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COMPARATIVE-TYPOLOGICAL STUDIES FOR THE PRACTICE OF TEACHING THE RUSSIAN LANGUAGE AS UNNONGENERAL
(On the example of the analysis of complex sentences)

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ABSTRACT
The article deals with the importance of comparative-typological research for Russian linguistics. These studies emphasize the subtle but important questions posed to the syntax of the Russian language.
KEYWORDS: *comparative-typological studies; complex sentence; indicator of syntactic context.*

СОПОСТАВИТЕЛЬНО-ТИПОЛОГИЧЕСКИЕ ИССЛЕДОВАНИЯ ДЛЯ ПРАКТИКИ ПРЕПОДАВАНИЯ РУССКОГО ЯЗЫКА КАК НЕРОДНОГО
(На примере анализа сложноподчиненных предложений)

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Аннотация
В статье рассматривается проблема значимости сопоставительно-типологических исследований для акцентированного преподавания недостаточно учитываемых, но важных вопросов синтаксиса сложного предложения русского языка.
Ключевые слова: *сопоставительно-типологические исследования; сложное предложение; показатель связи.*

Сопоставительно-типологическое изучение русского и других языков позволяет оттенить некоторые закономерности функционирования единиц русского языка, которые остаются неакцентированными при обращении к языку в процессе его преподавания. Сложноподчиненные предложения в русском языке организуются по иному принципу, чем аналогичные синтаксические конструкции, например, в узбекском языке. Более того,

синтаксическая связь между предикативными единицами в русском сложноподчиненном предложении оформляется иначе, чем связь между словами в русском же простом предложении. Что касается узбекского языка, то здесь, как показывают исследования представителей новосибирской синтаксической школы [1, с. 109; 2, с. 4–8; 3, с. 14], отмечается четкий изоморфизм способов и средств синтаксической связи на этих двух синтаксических уровнях. В данном случае для нас важно обращение к особенностям локализации и функционирования такого значимого компонента сложного предложения, как показатель связи. Для этого очень удобен метод моделирования, под которым здесь мы будем понимать представление в формульной записи разновидностей сложноподчиненных предложений как сущностных единиц языка.

Мы последовательно различаем сложное предложение как модель и
сложное предложение как фразу или высказывание. Фраза – это только явление, реализация синтаксической сущности, которую называют сложным предложением или моделью предложения. Термин «модель» подразумевает синтаксическую сущность, или инвариант. В этом смысле его можно сравнить с фонемой, которая подразумевает фонологическую сущность-инвариант, или с лексемой, которая подразумевает лексическую сущность-инвариант [2, с. 19].

Сопоставительно-типологические исследования открывают новые грани теоретического восприятия языкового материала. Например, когда, обращаясь к сложному предложению, представители новосибирской синтаксической школы развернули свои сопоставительно-типологические исследования по многочисленным языкам различного строя, это дало им возможность открыть новое видение многих синтаксических механизмов разных языков, в том числе и русского языка [5, с. 53].

В преподавании сложного предложения адекватной формой представления сложных предложений символическая запись, под которой мы понимаем показ синтаксических моделей формулами, которые строятся из заранее оговоренных символов, указывающих на существенные признаки моделей сложного предложения. Совокупность символов, составляющих конкретную формулу, должна быть необходимой и достаточной, чтобы отличить данную модель от любой другой [5, с. 21].

В данном случае мы должны подчеркнуть, что важнейшим компонентом сложных предложений и их моделей являются показатели синтаксической связи. Именно обращаясь к ним, можно максимально четко обнаружить типологическое своеобразие того или иного языка, в частности, русского.

Как известно, основным и типичным показателем синтаксической связи и конституирующим компонентом всего сложноподчиненного предложения в русском языке являются союзы и союзные слова. Считается, что они соединяют автономные предикативные единицы, находясь между ними. Но сопоставительно-типологические изыскания подсказывают иное видение, согласно которому показатель связи в русском языке линейно и по существу принадлежит зависимой предикативной единице. Он маркирует факт синтаксической зависимости и выражает ее характер: указывает на вид синтаксических отношений, которые выражаются между частями сложного целого.

В узбекскомязыке, например, зависимые предикативные единицы соединяются с главной теми же способами, что и слова в простом предложении [3, с. 17]. Здесь четко видно, к какому слову относится показатель связи в линейной структуре сложного предложения. Если опираться на такое видение структуры полипредикативного сложноподчиненного предложения применительно к русскому языку, то это облегчит преподавание данного сложного фрагмента грамматической системы языка.

Таким образом, при преподавании сложноподчиненных предложений
русского языка важно отталкиваться от показателя синтаксической связи как важнейшего компоненте предложения и его модели. Целесообразно подчеркивать, что союз или иное средство синтаксической связи линейно принадлежат именно зависимой предикативной единице. Подобное акцентирование, как показывает практика, способствует хорошему усвоению правил пунктуации. Использование моделей в современном образовательном процессе признается многими учеными в качестве удачной презентации грамматического материала. Это позволяет, во-первых, представлять сложное предложение именно как единицу языка, а не речевое высказывание, как лингвистический знак, а не как фразу – речевую реализацию. Во-вторых, подобный подход помогает использовать особенности синтаксического строя родного языка при постижении синтаксиса изучаемого русского языка.

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SOCIOLINGUISTIC COMPETENCE AS THE MAIN COMPONENT OF INTERCULTURAL COMMUNICATIVE COMPETENCE

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ABSTRACT

This article gives a general overview of some aspects of sociolinguistic competence as the main component of intercultural communication, difficulties students of non-linguistic tertiary institutions face when expressing themselves in a foreign language, the component of sociolinguistic competence as described in the CEFR as well as the ways of how sociolinguistic competence can be measured and checked.

KEYWORDS: *sociolinguistic competence, CEFR, communicative competence, intercultural communication*

DISCUSSION

The Council of Europe document *Common European Framework of References for Language Competencies: teaching, learning, evaluation* considers sociolinguistic competence as one of the most important components of intercultural communicative competence, the formation of which is the goal of teaching a foreign language in non-linguistic tertiary institutions. In this article, we are talking about the need to allocate sociolinguistic competence as an independent object of control, since the level of formation of this competence affects the degree of success of the implementation of intercultural communication by students.

