. The extract of the *Prosopis* act like a novel antibiotic and effect of the *Prosopis* is similar to the beoad spectrum antibiotics. The extract of the *Prosopis* does not produce any adverse effect after administration. The various types of phytochemicals are responsible for activity against multidrug resistance.

#### Current plant parts use:

1. **Fruits:** Fruit known as “sangri” or “dry pod” is an important ingredient of Rajasthani dish

which is well known as “Panchkuta”. [Khandelwal Preeti *et al.*, 2014].

2. **Leaves:** The smoke of leaves is good for eye troubles. Leaf paste is also applied on boils and blisters including mouth ulcer. [M.W. Islam *et al.*, 2019].
3. **Flowers:** *Prosopis cineraria* flower is mixed with sugar and used during pregnancy as safeguard against miscarriage. [Shruti Malik *et al.*, 2013].
4. **Bark:** Bark of the plant has sweetish taste. It is also prescribed for scorpion sting and snake bite. [Dhananjaya Seturaman Prabha *et al.*, 2014].
5. **Medicinal uses:** Almost all parts have traditional medicinal applications especially used as rheumatism, antidepressant, antibacterial, anticancer, antidiarrheal and antioxidant.
6. **Environmental:** Tree grown middle of the desert which shows water index in desert. It is also increased soil fertility [Ashish Kumar Pareek *et al.*, 2015].

#### CONCLUSION

The *Prosopis cineraria* plant is known as one of the medicinal plants. The different parts of plant are used for medicinal purposes or anti-oxidant, anti-diabetic, anti-microbial, anti-bacterial and anti-cancer. Pharmaceutical studies use *Prosopis cineraria* for processing of medicines against anti-fertility. It is useful in soil fertilation process and also helpful to find water index in desert.

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# A CO-RELATION STUDY TO ASSESS PARENTAL KNOWLEDGE AND ATTITUDE REGARDING THE IMPACT OF TELEVISION ON CHILDREN IN SELECTED AREA KANPUR, U.P

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## ABSTRACT

*Today's Children will be tomorrow's responsible citizen of the country.*

*Entertainment is an essential part of life, by this we feel tension free, relaxed, energetic and having a positive attitude towards life. Games plays an important role for the all round development of the children's personality especially outdoor games but Now a days children are adopting habits of playing indoor games and also entertaining themselves by using various electronic devices as we know one of them is television. There are various programmes such as various kids' channels, cartoon shows, video games etc. being watched by the children. Directly or indirectly these programs affect behaviour of the children in positive and negative ways. That's why it is needed that parents should have a look for types of programmes seen by children, how long a child is watching a program, how it is affecting child habits/ behaviour etc. Later on, these negative impacts will create health issues/behaviour problems such as obesity, aggressive behaviour, lack of concentration etc. Child who watch television for 10 hours or more per week are less skilled at reading and are less successful in school as compared to children who watch television for less than 10 hours per week. The American academy of paediatrics makes the following recommendations regarding television viewing should not exceed one to two hours of quality programming daily and children younger than two years old should not watch television.<sup>1</sup>*

*That is why researchers took this topic to highlight the attitude and knowledge of parents about the impact of television on their Children's behaviour.*

*A co-relational study conducted to assess parental knowledge and attitude regarding the impact of television on children in selected area at Kanpur (U.P). A descriptive cross-sectional survey approach was used, sample size was 100 parents selected by convenient sampling for this study. Self-structured knowledge questionnaire was used to assess the knowledge of parents, and attitude of parents was assessed by Likert scale. The study shows that among 100 parents 8% of them had poor knowledge, 36% average knowledge, 50% good knowledge, 6% very good knowledge about impact of television on children. The study shown the positive attitude 84%, negative attitude 16% on impact of television on children. The correlation value shows that positive correlation between knowledge and attitude score of parents. There was no significant association between knowledge score with their demographic variables and significant association seen between attitude score with types of family, educational status of parents, income of parents and number of children. There was no significant association between attitude score with age of parents and religion.*

**KEYWORDS:** *Impact, Television, Attitude, Parental Knowledge,*



## INTRODUCTION

TV is a good tool for children to relax, entertain or just spend time. Television helps in mental development of children as well as informs children about new things, increases their vocabulary, and watching good programs makes their behaviour good, children get knowledge of right-wrong, good-bad deeds. All this is possible only when parents provide the right guidance to the children, tell them what kind of programs are good for them, how long they should watch the programs, decide their time, turn off the TV while eating food, ensure they do not see programs that have a bad effect on them. <sup>2</sup>

Television is the most powerful and influential media of communication worldwide. Due to its powerful influence, most advertisers advertise their product to attract school going children as they are the target audience in most cases. This is due to the fact that school-going children are innocent and readily agree to buy any particular product, which is being advertised on television. <sup>3</sup>

## OBJECTIVES

- To assess the knowledge of parents on impact of television viewing on children in selected community area Kanpur.
- To assess the attitude of parents on impact of television viewing on children in selected community area, Kanpur.
- To find out co-relation between the level of knowledge and attitude of parents regarding the impact of television on children in selected area in community, Kanpur.
- To find out the association between the level of knowledge score with selected demographic variables.
- To find out the association between the level of attitude score with selected demographic variables.

## HYPOTHESIS

- There is a significant association between knowledge score of parents with their selected demographic variables.
- There is a significant association between attitude score of parents with their selected demographic variables.
- There is a significant correlation between knowledge and attitude score of parents.

## Delimitation-

The study was delimited to only urban area of Kalyanpur.

Data collection was delimited to 2 weeks.

## METHODOLOGY

- ♦ Research Approach - Descriptive cross-sectional survey approach.
- ♦ Research Design- Descriptive co-relational study design.
- ♦ Setting Of The Study - urban area of Kalyanpur, Kanpur.
- ♦ Population - All the parents of school going children in Kanpur.
- ♦ Accessible Population- All parents of school going children in a selected area of Kalyanpur.
- ♦ Sample- Parents of school going children between the age group of 6-12 years residing at selected area of Kalyanpur.
- ♦ Sample Size - 100 parents of school going children.
- ♦ Sampling Technique- Convenient Sampling techniques.

## Sampling Criteria

- **Inclusion criteria** -  
Parent who are having children between age groups of 6-12 yrs  
Available at the time of data collection.
- **Exclusion criteria** -  
Parents who are not willing to participate.  
Parents of children who are suffering from MR (mental retardation).

## Development of tools:

## Research tool consist of three sections

### Section- A

Demographic data of the parents of school going children such as age of parents, type of family, educational status of parents, income of the family, religion, no. of children,

### Section-B

Structured knowledge questionnaire to assess knowledge score of parents.

### Section -C

Likert scale to assess attitude score of parents.

## RESULT

Diagrammatic presentation of demographic variables found in this study:

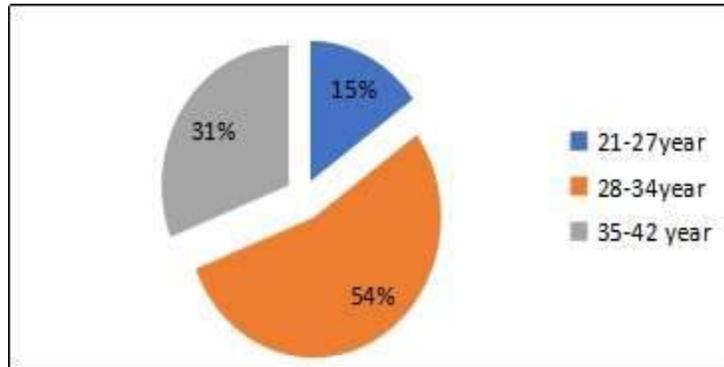


Fig.no.1 Pie Diagram Shows percentage by the distribution of age group.

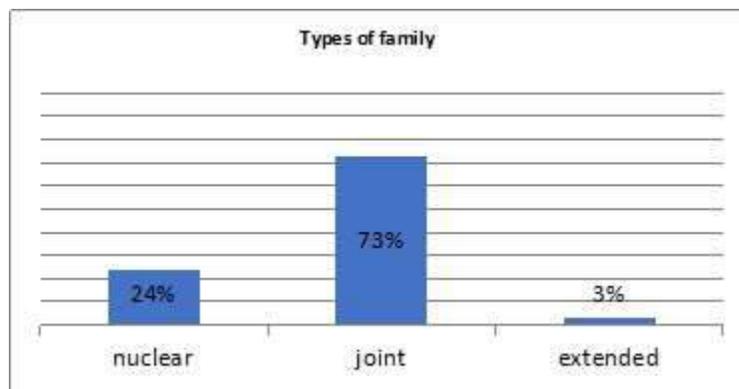


Fig.no.2: Column diagram shows the percentage by the distribution of type of family

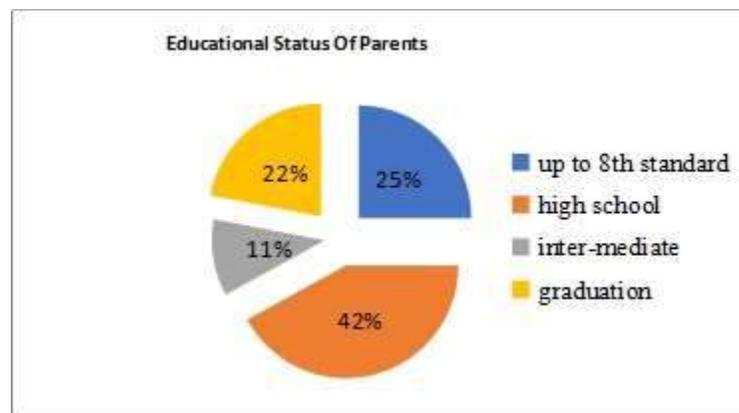


Fig.no.3 Pie diagram shows the percentage-wise distribution of educational status of parents

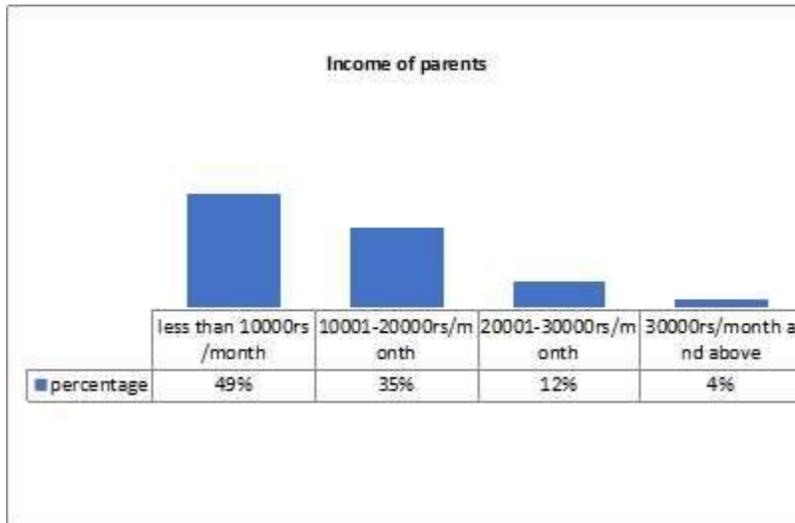


Fig. No.4: Cylindrical diagram shows the percentage-wise distribution of income of parents

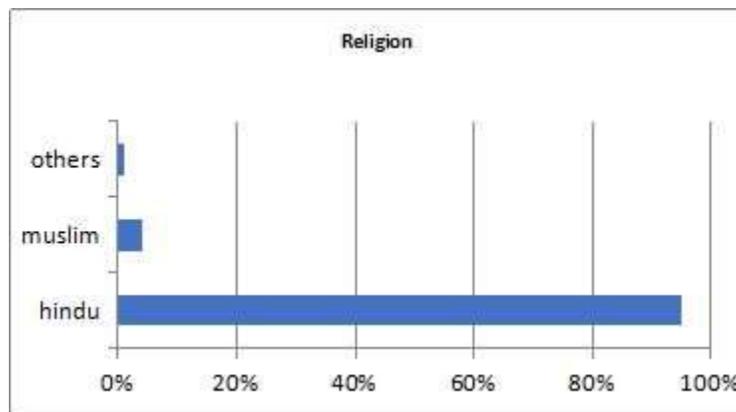


Fig.No.5: Cone diagram shows the percentage-wise distribution of religion.