Traditionally, the object of control is the linguistic side of speech, or in terms of the competence approach, linguistic competence. Recently, however, more and more attention has been paid to the so-called pragmatic mistakes or sociocultural errors, the presence of which leads to a violation of communication, such mistakes made in a conversation with a native speaker the latter relate to the personality of the speaker, to his level of culture and thus are the cause of various misunderstandings, up to the unwillingness to understand the language.

Domestic researchers include sociolinguistic competence in the broader concept of socio-cultural competence, but it is possible to narrow the object of control to sociolinguistic competence, since this competence, in turn, has several components identified in the CEFR:

- Language markers of social relations
- Standards of politeness
- Variability
- Differences in the communication register
- Adequate use of strong expressions, quotes, etc.

In the components of sociolinguistic competence separate components are also distinguished that allow us to determine the speech means of expressing social relations that are subject to control and evaluation. As indicated in the CEFR, the measurement of elements of sociolinguistic competence is very difficult, so it seems legitimate to allocate speech means that are subject to control. The requirements for level B1 are described as follows: *Can implement a wide range of speech functions and respond to them using the most commonly used speech means and a neutral register. Performs speech actions in accordance with the generally accepted norms of politeness. Aware of the most important differences in customs and traditions, ideas, values and beliefs typical for the society of the countries of the studied language, and understands the corresponding signals* [1, p. 122].

Since the requirements for the level of proficiency in sociolinguistic competence are somewhat vague, it is necessary to distinguish individual components, the requirements for the ownership of which can be described more precisely, and can be measured and controlled accordingly. These components include:

- Etiquette formulas of greetings, farewells, addresses, and thanks.
- Expression of a polite request, wish, interest, concern.
- Congratulations, expressions of sympathy, expressions of gratitude.
- Expression of regret, use of extenuating language.
- Expression of discontent, impatience, complaints.
- The use of all the above-mentioned speech means, considering
- the communication registers.
- Understanding the most commonly used stable expressions.
- Understanding the differences between different versions of the English language.

As mentioned above the B1 level students should be able to realize voice actions in accordance with the norms of politeness, speech etiquette, etc. Therefore, it seems possible to check and correct the level of completeness as in the productive types of speech activity (speaking and writing) and passive types (reading and listening). At the same time checking for the last two components is advisable at the level of recognition and understanding, since modern programs do not provide for mastering dialects and variants of the English language, given their huge diversity, this task is practically impossible within the framework of the university program.

Active knowledge of idioms at the level of B1, the use of proverbs, sayings, stable

expressions, etc. in speech is also not provided for by the requirements for this level

of language proficiency, as well as, as has been repeatedly indicated in the literature. Foreigners who constantly try to insert an idiom into their speech, most often become the object of ridicule from native speakers, so it seems more correct to master this component at the level of understanding, the ability to "spread out" the meanings of such words and expressions, to find their equivalents in their native language. Having thus considered the component composition of the sociolinguistic competence, we turn to the problem of drawing up tasks that control the level of formation of this competence.

As we know, each test task must meet three main criteria: objectivity, reliability, and validity. In competence testing, compliance with the test validity criterion is the most difficult, since, as already noted, the very description of the requirements for the possession of sociolinguistic competence is somewhat vague and focuses on speech means. Helmut J. Vollmer distinguishes between tests that control competencies and tests that control different types of speech activity. [2, p.365]. The competence tests are based on the abilities that control speech and language skills. Communication behavior, both

within and outside of test situations. In tests of certain types of speech activity, possible reactions in situations of real speech consumption and speech behavior are modeled using various tasks.

The most common and popular tests are that control the skills and abilities in certain types of speech activity, as well as individual components of linguistic competence (grammar, vocabulary, spelling, phonetics).

As already mentioned above, the most difficult when composing a test for verification of the level of formation of the sociolinguistic competence, is compliance with the validity criterion. In this case it is necessary to classify possible errors. The traditional classification is as follows:

- phonetic / phonological errors;
- morphosyntactic errors;
- lexicosemantic errors;
- pragmatic mistakes;
- actual errors.

These errors can also be divided into errors that lead to a violation of communication and errors that do not lead to a violation of communication. Obviously, the first group of errors is more gross, because it makes it difficult or impossible to communicate further, or such errors can lead to serious problems like misunderstandings between partners.

As already mentioned above, this group primarily includes pragmatic or socio-cultural errors, therefore, the diagnosis of these errors, their correction and work on them in order to prevent their repetition is no less important than work on the linguistic side of speech.

A large number of grammatical, phonetic, and lexical errors also complicates communication, complicates the perception of both oral and written speech, which can, as a result, lead to an unwillingness to continue communication. In order to correct errors and further work on this aspect, a number of tasks are proposed in the form of a speech situation, in which the test takers must offer an adequate version of the situation. Each task describes the system of scoring points, but the main criterion remains the relevance of the proposed option, its adequacy to the given situation. In the second place, the correct grammatical, lexical, and syntactic design of the utterance is evaluated, since the proposed tasks are aimed at checking. If the sociolinguistic competence is formed in oral speech, then it is possible not to consider spelling errors, since they will be invisible in speech. Since foreign language communicative competence of a graduate of a non-linguistic university is an integral part of his overall professional competence, further socio-cultural nature of errors in general, and sociolinguistic in nature particular, may reduce the effectiveness of his work. As V. V. Safonova noted in her work "In bi-

cultural/intercultural communication arise the difficulties which do not exist in monolingual/monocultural communication, the necessity of correlating phenomena of a different culture with the phenomena of native culture can cause difficulties and lead to sociocultural errors" [3, p.13]. Therefore, control over the level of formation of sociolinguistic competence should be carried out constantly, not only with the help of tasks specifically aimed at assessing this particular competence, it is also possible to include components of sociolinguistic competence in the criteria for evaluating the products of students' speech activity.

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FEATURES OF MILITARY TERMINOLOGY IN MODERN CONDITIONS

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ABSTRACT
Currently, the terminology is being evaluated and improved. Sometimes it is very difficult to understand it, since most of the new terms are often used for other purposes and require scientific justification. Therefore, in modern conditions, with the further improvement of the fundamental statutory documents, there is an urgent need to solve the problem of military terminology in order to clarify the basic concepts and categories of the system of knowledge about war and military security through the appropriate terms in the form of definitions.
KEYWORDS: *military terminology, military security, terms, basic concepts and categories.*

DISCUSSION

The categories of military science are historical in nature. They reflect the development of military affairs, methods and forms of armed struggle. With the appearance of new objects, phenomena, and connections, new concepts and categories can be formed in the business. At the same time, the formation of concepts and categories can proceed on the basis of scientific foresight, before the real appearance of new objects and phenomena, which is especially characteristic of military science. There is a constant need to clarify the existing categories, both at the level of definitions, as well as their content and scope. The historical nature of the categories of military affairs determines the objective process of dying out of some of them and excluding them from the number of existing concepts.

Military science, like any science, has its own system of concepts and categories, its own conceptual apparatus. The development of the conceptual apparatus of any sphere of subject activity is due to the expansion of the range of knowledge about the subject itself. In this regard, it is necessary to consider some categories and concepts that are used by military specialists when conducting research on military terminology in modern conditions.

The encyclopedic definition of the concept is "a form of thinking that reflects the essential properties, connections and relationships of objects and phenomena" [1]. The concept allows us to distinguish the general, which is achieved by abstracting from all the particular features of individual objects and phenomena of this class.

Each concept is characterized by its content and volume. The content of the concept is determined by the totality of the features of objects and phenomena reflected in it. The scope of the concept is determined by the number of generalized homogeneous objects or phenomena that have features that belong to the content of the concept.

The system of concepts is characterized by a hierarchical structure, determined by the degree of generalization of objects and phenomena. The limit of generalization is the concepts with the maximum volume, which become categories.

The category is "the most general and fundamental concept that reflects the essential, universal properties and relations of the phenomena of reality and cognition" [2]. The interpretation of the category as the most general concept does not have clear criteria. The degree of generalization of any concept does not always lend itself to an objective assessment. Therefore, in order to distinguish a concept into a category, it is necessary, in addition to determining the degree of generality, content and scope, to assess the place and importance of this concept in the relevant science. Categories form the basis of the structure and content of military science. They are a form of concentration of knowledge about the subjects and phenomena of military theory and practice. In fact, the content of the categories determines the level of development of military science.

A term is "a word or a combination of words denoting a special concept used in science, technology, and art" [2]. In relation to knowledge about war and military security, it is an external, verbal expression of the content of concepts and categories.

Definition (definition) is "clarification of the subject of consideration, its unambiguous characteristic" [2].

Thus, the article offers formulations of concepts and categories of the system of knowledge about war and military security through the corresponding terms in the form of definitions.

The concepts and categories of military science are the most important tool of military-scientific knowledge, one of the forms of transfer and dissemination of military knowledge. Without a clear definition of concepts and categories, it is impossible to communicate with military specialists in all areas of their activities, especially in a combat situation.

The hierarchical nature of the system of concepts and categories determines its several levels [3].

The first level is the most general categories related to such phenomena as preparing a country for war, maintaining the military security of the state, military construction, the activities of the armed forces, their types and branches of the armed forces, and military operations. The first-level categories relate to almost all tasks of national defense and military operations. The system-forming category is the category of "war". With this fundamental category, all others of any level should be correlated and subordinated.

The second level is the category of components of military science. For example, within the framework of military art, they include the categories of strategy, operational art, and tactics. The theory of the construction of the armed forces has its own categories.

The third level consists of categories of individual theories or sections of private military sciences.

Relatively independent subsystems are a set of categories of types of armed forces, which, while occupying a subordinate position in relation to higher-level categories, reflect the specifics of the land forces, air forces and air defense forces.

The branches of social, natural and technical sciences related to defense issues also have their own categorical apparatus.

The complex multi-level scheme of relations between the categories of military knowledge makes it necessary to carefully justify their content and scope in accordance with their place and subordination in the general system.

Currently, the military specialists in their activities use more than twenty official encyclopedic publications, military dictionaries published in different countries, which summarize and synthesize the existing military and scientific achievements of the world. These publications mainly objectively reflect the current content and understanding of the main military-theoretical problems, but they do not reflect the features of the development of military-scientific achievements.

The analysis and generalization of the existing special terminology used in the implementation of various types of activities in the selected areas of the life of the state and society, allow us to draw some conclusions.

First, it does not fully take into account the ever-changing nature of threats that affect the provision of military security, carried out by politics-diplomatic, economic, information and other subversive non-military means.

Secondly, it should be noted that in modern conditions, the nature of armed struggle is also changing. The importance of indirect actions is increasing, the nature and methods of using military force are significantly changing, which requires a new approach to determining the main forms of use of the Armed Forces, other troops and military formations both in local wars and armed conflicts, and in large-scale wars.

Third, in the published encyclopedias and dictionaries, some of the definitions given are not quite accurate, and in some cases incorrectly reveal the essence of the concepts, do not fully reflect objective phenomena and processes, so they turn out to be "non-working" and do not meet their purpose.

So, for example, at one time, for insufficiently clear political reasons in the field of state security and in connection with the defensive nature of the military doctrine, the concept of "strategic offensive operations" was abandoned, replacing them with a "counteroffensive" undertaken after a defensive operation. But the defensive nature of a military doctrine only means that the party adhering to such a doctrine does not intend to be the first to launch military operations. With the outbreak of war, the policy of the state changes and is entirely subordinate to the interests of protecting the Fatherland. And in these conditions, with the outbreak of war, any state will use various methods of defense without restrictions, all the necessary actions, both defensive and offensive, which will be required by the situation. Therefore, the whole system of concepts of strategic operations is restored in the system of categories and terms. At the same time, it needs to make a number of significant changes, taking into account the experience of modern wars and military conflicts.