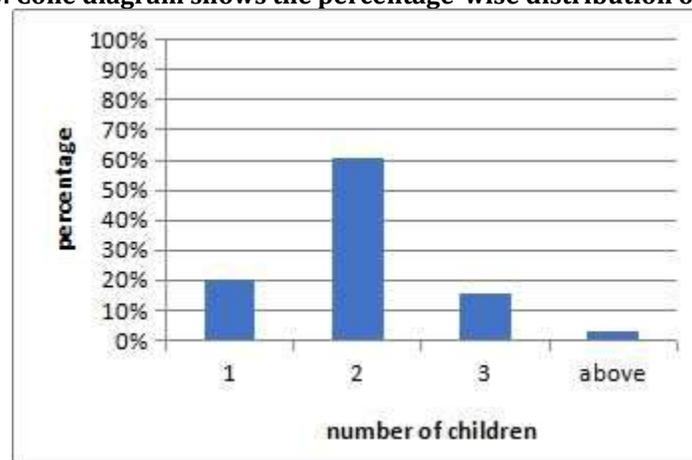


Fig.No.6: pyramid Diagram shows the percentage-wise distribution of the number of children



**Assess the knowledge of parents on impact of television viewing on children in selected community area Kanpur.**

Percentage-wise knowledge Score	Frequency	Percentage
Poor knowledge- (1-5)	8	8%
Average knowledge- (6-10)	36	36%
Good knowledge- (11-15)	50	50%
Very good knowledge- (16-20)	06	6%

**Table No.1: Showing percentagewise knowledge score of parents**

**Attitude score of parents on impact of television viewing on children in selected community area, Kanpur.**

Level of attitude	Frequency	Percentage
Positive attitude	84	84%
Negative attitude	16	16%

**Table No.2: Showing percentagewise Attitude score of parents**

	Mean	SD
<b>Knowledge</b>	10.7	3.5
<b>Attitude</b>	48.81	5.54

**Table No. 3: The mean and standard deviation for knowledge and attitude.**

**Co-relation between the knowledge and attitude score of parents regarding the impact of television on children in selected area in community, Kanpur.**

CATEGORY	CORRELATION	DF	INFERENCE
Knowledge and attitude	0.605	98	positive

**Table No:4 Correlation b/w knowledge and attitude**

**To find out the association between the level of knowledge score with selected demographic variables.**

Demographic variables	Categories	Poor	Average	Good	Very Good	X <sup>2</sup>	Df	Interference
1.Age of Parents:	(a) 21-27year	0	7	7	1	9.31	6	T-12.59 Non-significant
	(b) 28-34year	1	27	22	4			
	(c) 35-42year	1	17	11	2			
2.Types of Family:	(a) Nuclear	1	16	6	1	8.01	6	T- 12.59 Non-significant
	(b) Joint	1	32	32	6			
	(c) Extended	0	3	0	0			
3.Educational status of Parents:	(a) Up to 8 <sup>th</sup> standard	1	16	7	1	11.6	9	T- 16.92 Non-significant
	(b) High school	1	23	16	2			
	(c) Inter-mediate	0	6	3	2			
	(d) Graduation	0	6	14	2			



4. Income of Parents	(a) < 10000 Rs. /month (b) 10001-20000 Rs. /month (c) 20001-30000 Rs. /month (d) >30000 Rs. /month	2 0 0 0	27 17 7 0	18 15 4 3	2 3 1 1	8.5	9	T-16.93 Non-significant
5. Religion	(a) Hindu (b) Muslim (c) others	2 0 0	47 3 1	39 1 0	7 0 0	2.07	6	T- 12.59 non-significant
6. Number Of children	(a) 1 (b) 2 (c) 3 (d) above	0 1 0 1	10 31 9 1	8 25 6 1	2 4 1 0	16.5 9	9	T-16.92 non-significant

**Table:5 Association between demographic variables with their attitude score**

**To find out the association between the level of attitude score with selected demographic variables.**

Demographic variables	Categories	Positive Attitude	Negative Attitude	X <sup>2</sup>	Df	Inference
1.Age of Parents:	(a) 21-27year (b) 28-34year (c) 35-42year	2 7 8	13 47 23	2.43	2	T- 5.99 non-significant
2.Types of Family:	(a) Nuclear (b) Joint (c) Extended	4 13 0	20 60 3	11.18	2	T- 5.99 significant
3.Educational status of Parents:	(a) Up to 8 <sup>th</sup> standard (b) High school (c) Inter-mediate (d) Graduation	6 8 2 1	19 34 9 21	14.27	3	T-7.82 significant
4. Income of Parents	(a) < 10000 Rs. /month (b) 10001-20000 Rs. /month (c) 20001-30000 Rs. /month (d) >30000 Rs. /month	10 4 2 1	39 31 10 3	10.77	3	T- 7.82 Significant
5. Religion	(a) Hindu (b) Muslim (c) others	15 2 0	80 2 1	3.37	2	T- 5.99 non-significant



6. Number Of children	(a) 1	10	51	4.89	3	T-7.82 Significant
	(b) 2	5	11			
	(c) 3	1	2			
	(d) above	1	19			

**Table:6 Association between demographic variables with their attitude score**

## DISCUSSION

In this study it was found that

**Fig.no-1:** Majority 54% of parents were between age group of 28-34 years and lowest 15% were 21-27years.

**Fig.no:2** Percentage distribution as per types of family shows that the highest percentage 73%family were joint and 24%family were nuclear and 3%family were extended.

**Fig.no:3** Percentage distribution to their educational status shows that the highest percentage (42%) of parents had high school education 25% parents had up to 8 class education and 22% parents had graduation 11%parents had intermediate education.

**Fig.no:4** Percentage distribution according to their income 49%parents had income less than 10000rs/month and 35%parents had income 10001-20000rs/month 12% parents had 20001-30000rs/month and 4% parents had income 30000rs/month.

**Fig.no:5** Percentage distribution of religion of parents 95% of parents had Hindu 4%parents had Muslim and 1%parents had others religion.

**Fig.no:6** Percentage distribution of no of child 61% parents had 2 children 20%parents had 1 child 16% parents had 3 children and 3% of children had above 3 children.

**Table-1:** is showing Percentage distribution of level of knowledge 50%parents had good knowledge 36% of parents had average knowledge 8%parents had poor knowledge 6%parents had very good knowledge.

**Table-2:** is presenting Percentage distribution of level of attitude 84% of parents had a positive attitude and 16 %parents had a negative attitude.

**Table-4:** shows positive correlation between knowledge and attitude at the level of 0.05.

**Table-5:** Shows that there was no significant association between knowledge score and selected demographic variables like age of parents, types of family, educational status of the parents, an income of parents, religion, and number of children.

**Table-6:** Shows that there was no significant association between attitude score and selected demographic variables like age of parents, religion, except, type of family, educational status of the parents, an income of the parents, and the number of children.

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## THE ROLE OF ZAKAT IN THE EARLY STAGES OF THE ISLAMIC CIVILISATION

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### ABSTRACT

*“Zakat” is one of the five pillars of Islam. It is also stated that it is one of the main components in Islamic finance. Its aim is to balance wealth distribution in the country fairly. Zakat is interpreted as almsgivings to the poor and the “needy” and for payers; it is the purification of their souls through helping the needy and a way of restraining from greed and arrogance. Legally, “Zakat means the transfer of ownership of specific wealth to the specific individual or individuals under the specific conditions”<sup>1</sup>. This article discusses early zakat developments and it is divided into 1. introduction 2. The Law of Zakat during the lifetime of the Prophet (S.A.W.) 2. Zakat practices during the period of the Khulafah Al-Rashdin.*

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<sup>1</sup> Ganiyev, Avazbek () "INSTITUTION OF ZAKAT IN COLONIAL MALAYSIA," The Light of Islam: Vol. 2020 : Iss. 1 , Article 2. See P.10



## INTRODUCTION

With the birth of Islam at the heart of today's Saudi Arabia, Makkah, zakat was revealed in the *ayah* and *surat* of the Qur'an during the Prophet's 23 years' mission in Makkah and Madinah. Powell writes, "The revelations from Makkah established general principles of stewardship and charity, and the passages of the Madinah transformed these principles into rules that applied within the Muslim polity."<sup>2</sup> During the Makkah revelations, Muhammad (S.A.W.) received *Surah al-Duha*, *al-Muddaththir*, *al-Ma'arij* and *al-Maryam* pertaining the zakat. As Siddiqi writes,

*In surah al-Duha, the Prophet is reminded that when he was an orphan God gave him shelter, when he was ignorant He showed him the right path, when he was poor, He made him rich. The Prophet has been instructed not to be hard on orphans and not to be child on the ones who ask, and to maintain in acknowledging openly the blessing of God. Similarly, in surah al-Muddaththir while depicting the 'hereafter', the Qur'an states that those on the right will be in the Gardens and will ask the guilty ones about what brought them to Hellfire. These will answer then that they did not pray nor did they feed the poor and they joked and denied the Day of Judgment, now, 'we are confronted with this certain truth'.<sup>3</sup>*

The same message is stated in *surat al-Dharyyat* and *al-Ma'arij* but in much stronger terms. In both these *surat* there are statements as Muhamad writes, "the definite right of the needy and the deprived to a share in the property of those who are well off."<sup>4</sup> In *surah al-Dharyyat*, while describing "the heavenly blessings for the pious in the Hereafter, it is explained that they deserve these blessings on account of the fact that in their previous life they slept little at night. In the later phase of night asked for his forgiveness; further, the needy and the deprived had a *haqq* (share) in their wealth."<sup>5</sup> In *surah al Ma'arij* where the vivid depiction of the punishment in the Hereafter is described. It is stated,

*The criminal will wish that he could be ransomed from the punishment of that Day by his children, his wife, brother, other relatives. Who protected him and all the people of the world to save himself, but he will not be able to escape from wrath, for there will be a flaming fire that will lick his flesh and which will call everyone who turned his back and retreated, hoarded wealth and withheld it, to itself. Only those who pray regularly and in whose wealth the needy and deprived have a haqq ma'lum (definite or recognized right) can escape this vice.<sup>6</sup>*

The research suggests that, it is very important to be responsible while a person tested with wealth. In order to avoid severe punishment in hereafter, one should pay zakat, give *sadaqah* and pray regularly.