Fourth, in a number of issues, the American, NATO terminology is blindly copied, which turned out to be not entirely justified and vital. So "war" is defined as a kind of conflict [4]. But war and conflict

differ not only in scale, they are different phenomena in nature and in essence.

Fifth, in the published encyclopedias, dictionaries, and service reference books, serious methodological errors are made in the development of the conceptual apparatus, and the elementary rules of formal logic are not observed. According to the laws of logic, in order to define a particular concept, it is necessary to first bring this concept under another, broader concept, and then show its specifics, how it differs from other related objects and phenomena. For example: a birch is a tree that differs from other trees by its corresponding crown, leaves, and other properties; war is not a kind of universal human conflict, but a complex social phenomenon associated with the continuation of politics by violent means, etc. [5].

It should be noted that at present there are a number of problems both in the construction of the Armed Forces and in the development of forms and methods of their use. This is due to the fact that modern military science is largely lagging behind the development of socio-political and economic processes in the world, improving the means of armed struggle, untimely use of modern practical experience of headquarters and troops in military conflicts in order to develop military theory.

When developing and justifying new terms and concepts, special attention should be paid to the methods of conducting operations and combat operations in modern local wars and armed conflicts. This area of activity is still poorly understood. No common views have been developed on the joint use of various forces and means in the course of preventing, localizing and eliminating the conflict. This problem of course can be solved by joint efforts of various government bodies. [6].

Therefore, in today's conditions, due to changes in the forces and means of the Armed Forces, it is necessary to change the approaches to the development of terms.

Improving the terminology is one of the main tasks of military science in modern conditions. When improving the terminology, it is necessary to take into account the main thing that, in general, the formation and implementation of the national security policy of the state is led, within the limits of the constitutional powers.

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FORMULATING THE SKILLS OF TEACHERS ON MAKING RESEARCH WORK – IS AN IMPORTANT FACTOR OF PROVIDING EFFECTIVENESS OF THE PROCESS OF INNOVATION

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ABSTRACT
While making strategic plans for developing Education the main attention should be drawn to the teachers' creative activities basing on vary actions. This gives an opportunity for teachers to widen their professional interests, so that to make psychological-pedagogic and fundamental researches in the methodological, theoretical directions plays an important role for formulating innovative activities of teachers. In this article depicted the new trends of teacher education for the purpose of increasing, enriching and enlarging effectiveness of Education.
KEY WORDS: *innovation, the process of innovation, research activity of teacher, creativity, problem solving method, heuristic method, teacher's portfolio.*

INTRODUCTION

While making strategic plans for developing Education the main attention should be drawn to the teachers' creative activities basing on vary actions. This gives an opportunity for teachers to widen their professional interests, so that to make psychological-pedagogic and fundamental researches in the methodological, theoretical directions, plays an important role for formulating innovative activities of teachers.

Self-development of teachers through research activities has made positive impact on acceleration of innovative processes in the system of Education.

Researching has its special place in the innovative activities of a teacher. The skills of researching have been formulated by the influence of the objective and subjective factors. Objective factor included as the new policy of the government in Education, fundamental and practical researches and global changes. Social-regional needs, the development of educational process at the Educational establishments or institutions, scientific-methodological knowledge of the pedagogic staff, their skills and abilities, development of their scientific competency, development of capacity of the institutions or Educational Establishments,

changes the specifics of management and etc to be included to the subjective factors.

The innovative changes in the process of Education, entering different type of new trends in the system of Education can be implemented directly by renewing and changing teachers' activities.

Renewing the content of Education, using new information-communication technologies and advanced pedagogic technologies and also new teaching methods, changing the requirements on planning, organizing and management in the process of Education according to the demands of time, required that the teacher who work at the Educational institution should formulate and develop his/her scientific-research competency. The researching competency of teachers has been basically formulated during the process of conducting pedagogic Piloting. In this field analyzing, developing the content of Piloting materials, using information correctly and appropriately plays very important role of education.

Addressing to the problems of formulating research skills of teachers appeared as a result of recognizing the developmental process of the innovative dynamics in the society. The aim of formulating teachers' skills on researching activities not only implementing the new modern achievements of science and technology in the process of

Education, but to teach them seeking the news, creating, adapting, applying and reviewing the taken results.

THE SPECIFIC FEATURES OF TEACHERS' RESEARCH ACTIVITY

Contemporary society, which is called Information technology and postindustrial is demanding us to be active, to make independent decisions and adapt the changing conditions of life. In turns such kind of lifestyle demands that the person should have some special qualities, as:
- to gain necessary knowledge independently, professionally using the gained knowledge for solving problems;
- working with information valuable (to know how to collect necessary facts for researching on special issue, analyzing them, to offer the hypothesis regarding to the solution of the matters, define the law, define the new issues and solve);
- know definitely where and how can be used the gained knowledge and understand using field of this knowledge;
- Independent critical thinking, understanding the difficulties which are appeared in real world and seeking the feasible way of eliminating the problems;
- Creative thinking, have a chance for creating new ideas;
- be sociable in different social groups, knowing to work together or how to rid off non standardized situations;
- working at on his/her educational, intellectual and cultural competency independently.

Here the researching activity plays an important role, For formulating teachers abilities on making research the following factors to be considered very important:
- Teachers can be gained the philosophy of creative activity;
- Knowing the pedagogic research methods and use them in the process of Education (For example: Work sheets, Questionnaire, Pedagogic Piloting, pedagogic diagnostics and etc.);
- Ability of creating authorship conceptions;
- Planning and implementing Piloting process;
- Using other scholar-pedagogue's experience;
- Cooperating with colleagues;
- be able to change opinions and give methodological support;
- seeking, finding news and adapt it to his own condition;

The main features of teacher's creativity and activity are the following:

- ability of thinking independently;
- ability of unity for the benefit both people and state;
- ability of dedication to the strategic way of the country, being consentient of time;
- responsible and being professional in his field;
- ability of showing the love for Motherland deeply;
- clearly define the forces of the world which are made to be moved;
- ability of seeing the process of social events in advance.

CREATIVITY IS THE MAIN TERMS OF RESEARCH ACTIVITIES

According to the Educational characteristics of human personality by Abu Nasr Forobi (who lived in 873 – 950 Central Asian great scientist) human is social with his own essence, so he became a human in the process of interaction, system of inter attitude and in the process of interrelations,

Socially active teacher express oneself by deeply feeling his duty and responsibilities before the society, socially-morally recognizing himself, level of readiness for great creations and great aims. New social needs caused to develop person's creative competency in the process of education. Changeable educational paradigms put the new requirements for today's teacher. Today teachers should define his own direction among the different situations of innovative technologies, innovative ideas and innovative schools and practically be ready for accomplishing the tasks regarding to chosen Innovative Education technologies.

Developing of science and technology, innovations in the world of science, today's development of the subjects as psychology, pedagogy and methodology demands teachers work hard and enrich and enlarge their skills and abilities. The main goal of In-service and Retraining teachers is to develop their creative opportunities, develop their professional knowledge and general competency, in the end, to develop the content of teaching and educating up to date young generation basing on the new technologies.

Subjective sides of creative and active teacher to be included the following:
- the teacher should know his prestige (through this he is able to respect the others);
- the teacher should keep his own position, honestly approach to his started work;
- be kind- polite;
- feel gratefulness achieved results and hope future;

- be confident and punctual;
- be an exemplary person and lead the others for the purpose of achieving goals.
- Have a spirit of equality both in life and pedagogic activity;
- Be able to unite and involve others for the benefit of Motherland and nation;
- Defining unique theory, by renewing, social attitude, changing lifestyle, provoking and consolidating democratic dignity.

For formulating teachers' creative features, his behavior, outlook, dedication to his profession, his and the institutions' true attitude to work plays very important role.

According to the ideas of scientists on pedagogy the rules of the behavior of the teacher made up his attitude to the Educational Institutions and it consists of 4 steps:

First: the attitude of teacher to the Educational Institutions (dedication, satisfaction with his work, profession);

Second: the attitude of teacher to his work place and profession (action, responsibility, be proud of his profession);

Third: the attitude of teacher to his colleagues, staff and authorities (co operation, attention, treatment, punctuality)

Fourth: the attitude of teacher to himself (health, morally confidence, the level of self management)

The creative features of teacher formulated during the above mentioned process of relations. Coming out of this, the objectives of the Teacher Training system should be drawn for developing teachers' individual abilities.

In turns the creativity helps teacher to form high qualified effectiveness, discipline, logics, the quality of implementation, innovation, enthusiasm, attitude to the creative talent, dedication to his institutions, dedication to his staff and administration and etc.

THE ROLE OF PROBLEMATIC EDUCATION FOR DEVELOPING TEACHER'S RESEARCH ACTIVITY

S.L. Rubinstein stated: "Thoughts – is a problem stood before the human and it is the wisdom which leads to solve the problems, thoughts came out of the problematic situation and it has referred to solve the problem"

By this the following logical meaning has been formed. It's very important for the society to be creative, independent thinker of the person. The process of thoughts are begun with the problematic situation and in this process the methods of problematic teaching has its own place. Problematic

teaching methods include the following: the method of project, the method of heuristics and the method of making problematic situations. For teachers for the purpose of developing the activities on research work, knowing above mentioned methods is very important and demandable.

During the process of using the method of project a teacher can:

- On making up non-standardizing problems;
- Asking non-formulating questions;
- Use extra information;
- Generalizing basing on his own practical, independent observation;
- To explain the essence of some objects without using manuals;
- Define the edge of using selected results;
- Define the level of usage selected information.
- Define the mechanism of appearing the event;
- Creatively think and find the tasks like "in a moment" and can be given to the students by adapting appropriately to their age and ability.

Heuristics (The origin of this word belongs to Juno and means – searching, finding, inventing) is a subject which is learnt the creative activities of people, and also learnt the methods which are used to create new inventions, as a subject it is developed in the range of the subjects like Psychology, Cybernetics, Structural Linguistics, Theory of Informatics

Each of us has met with the people whose thoughts are unusual, developed imagination, specific and unexpected opinions. Such kind of people we usually call creative people who are able to form new ideas.

Unfortunately at school the development of the talents which created new ideas through the image assimilation are not paid enough attention. The teachers mainly draw their attention to use the methods referring to do logical sums. Sometimes they are under the influence of restoring the new generation according to the former traditions and normative documents

The role of is not only to set up cultural traditions, but it consists of creating new ones. It's known that the nature has been created the human and gives him a chance and talent as imagining, guessing, building and creating. So each person has an ability which is called heuristics. Consequently, the heuristic methods increase the possibility of finding the solutions for the creative problems which are not always optimal but worthy to use in conditions that the early information is not complete and untruthful. Heuristic methods give an opportunity to find solutions even in a very complex

and unexpected situations. Heuristics indicated the techniques which are helped to achieve the goal.

Heuristic teaching is not aimed for recreating all the knowledge and experience of people. That's why the problem which is stand in front of a teacher is to find the most important points of the topic and to give an opportunity to the students for making early creative researches. The students are offered to get acquainted with the achievements of people regarding to the problems after creating their first products basing on their own understandings, knowledge and assumes. Here also students don't assimilate the ready materials, but they compare them with the results of their own experience.

The limits of heuristic teaching have been indicated and marked by the teacher himself, by the Methodological Council or School Pedagogic Council. Practice showed that it is possible to plan and organize learning as a creative search of students regarding to any subject, any issue and any age of them according to the syllabi. Usually students accepted with pleasure to demonstrate their own creativity and fulfilled higher than indicated measures and requirements.

THE TEACHERS' PORTFOLIO AND ITS CONSEQUENCES IN THE PROCESS OF RESEARCHING

Portfolio has a significant feature at the beginning of the researching activity of the secondary school teacher. The meaning of the word "Portfolio" is "collected folder of documents, collected folder of specialist", while translating from Italian. Portfolio is the complex of the documents and works which is aimed to demonstrate teachers own opportunity. Its main content is to give an opportunity for teacher to use all the chance and assist him to develop professionally and mentally.