## THE LAW OF ZAKAT DURING THE LIFETIME OF THE PROPHET (S.A.W.)

During the *Madinah* period, after Prophet Muhammad (S.A.W.) made *Hijrah* in 622 C.E., *surat* regarding zakat were elaborated and were detailed compared to the *Makkah* revelations. Practical steps were also taken to regulate and systematize the implications of the *Makkah surat*.<sup>7</sup> In *surah al-Hajj*, we see one of the many instances in which the words "aqimu *al-salah* and *atu al-zakat* (so establish prayer and give zakat)"<sup>8</sup> were mentioned. As much as Muslim obligatory prayers were governed by the example and the practice of the Prophet (S.A.W.), he also set the fundamental principles and practices governing the implementation of zakat. During the Prophet's (S.A.W.) time, zakat was levied on *al-mashiyah* (animal properties), *al-'ayn* (gold, silver and coins) and *al-harth* (agricultural produce). Zakat *al-Fitr* was also ordained during the Prophet's time. There are some reports that during that time zakat was established on honey<sup>9</sup> and merchandise.<sup>10</sup> The administration of the zakat as a system started during Prophet's (S.A.W.) time in *Madinah*, where he used to send collectors of zakat to various tribes. The zakat collectors at that time were trained and knew their roles and responsibilities. Muhamad writes that "Zakat

<sup>2</sup> See Powell R. (2010). Zakat: Drawing Insights for Legal Theory and Economic Policy from Islamic Jurisprudence. 7 *PITT. TAX REV.* 43. p. 48

<sup>3</sup> Siddiqi M. A. S. (1983) *Early Development of the Zakat Law and Ijtihad*. First edition. Islamic research Academy, Karachi, Pakistan see p. 24

<sup>4</sup> Muhamad A. A. (1993). *Zakat and rural development in Malaysia*. Berita Publishing SDN BHD. Kuala Lumpur, Malaysia. See p. 67

<sup>5</sup> The Qur'an, *surah al Dharyyat* (51:17-19)

<sup>6</sup> The Qur'an *surah al-Ma'arij* (70:12-26)

<sup>7</sup> Muhamad A. A. (1993). *Zakat and Rural Development in Malaysia*. Kuala Lumpur, Malaysia. Berita Publishing. See p.36

<sup>8</sup> *Surah Al-Hajj* (22:78)

<sup>9</sup> Malik b. Anas, *Al-Muwatta'* (version of Al-Shaybani) p. 118

<sup>10</sup> *Sunan Abu Dawud*, Vol. 2, p. 95



as a compulsory levy supervised by the State with its whole set of rules was introduced by the prophet probably when he sent his collectors to different tribes.”<sup>11</sup> Although at that stage the items on which zakat were levied were not too many, the differentiated rates in the case of the livestock were rather complex. Because of this, the zakat collectors were particularly trained for the job.<sup>12</sup> Even though all collectors of zakat were well trained before they were sent to different tribes to collect zakat from the rich and distribute to the poor, some were not doing their job well so a few complaints occurred. This made it necessary to put down the relevant details of the subject and send them to the officials in order to avoid grievances from the zakat-payers. Eventually, this was done. Muhamad explains, “A document was written (*Kitab al-Sadaqah*) and copies circulated as a basic set of rules for practice in the future. Beside these safeguards, zakat-payers were also advised to be tolerant to and cooperative with these officials.”<sup>13</sup> Zakat funds distribution was strictly confined to eight categories. The Prophet (S.A.W.) used to distribute remaining zakat and *sadaqah* immediately after they were brought to him by the zakat *amil* after their distribution in collected places. By this way, he showed that zakat should not be accumulated and must be given to the beneficiaries as soon as possible.

### ZAKAT PRACTICES DURING THE PERIOD OF THE KHULAFAH AL-RASHDIN

During the time of the Prophet, there were his companions who later became *Khulafah*. These companions had been consistently present at the side of the Prophet, especially at the early difficult stages of his missionary struggle. Due to this fact, they were most familiar with the Prophet’s (S.A.W.) position of the true Islamic vision.<sup>14</sup> These companions and later *Khulafah* were Abu Bakr, ‘Umar, ‘Uthman and ‘Ali who ruled in total for 3 decades. During their *Khulafah* they were not only practising zakat as enforced by the Prophet (S.A.W.) based on the injunctions of the Qur’an and his *Sunnah* but also they themselves according to time, place and the situation at the time made some elaborations and added details on zakat practices.

Abu Bakr’s period of rule was short but very crucial as regards to zakat administration. Being the

first *Khalifah*, Abu Bakr ordained zakat collectors to send surplus funds to the central government in Madinah. However, the character of the traditional Arab tribes came to the scene, being reluctant to obey any central government and some refused to pay any zakat. Some were still reluctant to accept Islam, while some were believers but had not accepted Islam yet and did not want to pay zakat. Thus, it was clear that the real issue with all these tribes was their nature and character being reluctant to be under one government. In the light of the repeated *surat* of the Qur’an “*aqimu al-salah wa atu al-zakat*.”<sup>15</sup> Whoever was not following the direct command of Allah (SWT) were considered as apostates. Muhamad writes that “Abu Bakr, as a ruling *khalifah*, was also not prepared to make any distinction between *salah* and zakat based on clear injunctions of the Qur’an stated above as well as the practice of the Prophet (S.A.W.). He considered zakat as not only an obligatory duty for eligible Muslims but also the duty of the government to collect and spend on those categories of people specified in the Qur’an.”<sup>16</sup>

During the rule of the *Khalifah* ‘Umar ibn al Khattab, zakat coverage was extended due to the new situation occurrences. In the beginning, Prophet (S.A.W.) exempted horses from the zakat in the light of the horse only used for work and transportation purposes. However, during the rule of the *Khalifah* ‘Umar, Syria and Palestine were conquered. Horses in these places were used not only for transportation and work purposes but also as a means of trade. Many tradesmen specialized in horse rearing business. Horses were one of the sources of income and naturally, the question arose whether to establish zakat on horses. Another initiative came from the tradesmen themselves willing to pay zakat on their horse businesses. First, ‘Umar was reluctant to add horses as animals which are included to pay zakat, but finally realizing that during the Prophet’s (S.A.W.) time horses were only seen as transportation mode and after he found out about horse being source of income he agreed to add the horse as a *zakatable* animal. In the condition that horses were traded article, it was agreed that in this case income on a horse is liable to pay zakat. Muhamad cited the following hadith where it states that “*We levy zakat on forty sheep, and we don’t levy on these valuable horses. ‘Umar then instructed Ya’la that he should charge zakat on horses*

<sup>11</sup> Muhamad A.A. (1993). *Zakat and Rural development in Malaysia*. Berita Publishing, Kuala Lumpur, Malaysia. P. 38

<sup>12</sup> Ibid. See p. 39

<sup>13</sup> Ibid. See p.39

<sup>14</sup> Ibid. See p. 41

<sup>15</sup> *Surah al-Mujadila* 58:13

<sup>16</sup> Muhamad A.A. (1993). *Zakat and Rural development in Malaysia*. Berita Publishing, Kuala Lumpur, Malaysia. See p.74



at the rate of one dinar per horse<sup>17</sup>. One new position of the zakat collector was established during the second *khalifah* time namely, 'ashir (tax collector). Siddiqi explains that "He collected prescribed zakat rates from the tradesmen. They were both instructed to collect *jizya* (poll tax) from non-Muslims and zakat on trade articles from eligible Muslims."<sup>18</sup> Another development during 'Umar was regarding agricultural produce. He included peas, olives and lentils as *zakatable* items. 'Umar also brought innovations in the administrative side, such as:

- a. Condition of the animals that are chosen as zakat performance should be of average quality.
- b. Postponement of the zakat collection in the year of *al-Ramada* (drought) for a year, which undoubtedly was intended to minimize hardships on the people.

During the *Khalifah* 'Uthman ibn Affan's time, there were no changes in the zakat law and only questions regarding the zakat on the debtors raised. Questions such as does the debtor have to deduct the debt from his zakat calculation, or another issue was, should the person who has given a loan to consider it as his wealth or temporarily exclude a loaned amount from his zakat calculation. Most probably, to avoid such complications in the calculation of zakat, 'Uthman adopted the practice of reminding people to pay their debts prior to the zakat been collected. However, this method was not efficient enough and the solution for this issue awaited to be resolved. Regarding the debts - it was agreed that the debtor must exclude the amount of money he owes and calculate only property that are clear from any debts. Another issue arose when someone has given a loan to a person, should he include the given amount in the *nisab* calculation or wait until his loan been returned? There was such a case attributed to 'Umar. Muhamad writes that "It was reported that at the time of zakat collection, he charged merchants zakat on their assets which were *hadir* (present in their possession) and *ghaib* (assets belong to them but not available at the time). 'Ali was reported to hold a different view. He was inclined to charge zakat after the recovery of the loan. 'Uthman's solution was that if the creditor was able to recover his loan at the time of zakat collection but was reluctant to do so, he would then be charged

zakat on his entire property, including his credits."<sup>19</sup> During the five-year rule of the fourth *Khalifah* 'Ali ibn Abi Talib, as Muhamad mentions, "There were no considerable amendments or changes, except that he excluded *al hawamil wa al 'awamil* (literally translated as beasts of burden or animals employed in work)"<sup>20</sup> in the zakat payment. There are a few possibilities why 'Ali came to this *ijtihad*. The first possibility is that according to the injunction from the Qur'an, zakat was levied on surplus wealth and only after essential personal needs are satisfied. Thus, it is quite possible that in interpreting and applying the same principle, 'Ali in his time exempted the above animals from zakat, considering them as essential for the peasants. The second possibility is related to the first one in a way that peasants used the above mentioned animals to work on the lands, helping to grow their agricultural produce and in this aspect, these animals were part of the established zakat on agricultural products.

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<sup>19</sup> Muhamad A.A. (1993). *Zakat and Rural development in Malaysia.* Berita Publishing, Kuala Lumpur, Malaysia. See p.47

<sup>20</sup> Ibid, see p.47



# “LAZGI”-AN IMMORTAL DANCE ART

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## ABSTRACT

*Any nations' customs, traditions and rites are developed depending on their natural-geographical conditions and mentality. Various religious beliefs also have an influence on the formation of nation's customs and traditions. Some local traditions can be of national significance. The Khorezmian's local dance art in Uzbekistan – “Lazgi” is considered one of the oldest traditions, which has a national significance. As this type of dance is included to the list of intangible cultural heritage of UNESCO, there is a great interest to research it in depth. The age of Lazgi dance is still uncertain, but it is believed to be born before middle ages. The history, cultural impact and present state of performance of Lazgi dance is described in this paper based on historical sources.*

## 1. INTRODUCTION

Every nation has its own dance traditions, ways of performing and plastic graphic means. Peoples' dance, which is one of the ancient types of the art, is formed and developed under the influences of historical, social and geographical conditions of peoples' life. Thus, influence of peoples' traditions, psychology, age and environment leaves a trail on it. Many kinds of peoples' dance art are connected with music, as well as, they are component part of peoples' rites and holidays. In the development of Uzbek national dance art, the peoples' dances play a leading role. Just dances, those are peculiar to the Khorezm traditions, illustrate the ages from the history of one nation to the present days. And this serves to enrich sense and meaning of the dance. In Khorezm oasis the dance art has been formed in ancient times and developed for many ages.