There are several types of portfolio, the first type is – Teacher's achievements portfolio. It can be consist of 3 parts: 1. "Documents", 2. "The fulfilled activities", 3. "Opinions about fulfilled activities"

Documents. This part includes the private achievements during the time of study and the process of work(special merit awards, diploma, certificates. This gives an opportunity to evaluate teachers achievements.

Activities. This is the volume of teacher's creative, research and project works. Here is depicted the directions and trends of learning and creative activities of a teacher.

Opinions about fulfilled activities - here is compiled and collected written analyses of teachers relating to different activities (Summaries on tests, reviews, resumes and etc).

The second type of portfolio is – a Reflection portfolio, it is collected the professional development dynamics of teacher. It consists of self-

analyses and self-assessment of teachers for their own work, the results of their activities, analyses of the process and goals. Using observation diaries is considered as a very effective tools for developing skills on self-evaluation.

The third type of portfolio – is the portfolio of problems. It consists of the materials which are collected for the purpose of solving a certain problems, the process of solving problems and their results. This level of portfolio defined the teachers level regarding to analyses – syntheses – evaluation. Such kind of portfolio recommended to collect information to the following directions:

- The list of literature for studying the problem;
- Small topics, the area of the problem, the plan of the research;
- Point of views during the discussion;
- Quotations, aphorisms;
- Integration with other subjects;
- Summaries basing on the results of the research;
- The methods and techniques of the research;
- Predictions and future plan.

To collect materials and put them in the systematic order for such kind of portfolio not only give the teachers enough chance for doing appropriate work, but raise their interest up to the scientific level.

The fourth type of portfolio - is content based. It is created during the process of learning some large contents. Such kind of portfolio consists of information taken from additional literature, additional resources, problematic situations concerning to the topic.

Teacher can make a portfolio on the following themes: "Summary about the conducted lessons (session)". (In this portfolio is placed the reflective summaries about conducted sessions); "Questions without answers"; "Statistical Information"; "Graphic organizers"; "Quotations and aphorisms"; "Laws, Principles, Rules"; "My inventions"; "My students' creative work"; "When and which lesson I can use this"; "Comparative analyses: how the students use, how I use during the lesson; " The Bank of Ideas"; "Divers ant: the arguments on the topic and the arguments against them"; "Success encouragement: the information which help professional development in the process of work"; "Parallel world: inter-subject and in-subject relations".

CONCLUSION

It is possible to say as a conclusion that revealing hidden knowledge of the people not only depends on the teaching technique but it depends on the whole Education methodology. Personal experience of the student has been created as a part of

his educational activity in the process of learning. The activity of the teacher as a researcher gives not only the opportunity of transferring his knowledge to the students but gives the chance of evaluating his own activities, the ways of assimilating learned subject and expressing the results of learning. The imagination is unlimited and its appearance specifically depends on each person himself. That's why, through the creative activity the matter making lessons more brighter, more interesting and heuristic, more dynamic in the teaching process are loaded to the teacher. For this matter the Teacher's Portfolio together having been the folder which is collected the teacher's personal achievements, evaluation tools and also special systematic information folder for monitoring teachers knowledge, ability and skills, the tool of self- analyzing, defining tool of relative development, measurement of the level of cognitive thinking and the report of the teaching and learning process.

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PSYCHOLOGICAL BASICS OF FOREIGN LANGUAGE EDUCATING

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ABSTRACT
This article examines the specific essence of psychological approaches in professionally–oriented mechanism to acquiring foreign languages in non–linguistic majors of universities. This way is extremely actual as it improves students` capability to speak foreign languages in specific professional, academic or else business branches as well as situations, taking into consideration the characteristics of professional thinking. Furthermore, psychological approach to foreign language educating must be closely connected with cultur oriented method as the leading one and recognized as a priority in the focus of the education renewal. It is undeniably true that in the article it is proved how cultural background is of great essence. In particularly, according to this very paper, author pursuis specialists, professors to integrate psychology culture into the foreign language syllabus.
KEY WORDS: *individual features, psychological basics, teaching foreign languages, psychological approaches.*

INTRODUCTION

As we know that education process of university which is a complex multi–dimensional unity. Owing to the originality of the ambitious goals, content, forms, objectives as well as methods of the acquiring process, besides, due to the age along with psychological characteristics of students every university has its own picturesque strategies. That is to say, socio–economic conditions require graduates of each universities, for instance, qualities as entrepreneurship, willingness to adjust to new working circumstances. A specialist in the workplace has to share with an abundant flow of information that he/she needs to properly accept, process and transmit, which is impossible without the presence of personal communicative skills.

It is obvious that high level of attention switching, visual memory, high speed and accuracy of thought operations are also important. A vast majority of students who have difficulty in finding out their direct and appropriate ways of learning foreign languages to some extend. However, most of universities scholars, philologs or else researchers, professors have mentioned the strengthening of the introvertness of the person in the process of learning, the dominance of cognition motivation, desire for autonomy, lack of desire to dominate, consciousness, responsibility, low feeling when dealing with fellow students, a critical attitude to the environments. [1]

It is the fact that the notion of skills is one of the arguable and debatable in psychology. On a daily basis, any functions, states, or processes of people`s psyche are unreasonably attributed to capacities. Therefore, people have still talked about a one`s capability to consider, to notify, to recall, about the skill to experience emotions and so on. Certainly, ability which becomes inborn talent or inner emotions that are covered up the individuals` sincere or heart maximally.

What is more, it is obvious that until the 19th and 20th centuries, it was commonly relied on psychology as well as pedagogy that capabilities are a high grade of knowledge, abilities, which supplies a person with a certain grade of success in presenting different kinds of activities. This means that is partially utilized at current time. As a matter of fact that the highest

level of formation of these characteristics widely ensures the success of the work.