The dance “Lazgi” of Khorezm is included to the representative list of the intangible heritage as an element of cultural heritage of Uzbekistan. The resolution about this was accepted in the meeting of the interstate committee of Preserving of Intangible heritage of UNESCO on December 12, 2019 in Bogota, Colombia [1]. The members of this committee were much surprised at the particular charm, ardent and unique moves in the dance. And it made a deep impression on them, and encouraged to dance. The adoption of the agreement based on consensus, without voting, on the acceptance of the “Lazgi” to the representative list of the Human Intangible heritage by the interstate committee of Preserving of Intangible heritage of UNESCO, is the evidence of our idea.

## 2. THE INVESTIGATION OF THE SUBJECT

Some information of the dance art of “Lazgi” was brought in the Zoroastrians' holy book “Avesto”, and in the works of Herodotus, Beruniy, Vámbéry and in the researches of scientists as S.Tolstov, E.Bertels, L.Avdeeva, R.Karimova, G.Rahimova and A.Matniyazov. Gavhar Matyoqubova, a peoples' artist of Uzbekistan, conducted deep scientific

researches on this dance art and performed it in its norm. She published a monograph “Ofatijon Lazgi” in 1993, in the press named after Gafur Gulom.

In 2019 G.Matyoqubova with Sh. Eshjanova published a monograph “Lazgi” and this work can be considered as the code of this sphere.

In the research the mythological, artistic, historical and scientific-philosophical aspects of “Lazgi” were studied along with the history of the people. It was substantiated that this dance is consisted of a complex dance system, which requires consecutive and separate performance, and one of the strong banding, which binds the past with future. As well as, detailed information was given about the forgotten Khorezmian dances as “Zimlak”, “Qizil gul” and “Ashshadarozi” [2].

The works of G.Matyoqubova is of great importance, not only for, that she has been performing “Lazgi” for all her life and teaching the youth, but also for many years of observations, experiences, and analyses of a practitioner, theorist, pedagogue-researcher and ballet master-scientist. On preparing the dances as “Chanoq o'yini”, “Qayroq o'yini”, “Avesto malikasi - Anakhita” and “Olov o'yini” G.Matyoqubova is relied on historical sources.

Nowadays, she continues scientific researches with the scientists of the Urgench state university and Khorezm Mamun academy.

## 3. THE HISTORY OF “LAZGI”

Among the Uzbek dance art schools the Khorezm dance school has its own place. The history of “Lazgi” dates back to three thousand years. The origination of the dance is connected with the creation of the world and human. The holy book “Avesto” was created in Khorezm. The fire worship rites were performed in the lands of Khorezm. “Lazgi” was performed in the lustration rites of fire worshippers. Why does the melody of “Lazgi” make people to dance unintentionally? Because, reflections of fire, ebullience and ferventness are involved in “Lazgi”.



Inconvenient climate of Khorezm, as well as ancient freedom-loving country's historical fortune is the peculiarity of the people's nature. This nation didn't obeyed to Ahamanids – the Persian invaders in the 6<sup>th</sup> century BC, to Alexander Macedonian in the 3<sup>rd</sup> century BC and to the Arab in the 8<sup>th</sup> century in AD. And the historical peculiarities of Khorezmians led to enrich the dance with undisguised sentimentality and bravery.

Today, when we watch some dances of maqom ufars (a musical rhythm) by well-known dancers, we can see the story about brave women riders in their motions. Then we remember the legends about the ancient Khorezmian women Massagetae riders. In the list of the traditional Uzbek dances, the military dances can be seen only in Khorezmians'. It is known that, in the beginning of our century there were groups of dancers under the army. They induced soldiers before the fight. This dance was called "Lazgi". Ebullience and fervent lust express exactly the independent and proud nation's character.

Along with this, To'ra Qilichev brought the following information about Khorezmian men's dance in his book "Khorazm khalq teatri" (Khorezm peoples' theater): the antique Khorezmians also founded military dances and the ancient dance "Lazgi", which proves about the organization of victory celebrations, is still performed and military characteristics is remained in it [3]. In this dance the dancer raises hands up, and slowly follows the rhythm of the music with his fingers. As if he keeps his eyes is on his enemy, he stops moving. After several rhythms body motions joins the motions of fingers. As a soldier, who intended to attack the enemy suddenly, runs with short leads, plays with his fingers and claps his hands faster and with this he expresses "the state of the fight of a soldier". The dancer expresses with hand, foot, body and other movement of expressions, the achievement of victory was through strong fights and hard work.

One of the peculiarities of the dance "Lazgi" is that, it can be performed under the harmony of whetstones. Simultaneous motions of all part of the body and movement on bent legs are characteristic for the dances of Khorezmian school. In Khorezm men's dances sometimes are performed in pairs with women. The men's dance of this school usually expresses activities of ram and rooster fights. The clothing of the dancers also is peculiar to Khorezmian people. The most noticeable among the clothes is the Khorezmian big round warm fur hats (Chugurma). This peculiar hat for the oasis takes a leading place in the dance "Chugurma" in Khorezm. In this dance the process of making chugurma is revealed with meaningful movements and conditions. It is known that Khorezmian chugurma is worn both in sultry summer and in severe winter.

The dance "Khorezmian Lazgi" has a lot of kinds as "Maskharaboz Lazgi", "Qayroq Lazgi", "Dutor Lazgi", "Surnay Lazgi", "Saroy Lazgisi", "Changak Lazgi", "Khiva Lazgisi", "Garmon Lazgisi" [4].

#### 4. PERFORM AND PERFORMERS

Everybody in Khorezm dances to "Lazgi". People's "Lazgi" is the dance of joy. The dance begins with a slow melody and the dancers express it with the main dance figure. The dancers present the processes of the dance as if it is in a slow motion, each movement is shown exaggeratedly and separately, and both the audience and the dancers feel themselves as if they were waiting for

something miracle as in the sport competition. Suddenly, the rhythm is changed into the joyful temp, and the dancer joins the endless emotions of the harmony, and here the real miracle happens – this is the expression of people's inimitable admiration. The movements are simultaneously, come one by one as if they are the colors of the rainbow, blood runs through each muscles of the dancer. "Lazgi" is the expression of endless energy of men indeed. It appears before one's eyes, lives and outbreaks. It can't stop or disappear, because it is has no end. The finish of the dance is also in this way happens abruptly, and the dancer stops moving in unfinished pose.

In the Khorezm dance, the upper part of the body is inclined back, the shoulder-blades are closer to each other, the knees are slightly bent, and the toes are more open to the sides.

The women usually point their fingertips downwards, bend their elbows slightly; the men stretch their arms and hold the elbows straight, fingers up, palms to the sides. The women dance with 'zang' (little handbells) on their hands. They put on some adornments: 'taqya-tuzi' on their heads, 'manglay-tuzi' on their foreheads, pendants on their chests, earrings on their ears and bracelets on their hands, and these all fits the ways of dancing and serves to create a common dance manner. The men dance with red jacket on them and put on 'chugurma' on their heads. While dancing, snapping fingers, goose like standing, shaking body and hands and shoulders, jumping and playing whetstones are peculiar to both men's and women's dance.

Khorezmian dancer Karim Ollaberganov is also one of the talented dancers, who performed "Lazgi". According to the sources, his skillful plays with whetstone led to creation of rhythmic compositions, and audience and musicians followed him. Ringing of stones sometimes whisper, sometimes crashes loudly like rockfall, gets nervous, persuades, threatens, after that calms down and trickles like water in a channel under a big nut tree in a hot day... none of the rhythmic phrase, none of the chord don't disappear. Hands, every movement of shoulders, rhythmic shake of the upper part of a body and all the motions together creates the single scene of image. Sounds of whetstones and plasticity make up the single scene, which expresses spiritual state – enthusiasm.

As the people say, during the dance Karim Ollaberganov has an ability to keep his body still while his hands, all the muscles of his upper body, and his legs were actively moving. Suddenly, the dancer stops and after clicking the whetstones twice he bends his knees slowly and sits. The knees make up an angle of about 70 degrees, leaving a bit space between the heels, the lower the dancer sits on the legs, the higher the heels rise. The hands also rise upwards on both sides, one stops in front of the chest, the other rises upwards, and the resonant rhythms continue. The shoulders sometimes tremble softly, slowly, with full of strength. The body shakes in two sides. In this sitting, that is, in the position of a deep "plie," the he rings the whetstones for several times, and then slowly begins to rise and the body and hands do not stop dancing. Karim Ollaberganov was such a talented dancer.

Khorezm dance is rich in motions. While young dancers and clowns performed the dances "Chagalloq", "Norim-norim", "Aliqambar", "Orazibon", "Mo'ri", "Khobbimboy", "Shirinnovvot" better, the women dancers are advantaged in dancing "Ashshadaroz" and "Maqom ufori". In performing the dance series "Lazgi" man and woman dance



masters has an equal skills. The most famous khalfa (local woman singer) Onajon Sabirova (1885—1952) played an important role in preserving the composition of the khalfa performance, playing the accordion and singing, especially in bringing women's dance to the stage. S.Ollaberganova, R.Hakimova and R.Otajanova are members of the ensemble of Onajon khalfa.

Qambar bola, Kanarak bola Saidov, Qodirbergan Otajanov, Karim Ollaberganov, Rimajon Matkarimova, Matlatif Saidov, Latif Zarifov, Khudoybergan to'q-to'q, Gavhar Matyokubova and others have made a significant contribution to the preservation and development of Khorezmian dance style, traditions in new social conditions. Khorezmian dance style continues in the activities of the Khorezm regional theater, folk ensembles, the ensemble "Lazgi" under the association "Uzbekraqs" [5].

As "Lazgi" is a divine melody, previous teachers did not compose a poem to it. Komiljon Otaniyozov was the first who wrote a poem and created a song "Lazgi". After that "Lazgi" spread to all over the world outside Uzbekistan.

The note of the song "Lazgi" performed by the People's Artist of Uzbekistan K.Otaniyozov (with the poem by K.Khorezmiy), Honoured Artist of Uzbekistan R.Qurbonov (with the poem by Mashrab), People's Artists of Uzbekistan O.Khudoyshukurov (with the poem by Mashrab), O.Hayitova (with the poem by O.Erkin), M.Matyoqubov, M.Yoqubov and the ensemble "Lazgi" is attached, and they are considered to be a valuable source for those who is interested in the art of Khorezm, especially in the history of the dance "Lazgi".

## 5. IMPORTANCE OF "LAZGI"

In 2012, on the basis of a special project, the Academic and Folk Art Group "Lazgi Dance Center" was established by the Government of Uzbekistan. The program of the regional ensemble "Khorezm raqs" includes 9 types of "Lazgi". Now here, along with professionals, hundreds of amateur dancers are learning the secrets of dance.

The inclusion of the dance into the list of intangible cultural heritage of the UNESCO in 2019 will further increase the interest of the peoples of the world in this dance. Holding the annual festival "Magic of dance" in Khiva also causes to increase the number of visits of tourists. Most important, "Lazgi", as an ancient tradition of the Uzbek people, plays an important role in educating the younger generation in the spirit of patriotism.

## 6. CONCLUSION

For the further development of the art of dance "Lazgi", while preserving the beauty of the whole style, it is necessary to enrich them with new content, to revive and open up wide opportunities for men's dance, to create and spread modern types of dances which reflect working process and express the mood of the people, and that are played with whetstones and little handbells, as well as with spoons, sticks, bowls and other items. The most important, we need to further enrich the culture of Uzbek choreography on the basis of the true folk dances that we have described and many of which have not been identified yet [6].

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## QUESTIONS FROM FOREIGN LANGUAGE TEACHING IN EDUCATIONAL BODIES

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### ABSTRACT

*In the article an attempt is made to consider the main problems of foreign language teaching. Special attention is paid to the situation in non-linguistic universities, where the role of studying foreign languages is often depreciated due to the dominant role of special disciplines and the limited possibilities of educational institutions.*

*According to his own professional experience, the author divides the problems in teaching a foreign language into three groups in accordance with the three involved parties of the process: the teacher, the student and the educational environment in general. In each aspect, a number of circumstances that directly affect the quality of teaching and learning a foreign language are highlighted, and recommendations for optimizing the process of forming a full-fledged personality of a professional specialist are given. All the proposals listed in the article, which are within the competence of the teacher, found their practical application in the teaching work of the author and showed a significant improvement in the qualitative indicators of working with the material and its assimilation.*

**KEYWORDS:** *teaching, german language, professionalism, motivation, learning process, efficiency*

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## FRAGEN DES FREMDSPRACHENUNTERRICHTS IN BILDUNGSEINRICHTUNGEN

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### Anmerkung

*Der Artikel versucht, die Hauptprobleme des modernen Unterrichts der deutschen Sprache zu betrachten. Besonderes Augenmerk wird auf die Situation an nichtsprachlichen Universitäten gelegt, an denen die Rolle des Fremdsprachenlernens aufgrund der dominierenden Rolle spezieller Disziplinen und der begrenzten Kapazität von Bildungseinrichtungen häufig verringert wird.*

*Der Autor versucht zu demonstrieren, wie wichtig komplexe Änderungen in den Ansätzen zum Unterrichten einer Fremdsprache sind. Es wird betont, wie wichtig es ist, die Rolle von Wissen, Fähigkeiten in einer Fremdsprache im Kontext der Integration des Landes in eine einzige Weltgemeinschaft zu überdenken, die strategische Notwendigkeit eines internationalen Erfahrungsaustauschs und die Fähigkeit, die Erfahrungen ausländischer Kollegen in die nationale Praxis einzubringen.*

**Schlüsselwörter:** Lehren, Deutsch, Professionalität, Motivation, Lernprozess, Effizienz



Offensichtlich erfüllt der Bildungsprozess eine der grundlegenden Funktionen bei der Bildung und Entwicklung einer Gesellschaft. Das Schicksal jeder einzelnen Person hängt nicht nur vom Erfolg der Ausbildung ab, sondern auch von den Aussichten auf Fortschritte in dem Bereich, in dem diese Person in Zukunft arbeiten wird, indem sie das in der Praxis erworbene Wissen anwendet und theoretische Ideen in die Realität umsetzt. Eine Unterschätzung der Bedeutung des Bildungsprozesses und seiner Ergebnisse führt zwangsläufig zu einem Rückgang vieler Indikatoren für die Lebensqualität der Bevölkerung und das Funktionieren der komplexen verzweigten Struktur staatlicher Mechanismen.

Die Optimierung des Bildungsprozesses ist dringend erforderlich, und unsere Gesellschaft sollte alle angesammelten Bildungsprobleme so schnell wie möglich lösen, um schwerwiegende soziokulturelle Folgen zu vermeiden. Das Bildungsumfeld erfordert regelmäßig die Aktualisierung und Verbesserung von Mitteln, Methoden und Ansätzen, um den sich ständig ändernden Bedürfnissen einer sich entwickelnden Gesellschaft gerecht zu werden. Darüber hinaus macht sich eine Verzögerung bei der Modernisierung des Bildungsprozesses sofort bemerkbar und verursacht in verschiedenen Bereichen der Gesellschaft erheblichen Schaden.

Im Zeitalter der Globalisierung und der internationalen Integration nehmen Schulungen einen besonderen Platz ein, die darauf abzielen, Beziehungen zwischen Ländern und Nationalitäten herzustellen, aufrechtzuerhalten und zu stärken, um Wissen und Erfahrung auszutauschen, gemeinsame internationale Projekte zu schaffen und für beide Seiten vorteilhafte Bedingungen für die Zusammenarbeit zwischen verschiedenen Staaten zu schaffen. Es wird äußerst wichtig, Fremdsprachen zu unterrichten, einschließlich Deutsch, die nationalen und kulturellen Merkmale verschiedener Länder.

#### Drei Seiten des Problems

Wie jeder andere Komplex, der für die Gesellschaft strategisch wichtig ist und den Prozess ständig verbessert, weist der Fremdsprachenunterricht eine Reihe von Merkmalen auf, die, wenn sie ignoriert werden, in die Kategorie der Probleme fallen. Unserer Meinung nach sollten die Wurzeln dieser Probleme und Wege zu ihrer Überwindung bei jedem der drei Hauptteilnehmer des Bildungsprozesses gesucht werden: dem Lehrer, dem Schüler und dem Bildungsumfeld (womit wir das Bildungssystem als Ganzes und insbesondere einzelne Bildungseinrichtungen meinen). Betrachten Sie die Hauptprobleme des Fremdsprachenunterrichts am Beispiel einer modernen nichtsprachlichen Universität aus Sicht der drei beteiligten Parteien.

Die Rolle eines Lehrers beim Unterrichten von Fremdsprachen

Moderne Spezialisten in allen Wissensbereichen werden hohe Standards auferlegt, die durch die Notwendigkeit der Einhaltung internationaler Standards vorgegeben sind, damit Fachleute auf ihrem Gebiet wettbewerbsfähig bleiben und die Erfahrungen ausländischer Kollegen erfolgreich umsetzen können. Hohe Anforderungen sollten auch an Lehrer gestellt werden, die diese Fachkräfte ausbilden, insbesondere an Fremdsprachenlehrer, die im Idealfall dazu beitragen, diese „Brücke der Kontinuität“ der Erfahrungen von Ländern und Nationalitäten zu bauen und einen Dialog der Kulturen aufzubauen.

Jeder Universitätslehrer muss ein Profi sein. Unter der Professionalität eines Universitätslehrers L.I. Gourier versteht "ein hohes Maß an psychologischen, pädagogischen und wissenschaftlichen Fachkenntnissen und Fähigkeiten in Kombination mit einem angemessenen kulturellen und moralischen Charakter, der in der Praxis eine sozial relevante Ausbildung für zukünftige Fachkräfte bietet"; Die berufliche Kompetenz des Hochschullehrers besteht aus miteinander verbundenen Blöcken: pädagogische Tätigkeit, pädagogische Kommunikation, Persönlichkeit des Lehrers, Ausbildung und Entwicklungsstand der Studierenden; die Struktur der Aktivität - gnostische, gestalterische, konstruktive, organisatorische und kommunikative Fähigkeiten [1].

Leider hängt das Verständnis der Professionalität eines Lehrers in der Realität oft von seiner tatsächlichen Kenntnis des Fachs ab. Die Aufgaben des Lehrers sollten sich nicht nur auf die Weitergabe von Informationen beschränken: Es ist nicht nur wichtig, welchen informativen Inhalt die unterrichtete Disziplin hat, sondern auch, wie und unter welchen Bedingungen das Unterrichtsmaterial den Schülern präsentiert wird. Das „trockene“ und langweilige Nacherzählen des Textes eines Lehrbuchs oder die Beschränkung der Aufgaben auf das Lesen, Übersetzen und Nacherzählen von Texten - all diese Methoden gehören seit langem der Vergangenheit an. Jetzt sollte der Unterrichtsprozess dynamisch, kreativ und multimedial sein. Dies ist eine Art von Aktivität, die, egal wie banal sie auch klingen mag, erfordert, „Ihre Seele hinein zu stecken“, um ein echtes Interesse an den Ergebnissen Ihrer Arbeit zu haben. Ein echter professioneller Lehrer sollte am Erfolg seiner Schüler interessiert sein und alles dafür tun. Wenn sich der Lehrer aufgrund verschiedener Umstände dem Bildungsprozess ausschließlich als Arbeit nähert, zu der er gegen eine Gebühr verpflichtet ist, wird die



Wahrscheinlichkeit des Erfolgs seines Unterrichts höchstwahrscheinlich gegen Null gehen.

Unserer Meinung nach sind die Hauptfaktoren, die die Verbesserung der Professionalität durch die Lehrer selbst negativ beeinflussen, folgende:

- 1) exorbitante Belastung, die häufig zu Burnout führt;
- 2) deutlich geringere Rentabilität der Arbeit;
- 3) mangelnde Motivation des Managements;
- 4) schlechte Organisation der Bedingungen für die Fortbildung des Lehrpersonals. Aufgrund der enormen Arbeitsbelastung und des Fehlens einer signifikanten Motivation haben Lehrer häufig keine internen Anreize zur Selbstverbesserung und beruflichen Weiterentwicklung.

Im Idealfall sollte jeder Lehrer einer Fremdsprache, der behauptet, ein Fachmann auf seinem Gebiet zu sein, Folgendes tun:

1) ständig im Sprachumfeld „rotieren“: Filme schauen und Literatur in einer Fremdsprache lesen; Möglichkeiten zur Kommunikation mit Muttersprachlern finden; ins Ausland reisen, um die „natürliche“ Sprache (und nicht die Buchsprache) zu beherrschen und sich mit der Kultur der unterrichteten Sprache vertraut zu machen;

2) sich regelmäßig mit neuen Lehrmitteln vertraut machen; moderne Lehrmethoden beherrschen; versuchen Sie, Ihre eigenen effektiveren und innovativeren Methoden für den Sprachunterricht zu entwickeln;

3) Verbesserung ihrer Kenntnisse in der Sprache des Fachgebiets, das die Schüler lernen (wenn beispielsweise ein Lehrer Wirtschaftswissenschaften unterrichtet, kann die Selbstbildung auf dem Gebiet der Wirtschaftswissenschaften und die Kommunikation mit Kollegen, die Fächer in verschiedenen Wirtschaftsdisziplinen unterrichten, eine große Hilfe sein);

4) zur Schaffung (und Aufrechterhaltung) einer kreativ-freundlichen Atmosphäre im Klassenzimmer beizutragen, die es Ihnen ermöglicht, die Aufmerksamkeit des Publikums zu behalten und zusätzliche Motivation für die Aufnahme von Unterrichtsmaterial zu schaffen;

5) die Fähigkeiten des öffentlichen Sprechens zu üben, Strategien und Möglichkeiten zur Beeinflussung des Publikums zu studieren;

6) Kenntnisse auf dem Gebiet der Pädagogik und Psychologie besitzen;

7) teilen regelmäßig ihr Wissen und ihre Erfahrungen durch die Veröffentlichung von wissenschaftlichen und methodischen Artikeln, Handbüchern und Lehrbüchern, die die Arbeit mit Lehrmaterial wirklich verbessern, und nehmen an wissenschaftlichen Veranstaltungen teil (Konferenzen, Seminare, Runde Tische).