RESEARCH METHODS

It is known that there are a wide range of approaches to the professional activities as well as individuality of the educator and learner who testify to the scope of work in this direction. It is the fact that whatever these mechanisms along with directions from classical, which means that knowledge transference and ability; to innovate or to create a convenient atmosphere for education, it is significant to give a holistic description of the personality of a high school educator who initiates activity and a creative search for students.

At present knowledge as well as the enhancement of personality of both teachers and students remain the primary notion of higher education. Therefore, if any teachers, who love their professions, students, getting knowledge, make a decision to tackle any issues as quick as possible with maximum results.[2]

What is more, it is undoubtedly true that current educators who are really engaged in learning how efficacious today`s global information or not effective to some extend. This is mainly because how one acquires, learns new information and keeps in mind previous information guides option of long–term learning goals and methods of effective instruction.

Self–awareness, additionally, the skill to express oneself, which is connected with the processes of execution important for self–management. In western countries, in social psychology, self–consciousness is frequently explained by theoretical psychologists who are named Robert Wicklund as well as Shelley Duval, in relationship with the theory of objective self–consciousness.

The most significant component of awareness, one of its components, is self–consciousness. It is the fact that animals are unable to understand the psyche built into them. Via comprehending the program of their lives, they do not analyze their movements along with making a comparative evaluation of them. Self–consciousness is only the special centre of the mankind mind – it is the iseolation of a person from the outside world, the assessment of his capabilities and capacities, emotions, thoughts, place, actions in society and so on in other words, to find out oneself as a united and unique person.

Contemporary educators ought to improve such professionally essential individual qualities as: goodwill, honesty, conviction, professional ethics, active life position. Necessary factor in the upbringing and education of the individuality of a student, is the attitude to the profession as the principal task of life, the skill to self–giving, inspiration, enthusiasm.

We should not forget about a variety of spiritual needs, interests, objectivity of self–esteem, patience, optimism, professional self–development and culture of behavior. The success of professional activity hinges on the severity of these components, on the level of formation of the teacher`s professional qualities. His most important task is to develop students ` need for self–esteem, self–analysis and self–improvement. It is important to awake the inner activity of the students, to maximally increase their independence in the whole spheres of life. [3]

RESULTS

Training of would be specialists ought to be completed by the formation of a personality and the acquisition of life and professional experience in a sociocultural context. The main idea of such an educational system is to replace the abstract acquiring process with the practical experience of students in real life. The exaggeration is on the interests of the individual, the method of project training, psychological approaches. By this training, the educator becomes the coordinator of the practical activities of students.

Teachers today need to build their relations with students in accordance with the laws of cultural life, in the professional sphere. We need a new type of teacher, for whom such a method of pedagogical and psychological interactions would be organic and comfortable. The principal thing is that the student has passed the key stages of the formation of socio–cultural and professional awareness. The teacher must be competent and from psychological point of view so as to properly organize the learning process, besides, to have certain professional and personal qualities.

DISCUSSION

Teachers opt for creatively strategious of work, that give students good possibilities or facilities to their futer lives taking into consideration all the advanced experience of psychological and pedagogical thought in foreign languages, for example, English, Russian, Chinese, French and overseas. It is undoubtedly true that educators draw the students` attention to the linguistic features of their native country in comparison with the elements of the language being studied.

Not only linguistic, but also sociopolitical features of the native country and countries of the target language are subjected to a comparative analysis. In the professional field this is particularly important, since the solution

of essential problems depends on cultural and national factors. Frequently the work on the study of the mentality of the British, their characteristics and habits is accompanied by different videos, computer presentations that play a necessary role in the formation of sociocultural competence. This process is even more captivating when the students themselves are participants in role–playing games, dramatization, performing certain features of the manifestation of the national character in the professional field. Modeling real–life situations of professional orientation is an integral feature of the occupation. [4]

Everyone accepts the notion that language is a means of communication, but there is much less agreement about just what is involved in the ability to communicate. The distinction between "linguistic competence" and "communicative competence" is either not explicitly taken into account in the majority of foreign language (FL) courses or it is tacitly assumed that the former must precede the latter in such a way that a certain high level of linguistic competence must be achieved before attempting the functional use of the FL.

Arguments will be presented which show the harmful consequences of this practice. "Liberated expression" and the practical use of a FL is both desirable and possible at even the very beginning stages of study. A new attitude to the assessment of communicative skills (rather than language skills) is long overdue in the language testing field. [5]

We should experiment on teaching foreign languages following categorises:

➢ *Psychological basics;*
➢ *Pedagogical approaches;*
➢ *Intellectual skills;*
➢ *Communicative approaches;*
➢ *Highly quality of professors;*
➢ *Highly intelligent of both teachers and students;*
➢ *Understanding of culture;*
➢ *Comprehending of internship;*
➢ *Comprehension of language;*

Abovementioned work is carried out both in class and during extracurricular activities. Students become active participants in scientific conferences, youth forums, additionally, a variety of meetings where it is significant to express themselves as a fully developed personality, included in the context of professional approach. These types of meetings or international conferences will be came in handy with the students` milestones in the enhancement of both a professional and a person of culture. this is facilitated by the knowledge gained in professional foreign language environment, which

is held in the focus of the rapprochement to the national and cultural distinctions of countries, emphasizing common points and consentrating on features. [6]

Intercultural communication becomes decisive in almost the whole aspects of the activities in educating students a foreign language. There are a great number of examples how this process takes place in the classroom. Initially, foreign language teachers should be knowledgeable and really appreciative intellectual power if they are attempting to explain students what they are, the British.

By comparison of other countries teaching processes we can see that how important psychological as well as pedagogical approaches, experience at teaching process maximally, skilful at educating foreign languages in harmony. Especially it will be thoroughly tactful to realize the world and its collaborative enterprises or else the most specific methods or strategious of achieving the number of goals, objectives, purposes, ambitious plans in an equal manner and in an perfect manner.