Unter den Bedingungen einer modernen Universität erfüllen nicht alle Fremdsprachenlehrer diese offensichtlich notwendigen Anforderungen. Die Gründe für diesen Umstand können vielfältig sein: von einem banalen Missverständnis über die Bedeutung eines ständigen Wunsches nach Verbesserung der Unterrichtsqualität bis hin zu objektiven äußeren Umständen wie den Arbeitsbedingungen und der wirtschaftlichen Situation in der Gesellschaft.

Folgendes kann als die optimalste Maßnahme zur Bekämpfung des Problems der unzureichenden und „stagnierenden“ Professionalität der Lehrkräfte vorgeschlagen werden:

1) Verschärfung der Qualitätskontrolle des Unterrichts, begleitet nicht nur (und nicht so sehr) von Geldbußen (Verweise von Managern, materielle Abzüge, Entlassung), sondern auch von Maßnahmen zur Förderung von Initiativlehrern;

2) Schaffung ständiger wissenschaftlicher Seminare auf der Grundlage von Schulungseinheiten. Die aktive Teilnahme des Autors dieses Artikels an der Arbeit des wissenschaftlichen Seminars, das jedes Semester am Institut für Fremdsprachen abgehalten wird, lässt keinen Zweifel daran, dass eine solche Praxis wissenschaftlicher und methodischer Treffen die Qualität des Unterrichts am Institut erheblich verbessert. Wissenschaftliche Seminare geben Kollegen die Möglichkeit, Erfahrungen auszutauschen und etwas Neues für sich zu lernen. Angesichts der Nützlichkeit solcher Veranstaltungen möchte ich einen Vorschlag für ihre häufigere Durchführung machen, beispielsweise 3-6 Mal pro Semester. Außerhalb der Seminare haben die Kollegen (aufgrund der hohen Belastung) einfach keine Zeit, um Erfahrungen und ihre eigene methodische Forschung auszutauschen.

3) Popularisierung von Programmen zur Entwicklung von Hochschullehrern und Motivation zur Teilnahme an diesen Programmen. Zweifellos erfordern solche Programme zusätzliche Mittel, aber selbst unter den Bedingungen der Sparmaßnahmen des Haushalts sind sie gerechtfertigte Investitionen in die Zukunft der Institution.

4) Herstellung enger Verbindungen zwischen Sprachabteilungen und Abteilungen anderer Fachrichtungen, deren Studenten eine Fremdsprache lernen. An Universitäten wie in Unternehmen lohnt es sich, eine Unternehmenskultur nicht nur lokal, in einzelnen Einheiten, sondern auch auf fakultäts- und abteilungsübergreifender Ebene zu entwickeln. Dies ermöglicht nicht nur die Vereinigung des Teams, sondern auch die Erzielung interdisziplinärer Synergien. Im Falle einer Fremdsprache wird die enge Zusammenarbeit der



Sprachabteilung mit den Fakultäten, denen sie dient, die Theorie näher an die Praxis bringen, die wirklich wichtigen Aspekte beim Unterrichten der Fachsprache hervorheben und terminologische Erklärungen anhand realer (Lebens-) Beispiele aus der beruflichen Praxis erstellen.

5) die Einführung einer Wettbewerbskomponente in der Verwaltung der Bildungseinheit: Alle Lehrer sollten sich der beruflichen Leistungen ihrer Kollegen bewusst sein; Die besten Lehrer in einem halben Jahr oder im akademischen Jahr sollten ausgezeichnet werden, und ihre Erfahrungen sollten an Kollegen weitergegeben werden.

Wie bereits oben erwähnt, sollte die Rolle einer Fremdsprache bei der Persönlichkeitsbildung eines Spezialisten nicht beeinträchtigt werden. Sobald alle oben genannten Probleme in der trilateralen Interaktion „Lehrer - Schüler - Bildungsumfeld“ berücksichtigt werden, werden sich das Niveau und die Qualität der Fremdsprachenkenntnisse der Schüler um ein Vielfaches erhöhen. Hochschulabsolventen erhalten einen enormen Vorteil in Bezug auf Beschäftigung und anschließende Beförderung. Der Staat wird vollwertiges Fachpersonal erwerben, das in der Lage ist, ausländische Erfahrungen zu sammeln und diese zum Wohl seines Landes zu nutzen.

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## TOPICAL ISSUES USE OF AUTHENTIC TEXTS IN THE GERMAN LANGUAGE

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### ANNOTATION

*This article discusses the importance of using authentic materials (mainly in the reading lesson) in German classes. This explains what genuine texts include and their pros and cons in language learning.*

**KEY WORDS:** *authentic texts, intercultural competence, types of text, reading comprehension, source of information, originality.*

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## AKTUELLE PROBLEME MIT AUTHENTISCHEN TEXTEN IM DEUTSCHUNTERRICHT

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### Anmerkung

*Dieser Artikel beschreibt die Bedeutung der Verwendung authentischer Materialien (hauptsächlich in der Lesestunde) im Deutschunterricht. Dies erklärt, was echte Texte beinhalten und welche Vor- und Nachteile sie beim Sprachenlernen haben.*

**Schlüsselwörter:** *authentische Texte, interkulturelle Kompetenz, Textarten, Leseverständnis, Informationsquelle, Originalität.*

Die Sprache mit der Kultur des Volkes zu lernen bleibt immer aktuell. Im Rahmen des modernen Fremdsprachenunterrichts wird folglich versucht, Sprachkenntnisse nicht in Form von purer Grammatik zu vermitteln, sondern sie in den konkreten, wirklichkeitsnahen Kontext einzufügen. Dieselbe Tendenz können wir auch im Bereich der Landeskunde bemerken. Der Lernende wird ermutigt, sich den konkreten alltagskulturellen oder

sozialwissenschaftlichen Erfahrungen zuzuwenden und dadurch den Kontakt zu dem Erlebten und Erlebten zu pflegen. Auf solcher Weise wird bei den Lernenden interkulturelle Kompetenz entwickelt. Der richtig geplante Unterricht muss in sich alle Sprachfertigkeiten (Hörverstehen, Leseverstehen, Sprechen und Schreiben) aufnehmen. Unser Thema ist genau mit dem Leseverstehen verbunden. In den Lehrwerken



kommen zwei Arten von Textmaterialien zum Einsatz: für den fremdsprachlichen Lernzweck von den Lehrbuchautoren konstruierte sogenannte synthetische Texte und authentische Textmaterialien.

Normalerweise treffen wir in Lehrbüchern viele ausgedachte Texte, die der Lernende verstehen konnte, aber nicht praktisch verwenden, da die ausgedachten Informationen brauchte er beim Sprechen nicht. Mit dem Zweck das Hindernis bei der Kommunikation zu beseitigen, werden heutzutage nicht nur die authentischen Texte, sondern auch authentische Audio- und Video-Materialien verwendet. Durch solche Materialien bekommen die Lernenden das Gefühl der Mentalität und Kultur des Landes, dessen Sprache sie lernen. Das heißt, dass man durch den Einsatz authentischer Texten in den DaF-Unterricht das Hauptziel erreichen kann, und zwar werden die Lernenden auf Deutsch zu den realen Themen sprechen können und wird kulturelle Kompetenz gleichzeitig bei ihnen entwickelt.

Authentische Texte werden von Muttersprachler für Muttersprachler produziert, wobei sie konkret reale Kommunikationshandlungen darstellen und folgerichtig auch immer ein Stück Wirklichkeit enthalten. Daher kann man in authentischen Texten die aktuellen Kommunikationshandlungen mit den sprachlichen Normen des Zielsprachenlandes erkennen. Da die Sprache selber aus einem Geflecht verbaler, nonverbaler sowie situativer Faktoren besteht [5, S. 83], schlagen sich auch diese Aspekte in den authentischen Texten nieder. Edelhoff[3] unterscheidet neben der Authentizität von Texten noch die Authentizität der Sprache, womit eine möglichst natürliche Sprachgebrauchssituation gemeint ist. Bei der authentischen Text im Fremdsprachenunterricht handelt es sich nach Edelhoff um solche Texte, die unmittelbar aus der Sprachwirklichkeit entnommen werden, die nur bedingt für Fremdsprachenunterricht geeignet sind und daher der didaktischen Manipulation bedürfen, ohne dass die Forderung nach Authentizität außer Acht gelassen werden darf.“ [3, S. 8]. Alleine die Tatsache, dass man den authentischen Text in den Fremdsprachenunterricht einbezieht und dadurch von seinem originalen Kontext losbindet, stellt in seinem neuen Gebrauchszusammenhang für bestimmte fremdsprachliche Lehrzwecke ein ganz anderes Wirkungsfeld für diese dar, als dies ursprünglich beabsichtigt war.

Es ist wichtig zu wissen, gleich welche Textsorten in die Kategorie authentischer Lehr- und Lernmaterialien eingeordnet werden, die interkulturelles Lernen ermöglichen und sogar aktivieren können, indem sie Fremdsprachenlernende dazu motivieren, sich einen tieferen Einblick in die fremdkulturelle Welt zu verschaffen. Michael Bludau

stellt einen kurzen Katalog von Textsorten zusammen, die für das interkulturelle Lernen geeignet sind und teilt sie in drei Kategorien ein:

a) Texte mit personalisierten Darstellungen – Interviews, Biografien, Briefe, Tagebücher usw.;

b) Informierende Sachtexte aus: Enzyklopädien, Nachschlagewerken, Informationsbroschüren und -blättern, Prospekten, Reiseführern, Zeitungen und Zeitschriften usw.;

c) Literarische Texte – Romane (vor allem deskriptive Abschnitte); Theaterstücke (für die sozialkommunikative Interaktion) und Dichtung (als Wiedergabe kulturspezifischer Gedanken- und Gefühlsmustern) [2, S. 12].

Bei der Vermittlung authentischer Materialien muss man auch auf die Sprachniveau der Lernenden achten. Jedes Material, egal ob es Hörverstehen oder Leseverstehen u.a. entwickelt, muss didaktisiert werden und altermäßig verwendet sein. Wenn man das Ziel richtig bestimmen kann, dann wird auch der Unterricht erfolgreich laufen.

Bei der Einbindung des authentischen Materials in den Fremdsprachenunterricht wird der von Edelhoff postulierten ‚Forderung nach Authentizität‘ erst dann gerecht, wenn trotz vorgenommenen didaktischen Eingriffen die strukturellen und sprachlichen Eigenschaften der jeweiligen Texte, in ihrem ursprünglichen, originalen Zusammenhang von den Lernenden wiedererkannt werden können. Die ‚didaktische Manipulation‘ meint dagegen, die authentischen Texte einer bestimmten Modifikation unterzuziehen, damit der Text von den Lernern leichter erschlossen werden können.

Beim Erfassen und Erarbeiten der authentischen Materialien soll also nach Möglichkeit immer wieder der Bezug auf die gegenwärtigen Lebenswirklichkeiten der Studenten hergestellt werden. Unter diesem Blickwinkel betrachtet, ist es angemessen, der Frage nachzugehen, ob diese authentischen Materialien dementsprechend inspirierend eingebracht sind, sodass die Lerner mit ihnen ein Geflecht aus der Ausgangs- und Zielsprache samt ihren kulturellen Besonderheiten weben können. Anhand der „Selbstreflexion über eigenkulturelle Selbstverständlichkeiten“ [1, S. 40] wird nämlich die Fähigkeit gefördert, andersartige Interpretation und Handlungsmuster zu erkennen, wobei dies nicht zuletzt zur Entfaltung des persönlichen Potentials von den Lernern führt. Anhand eines differenzierten Wahrnehmens von kultureller Diversität durch Vergleichen und Reflektieren, was die Konfrontation mit eigenen und fremden Kulturstandards erfordert, wird also auch eine gezielte Auseinandersetzung mit diesen Stereotypisierungen gewährleistet. Unter den üblichen Stereotypen, die den Deutschen zugeschrieben werden, können beispielsweise *systemisches*



*Arbeiten, Ordnung, Pünktlichkeit*, jedweder Zusammenhang mit dem *zweiten Weltkrieg*, hervorstechendes *Bier-, Wurst- und Kaffeekonsum*, usw. angeführt werden. Die Türken werden meistens als gastfreundlich, traditionsverbunden, hilfsbereit, konservativ, usw. bezeichnet. Diese Eigenschaftszuweisungen, die auch implizit mit jeglichen Bewertungen fest verknüpft sind, sollten also durch dieses Vorgehen relativiert werden.

In der Fachliteratur werden auch mögliche Nachteile des Einsatzes authentischer Texte im Fremdsprachenunterricht erwähnt: Der fremde Wortschatz und das vorausgesetzte kulturelle Wissen bereiten den Lernenden möglicherweise Schwierigkeiten und demotivieren sie dadurch [4, S. 107]. Denn „Texte enthalten vielfältige Instruktionen an einen potenziellen Rezipienten, dieses lebenswesentliche Hintergrundwissen zu aktivieren und für den Rezeptions- und Verstehensprozess fruchtbar zu machen“ [6, S.11].

Zugleich kann die Arbeit mit authentischer Texten für die Lernenden dadurch motivational wirken, dass sie, indem sie eine solche Aufgabe bewältigen, sich selbst ihre sprachliche und soziokulturelle Kompetenz bestätigen [4, S. 107] und dadurch viel mehr Selbstvertrauen gewinnen.

Eine mögliche Strukturierung des Lernvorgangs finden wir bei Michael Blaudau[2]. Er schreibt über vier Schritte:

a) Erfahren: Der Text wird gelesen und die Lernenden machen sich kurz Gedanken über die vorhandenen und zugleich leicht erkennbaren Elemente der Zielsprachen-Kultur.

b) Vergleichen: Es werden Vergleiche zwischen der persönlichen Situation des Lesers und der Hauptfigur(en) angestellt, zuerst die äußeren und im Nachhinein auch die tieferen Umstände betreffend.

c) Informieren: Ergänzende Informationen aus dem sprachlichen oder dem allgemeinen oder kulturspezifischen Wissen werden gesammelt.

d) Umsetzen: Die Handlungsfähigkeit der Lernenden wird durch die gewonnen kulturellen Erkenntnisse und Erfahrungen bereichert und soll in simulierten Situationen, die von dem besprochenen Thema ausgehen, eingesetzt werden [2, S. 13].

Ein wichtiges Ziel des universitären Fremdsprachenunterrichts besteht darin, die Lernenden dazu zu befähigen, zu den zielsprachigen Kulturen und Lebensweisen offen gegenüberzustehen und damit auch kulturelle Besonderheiten der Sprachverwendung zu erschließen. Über die Einbindung authentischer Materialien in den Fremdsprachenunterricht lassen sich im ersten Schritt einen bewussten Zugang zu den Aspekten der eigenen Kultur vermitteln um anschließend in der nächsten Etappe Parallelen oder Differenzen zur Zielkultur herstellen zu lassen. Ausgehend von den entschlüsselten Informationen, die den authentischen

Materialien typisch sind, können die Lernenden Berührungspunkte zwischen den betreffenden Kulturkreisen aufdecken, verbindende Gemeinsamkeiten feststellen aber auch interessante Verschiedenartigkeiten registrieren. Mit diesen allgemein pädagogischen und die sich daraus ergebenden didaktisch-methodischen Konsequenzen kommt der Nutzung authentischer Materialien durch gut ausgebildete, qualifizierte Fremdsprachenlehrer eine besondere Bedeutung zu. Der Lehrende soll interkulturelle Fragestellungen berücksichtigen und sich nicht an tradierten Unterrichtsmodellen und Materialien festhalten, sondern den Lernern die Möglichkeit darbieten, anhand von authentischen zielsprachlichen Materialien den Wirklichkeitsbezug herstellen zu lassen, die durch zu erlernende Fremdsprache geprägt ist.

Abschließend möchten wir behaupten, dass authentische Texte, unwichtig ob personalisierter, informierender oder literarischer Sorte, die gleiche Wirkung wie interkulturelle Begegnungen einer jeden Art erzielen. Texte fungieren als zuverlässige Informationsquellen, erleichtern die Entschlüsselung fremder Kulturmuster und ermöglichen den Perspektivenwechsel. Viele Lernende empfinden literarische Texte in dem Sinne abwechslungsreich, dass sie ihre Fantasie erregen.

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## PORTFOLIO MANAGEMENT IN LIC- AN EMPIRICAL STUDY OF DHARWAD REGION

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### ABSTRACT

*LIC of India is the leading insurance company in India. Life insurance is designed to protect life and to protect family against financial uncertainties that may result due to unfortunate demise or illness. It can also view as a comprehensive financial instrument, as a part of the financial planning offering savings & investment facilities along with cover against financial loss. By choosing the right policy as per the needs. We all have different financial needs and objectives. But life insurance plays a fundamental role in most of our plans for financial security. That's because of the variety of life insurance plans available and the many ways they can be customized to meet unique needs at different periods of our life.*

*The present study is concerned with investment portfolio of life Insurance Company during the period 2017-20. The gist of this paper is to examine and explain different investment portfolio of the life insurance company. Moreover to find out how they follow the prevailing norms of investment guideline and to signify the deviation from investment norms. Therefore, it becomes relevant to discuss investment portfolio at the outset with the help of some statistical test i.e. Chi-Square, percent, trend etc.*

**KEY WORDS:** *Portfolio analysis, Life insurance, Investment guidelines, Customers.*

### INTRODUCTION

A Company's primary objective is to develop products that satisfy the customer's needs. The company's existence is in trouble if it does not deliver need satisfying product / service. The concept of product extends the applicability of marketing principles to insurance marketing. "A product is anything that can be offered to a market for attention, acquisition, use or consumption that might satisfy a want or need. It includes physical objects, services, persons, places, organizations and ideas. "Philip Kotler describes insurance products as unsought (consumer) goods". These are consumer goods that the consumer does not know about or knows about but does not normally think of buying." Product element in the financial services is of the utmost importance, since the customer is initially attracted to the product only. The benefits of the financial services must be of value to the customer.

A portfolio manager is a professional responsible for making investment decisions and

carrying out investment activities on behalf of vested individuals or institutions. The investors invest their money into the portfolio manager's investment policy for future fund growth such as a retirement fund, endowment fund, education fund, or for other purposes<sup>7</sup>. Portfolio managers work with a team of analysts and researchers, and are responsible for establishing an investment strategy, selecting appropriate investments, and allocating each investment properly towards an investment fund or asset management vehicle<sup>6</sup>.

### **The things which involves in Portfolio Management are as follows; Allocation of assets**

This is the base for portfolio management where assets with low correlation with each other are mixed in a certain way so that the risk and return profile of the investor are Investors who have huge risk appetite can settle for a more volatile group of



assets while the risk-averse investors can go for subtle or stable investment classes.

#### **Diversification of investment**

Since, it is not possible for any investor, portfolio manager to predict how one single asset class will behave or return over a longer period of time due to various ambiguities in the market and the volatility, diversification is necessary. It is to divide the amount invested, in different asset classes, which are least correlated with each other.

#### **Investment/asset rebalancing**

Since markets are not same every year; the asset allocation needs to be rebalanced according to the market prediction for the similar period. Another scenario is over the period of time, the ratio of asset classes in the portfolio changes on its own due to the returns accumulated. For example, in the beginning, you invested 60% in shares and 40% in FDs but with the passage of time, the ratio changed to 75:25 ratios which have put your investment at risk. The portfolio manager keeps an eye on the portfolio and whenever he or she feels that the portfolio has crossed the level of the risk appetite of the investor, they rebalance it accordingly.

### **REVIEW OF LITERATURE**

A good number of studies have been made by researchers, academicians and other experts in the area of life insurance companies to measure the product portfolio management in LIC. Some important studies conducted in this area which is mentioned here.

**Mundra (2000)<sup>1</sup>** expressed, through his article, the fear in the minds of the competitors and the possible strategies to face them. The main concern of the public sector companies, according to him, is that the private players, especially foreign ones, will swamp the market and grab a large share of it. The possible strategies for combating the situation can be the adoption of latest information technology, use of data warehousing management, implementation of high level training and development programmes and practices of alliances and tie-ups.

**Nikhil Gupta (2001)<sup>2</sup>** in his article viewed that among the strategies that Indian insurers adopt, best opportunity lies in the product's core function that is in providing a safety net. The author brings out the highlights in rising proportional aspects, penetration level and other projected macro - factors along with global insurance market during the year 1999. Protection is discussed separately with their capital base, centre owned, number of agents and free look period.

**Ziaudeen, A. (2003)<sup>3</sup>** in his dissertation he had discussed various aspects relating to product line, product development process,

product mix, premium fixation, modification, facilities provided to policyholders, accessibility of Life Insurance Company services in Thanjavur location, training, motivation and the problem involved in it. He suggested that the level of awareness among the consumers has to be improved more in order to tap the market entirely.

**Varaprasad, V. and Murali Krishna, B. (2009)<sup>4</sup>** were in their article revealed that the suggestions brought forward by this study are mixed. The contribution of insurance sector to economic development hardly affects financial intermediation. He concluded that in order to make insurance sector significant component of financial intermediation process, complete deregulation and increase in face of reforms are essential at the same time, by adopting proper segmentation capture significant share in the market for the overall benefit of organizations.

**R Guru Murthy(2012)<sup>5</sup>** in his article on said that with the opening up of Insurance Sector, more private players started entering the Industry with new products and new marketing strategies. The researchers want to conclude that the marketing strategy should have to be adopted cautiously after studying various parameters such as customer expectations and Perceptions into account.

### **OBJECTIVES OF THE STUDY**

1. To know the marketing approach in relation to life insurance.
2. To through light on the marketing strategies to improve customer service and policy services.
3. To analyse the significant relation in between strategic marketing approaches and product portfolio mix in LIC.

### **HYPOTHESIS**

**H<sub>0</sub>:** There is no significant relation in between strategic marketing approaches and product portfolio mix in LIC.

**H<sub>1</sub>:** There is significant relation in between strategic marketing approaches and product portfolio mix in LIC.

**H<sub>0</sub>:** There is no significant relation in between selling the policy by the agents or officers and convincing the policyholders, sufficient staff and computerised work.

**H<sub>1</sub>:** There is significant relation in between selling the policy by the agents or officers and convincing the policyholders, sufficient staff and computerised work.

**H<sub>0</sub>:** There is no significant relation in between policyholders' financial needs and LIC insurance plans.



**H<sub>1</sub>:** There is significant relation in between policyholders' financial needs and LIC insurance plans.

**RESEARCH METHODOLOGY**

- a. **Collection of data:** The study based on primary and secondary data. The primary data has been gathered by the execution of well structured questionnaire to the respondents. And the secondary data has been collected from the published records of company i.e. annual reports, journals, books etc.
- b. **Tools of analysis:** The collected data

recorded, analyzed and interpreted in the significant manner with the help of SPSS and excel sheet. The statistical tools used for the study included percent, ratio and Chi-square etc.

- c. **Sampling Area:** This study is based on empirical research. The corner stone is to analysis investment portfolio of Life Insurance Corporation of India.
- d. **Period of study:** The data was collected during the period 2016-19

**RESULTS AND DISCUSSIONS**

**Table No. 1 Respondents opinion about Demographic profile:**

Demographic	Groups	Frequency	Percent
<b>Gender</b>	Male	67	67.0
	Female	33	33.0
	Total	100	100.0
<b>Education</b>	Graduation	64	64.0
	Post-Graduation	34	34.0
	Others	2	2.0
	Total	100	100.0
<b>Age</b>	30 to 40 years	29	29.0
	41 to 50 years	30	30.0
	51 to 60 years	41	41.0
	Total	100	100.0
<b>Marital status</b>	Married	92	92.0
	Unmarried	8	8.0
	Total	100	100.0
<b>Work experience</b>	Less than 5years	11	11.0
	6-10 years	8	8.0
	11-15 years	16	16.0
	16-20 years	24	24.0
	More than 20 years	41	41.0
	Total	100	100.0

Table No.1 Depicts information about demographic profile of respondents. It clear from the above table that, 67.00% of respondents are male and remaining 33.00% of respondents are female. However 64.00% of respondents are graduates and 34.00% are post graduates; and remaining 02.00% are others. Whereas 41.00% of respondents belong to 51 to 60 years of age group followed by 30.00% of respondents belong to 41 to 50 years and remaining 29.00% of respondents belong to 30 to 40 years of age groups. It is noticed that 92.00% of respondents are married and remaining 08.00% of respondents are

unmarried. However 41.00% of respondents are having more than 20 years of experience; 24.00% of respondents are having 16 to 20 years of experience; 16.00% of respondents are having 11 to 15 years of experience; 11.00% of respondents are having less than 5 years of experience and remaining 08.00% of the respondents having 6-10 years of work experience.

At last it may be inferred that, LIC is having highly experienced, qualified and office staff, hence this may be the real strength of LIC with which it's doing good business in the market.



**Table No. 2 Respondents opinion about marketing approach in relation to life insurance:**

Sl.No.	Marketing approach		SDA	DA	N	A	SA	M	SD
1.	Research to determine customers financial security	<i>f</i>	0	9	15	42	34	4.01	0.93
		%	0	9.0	15.0	42.0	34.0		
2.	Design new services	<i>f</i>	0	0	0	59	41	4.41	0.49
		%	0	0	0	59.0	41.0		
3.	Market services to the customer for whom they were researched and designed at a profit	<i>f</i>	0	0	16	50	34	4.18	0.69
		%	0	0	16.0	50.0	34.0		
4.	Satisfy the customer's needs	<i>f</i>	0	9	0	6	85	4.67	0.88
		%	0	9.0	0	6.0	85.0		

**Note:** SA-Strongly Agree, A-Agree, N-Neutral, DA-Disagree, SDA-Strongly Disagree

Table No. 2 exhibits the information regarding respondents' opinion about marketing approach in relation to life insurance. There are four marketing approaches identified and collected opinion on these four marketing approaches from the officers on five point Likert scale. The average opinion of officers on all marketing approaches is above 4 which indicates officers agree and strongly agree with all four

marketing approaches. The standard deviation below one indicates the opinion was consistent.

In toto it can be inferred that all the above four marketing approaches have been taken into consideration while forming the policies. It may be due the reason that the marketing approaches will have very important role to play to frame any policies keeping in mind of financial security, new service design, profit and satisfaction of policy holders.

**Table No. 3 Respondents opinion about marketing strategies to improve customer service and policy services:**

Sl.No.	Marketing strategy		SDA	DA	N	A	SA	M	SD
1.	A very clear definition of marketing objectives	<i>f</i>	0	0	0	30	70	4.70	0.46
		%	0	0	0	30.0	70.0		
2.	A very clear definition of target customers	<i>f</i>	0	0	0	72	28	4.28	0.45
		%	0	0	0	72.0	28.0		
3.	The development of marketing needs to satisfy the customers at a profit	<i>f</i>	0	0	0	50	50	4.50	0.50
		%	0	0	0	50.0	50.0		
4.	Planning for each of the 'source' markets and each of the 'use' markets	<i>f</i>	0	0	1	67	32	4.31	0.49
		%	0	0	1.0	67.0	32.0		
5	Organization and administration	<i>f</i>	0	0	9	8	83	4.74	0.61
		%	0	0	9.0	8.0	83.0		

**Note:** SA-Strongly Agree, A-Agree, N-Neutral, DA-Disagree, SDA-Strongly Disagree

Table No. 3 crystallizes the information about respondents' opinion regarding marketing strategies to improve customer service and policy services. There are five marketing strategies identified and collected opinion on these five marketing strategies from the officers on five point Likert scale. The

average opinion of officers on all marketing strategies is above 4 which indicates officers agree and followed by strongly agree with all four marketing strategies. The standard deviation below one indicates the opinion was consistent.



At the end it can be inferred that LIC officials take into consideration all the above five marketing strategies to improve customers service and policy services. It may be due to the reason that, it is marketing strategies which will be having a

pioneer role to play to provide good services to customers and their policies services too to remain competent in the market.

**Table No. 4 Respondents' opinion about officers Perception on the strategies followed to form marketing mix to sell the insurance products and services:**

**H<sub>0</sub>:** There is no significant relation in between strategic marketing approaches and product portfolio mix in LIC.

**H<sub>1</sub>:** There is significant relation in between strategic marketing approaches and product portfolio mix in LIC.

Sl. No.	Strategies		SD 1	D 2	SW D 3	N 4	SW A 5	A 6	SA 7	M	SD
1.	LIC offers a variety Product mix to Policyholders	<i>f</i>	0	0	0	0	5	33	62	6.6	0.6
		%	0	0	0	0	5	33	62		
2.	LIC offers policies with better range in sum assured (min & max)	<i>f</i>	0	0	0	0	11	42	47	6.4	0.7
		%	0	0	0	0	11	42	47		
3.	LIC offers Riders, Bonus etc with almost all Life insurance products	<i>f</i>	0	0	13	5	16	26	40	5.8	1.4
		%	0	0	13	5	16	26	40		
4.	Life policies of LIC assures guarantee loyalty Addition	<i>f</i>	7	4	0	0	31	51	7	5.3	1.5
		%	7	4	0	0	31	51	7		
5.	LIC offers Loan facility on almost all life Policies	<i>f</i>	0	0	4	9	10	25	52	6.1	1.2
		%	0	0	4	9	10	25	52		

Note: SA=Strongly Agree; A=Agree; SWA=Some What Agree; N=Neutral; SWD = Some What Disagree; D=Disagree; SD=Strongly Disagree.

Table No.4 depicts the information about officers Perception on the strategies followed to form marketing mix to sell the insurance products and services. It is clear from the above table that the mean value of all the elements of strategies are more than 5 and their standard deviation is less than 2 which indicates that marketing approaches are always interlinked with the product portfolio mix in the LIC.

At last it may be inferred the relation in between strategic marketing approach and product portfolio mix in LIC is there because the needs and desires, wants demands of customers are having volatility in there requisition. Hence it may become inevitable for the LIC to have a different strategic markets approaches based on product portfolio mix, to satisfy the customers.



**Table No. 5 Respondents' opinion about consideration of marketing objectives before selling policies:**

**H<sub>0</sub>:** There is no significant relation in between selling the policy by the agents or officers and convincing the policyholders, sufficient staff and computerised work.

**H<sub>1</sub>:** There is significant relation in between selling the policy by the agents or officers and marketing objectives of the LIC.

Sl. No	Marketing Objectives	Always		Occasionally		Never		T- Test	
		F	%	f	%	f	%	Mean Dif. & df	Sign.
1	Spread of life insurance message	91	91.0	09	09.0	0	0.0	1.090 df=99	0.000
2	Mobilization of savings in the form of premium	76	76.0	24	24.0	0	0.0	1.040 df=99	0.000
3	Improving customer service	96	96.0	04	04.0	0	0.0	1.070 df=99	0.000
4	Increasing customer base and its spread	87	87.0	13	13.0	0	0.0	1.130 df=99	0.000
5	Developing corporate image	93	93.0	07	07.0	0	0.0	1.380 df=99	0.000
6	Reporting a marginal profit	66	66.0	30	30.0	4	4.0	1.240 df=99	0.000

The table No. 5 presents the information about consideration of marketing objectives before selling policies. It is clear from the above table that for all the above marketing objectives T-Test has been applied. For each objective degree of freedom is 99 and level of significance is 0.000 for the respective T-Value. Hence the null hypothesis has been rejected and accordingly alternative hypothesis i.e. there is significant relation in between selling the

policy by the agents or officers and marketing objectives of the LIC has been accepted.

Ultimately it can be concluded that selling of policy by the agents or officers may become fruitful by convincing a policyholders for that they need sufficient staff, usage of modern ICT. Because presentation with PPT through videos, audios and some pictures exhibitions may helps to convince the customers in a pragmatic way to by the policy.

**Table No. 6 Respondents' opinion about customer's future financial needs Vs development of appropriate insurance plans**

**H<sub>0</sub>:** There is no significant relation in between policyholders' financial needs and LIC insurance plans.

**H<sub>1</sub>:** There is significant relation in between policyholders' financial needs and LIC insurance plans.

		Customer's future financial needs						Chi-Square
		Old Age	Death	Health	Income	Family tradition	Total	
LIC develop appropriate insurance plans	Designing new services/policies	7	0	0	0	0	7	χ <sup>2</sup> =133.1 df = 12 P = 0.000
	Innovate old once	0	0	9	0	0	9	
	Policies with varied benefits	6	0	0	0	7	13	
	Changing needs of customers	10	4	0	11	46	71	
	Total	23	4	9	11	53	100	



The table no. 6 exhibits the problems/difficulties in marketing life insurance products between Urban and Rural areas in the perspective of Officers. It is clear from the above table that, the calculated value of chi-squares' P Value is 0.000 at a 12 degree of freedom which is less than the standard level of significance i.e, 0.05. Hence the null hypothesis has been rejected and accordingly alternative hypothesis has been accepted.

At last it may be summarize that the future financial needs and development of insurance plans are having a mutual relation. Because development of LIC plans should inspires and satisfy the future financial needs of customers, otherwise they may show there back towards LIC.

## CONCLUSION

From the above discussion it is quite clear that Portfolio Management in LIC is good. Because of highly experienced, qualified office staff, hence this may be the real strength of LIC with which it's doing good business in the market and marketing approaches have been taken into consideration while forming the policies. The marketing approaches will have very important role to play to frame any policies keeping in mind of financial security, new service design, profit and satisfaction of policyholders. LIC officials take into consideration all the marketing strategies to improve customers service and policy services. It may be due to the reason that, it is marketing strategies which will be having a pioneer role to play to provide good services to customers and their policies services too to remain competent in the market.

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