The role teachers and students are the most valuable and substantially significant to create psychological and pedagogical succed in the education system on a regular basis. This is mainly because, both students and teachers can act themselves not only as a specialist in teaching and learning proceses, but also as an intermediary between the native and foreign language culture in a perceptible manner. Culture which is understood as spiritual values of the lessons. [7]

It should be focused on avoiding some obstacles which are meant the occupation of young ones` mentality by showing colourful and wonderful features of media, such as fascinating virtual games, interesting social films are based upon appealing the young to be altered their future intentions, future plans or future objectives in a sensible manner. It is universally true that ''Actions speak louder than the words'', current social lives or policy that manifest itself as a real life. This is mainly because both above point of views which are devoted to get better and better young generations` mentality even if they are diving into utilizing social media platforms at present.

CONCLUSION

Finally, it should be noted that cognitive activity involves in a wide range of activities or taks. That is to say, an integral part of distinctive kinds of both extracurricular and educational activities of students, contributing to the deepening and widening of sphere of knowledge of students in their selected speciality. Overall, psychological basics or approach to

education in the context of culture, the upbringing of human culture will support to overcome the crisis and allow every countries to take its right place among developed ones.

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THE IMPACT OF BEDTIME COMPULSIVE SOCIAL MEDIA USE ON STUDENTS' QUALITY OF SLEEP IN THE COPPERBELT COLLEGES OF EDUCATION, ZAMBIA

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ABSTRACT

This study investigated the relationship between bedtime Compulsive Social Media Use (CSMU) on students' sleep quality in the Copperbelt Colleges of Education, Zambia. Mixed method was utilised to solicit data from a sample of five hundred and seventy-nine (579) college students who were drawn from three (3) public and three (3) private colleges. Bergen Social Media Addiction Scale (BSMAS) and Pittsburgh Sleep Quality Index (PSQI) scale were utilised for data collection. Quantitative data were analysed using Statistical Package for the Social Science, whereas qualitative data was analysed using thematic analysis. Findings showed provision of pleasure as motive that compiled students to use social media during bedtime. Besides, it was established that students were spending less than 8 hours of sleep. However, the negative correlation between CSMU and sleep quality was evident. Therefore, the study recommends that college managements should conduct awareness programs to educate students on the negative effects of excessive usage of social media, particularly during bedtime.

KEY WORDS: *Bedtime; Social Media; College Students; Quality of Sleep; Copperbelt Zambia.*

INTRODUCTION

Social media is a prevalent communication channel that is extremely fast, broad and compelling (Dearborn, 2014). Until now, it has spread across the globe with remarkable speed, and several studies have reported a rapid increase in social media accessibility and usage (Smith & Anderson, 2018; Statista, 2019; Kemp, 2021). Besides, social media users have continued to surge, with nearly half a billion new users within a short period taking the global total to almost 4.2 billion by the start of 2021 (Kemp, 2021). A regulatory body called Zambia Information and Communications Technology Authority (ZICTA, 2018) reveals a steady growth in the adoption and utilisation of social media among Zambians. For example,

Zambia's amount of social media consumers extended by 360 thousand (+19%) between April 2019 and January 2020 (Kemp, 2021). Social media progression in Zambia remained at 13% in January 2020, and it has been accounted for to be on the increase among Zambians youthful population (Akakandelwa &Walubita, 2017; Kemp, 2021; Silomba et al., 2021). The growing affordability of more advanced mobile technologies such as handheld devices (smartphones and tablets), computers and mobile data has increased social media access. Subsequently, the geometric increase in social media connectivity and networking improvement from 2G, 3G, 4G, and the projected 5G mobile broadband has also increased the students' demand for social media accessibility.

One of the most striking consequences arising from the unprecedented upsurge in social media use seems to be a fundamental change in how students deal with social media during bedtime in today's pervasive technology. Instead of using it to get in touch with others or for provision of entertainment only at certain points in time and for a specific amount of time, many students have now engaged in the habit of being almost permanently online, even during bedtime (Lund et al., 2010; Vorderer et al., 2016; Scott et al., 2019), a trend purported to induce poor quality of sleep (Bhat, 2017; Oche et al., 2019).

As literature holds, poor quality of sleep is caused by a host of reasons which has numerous negative consequences (Lund et al., 2010; Vorderer et al., 2016; Garett et al., 2018; Scott et al., 2019), and it is often termed either acute sleep deprivation or chronic partial sleep deprivation (Lund et al., 2010). Sleep plays a huge role in the healthy lifestyle of an individual, but with todays' surge in social media usage, several upcoming factors may deter this vital function, causing poor quality of sleep. Many college students access social media daily. In that case, social media has become a significant part of their lives. At present, as all information is instantly available on social media platforms, it becomes challenging to disregard it even during bedtime. As Vorderer et al. (2016) advanced, social media users desire to stay engaged online and habitually prefer to keep their smartphones in closeness, even during bedtime, to ensure quick responses to their friends online. As such, social networking has become a daily practice in almost every student, which in turn adversely affects their sleep patterns (Scott et al., 2019).

Studies have reported that the number of social media friend student be-friend may also account for why students sleep late (Bhat, 2017). This occurs for multiple reasons; however, it is essential to note that quantity and quality of sleep are often situation-dependent, with many aspects of the students' activities exacerbating it. For example, some studies indicate that students stay awake because of their gratification of chatting online, attending to oncoming messages immediately, checking on updates, or reaching the next game levels (Sharma & Shukla, 2016; Cramer & Inkster, 2017). Another related study done by Buran & Doǧan (2018) discovered that students had more than 250 friends. In contrast, Petersen & Johnston (2015) asserted that student had between 301 to 400 Facebook friends. Furthermore, Johnston et al. (2013) indicated that students at a university in South Africa had between 100-150 Facebook friends. Although the numbers of followers varied, we can argue that just having more than 100 followers makes a student be too overwhelmed during bedtime social networking.

Reliable information that has been documented in other countries revealed significantly sleep problems due to inadequate sleep among the students (Adams et al., 2016; Abdalqader et al., 2018; Oche et al., 2019). A study conducted by Nasirudeen et al. (2017) reported that an overwhelming number (97.6%) of students used to sleep less than 7 hours. Subsequently, an earlier study was done by Lund et al. (2010) in Virginia, USA, reported that the majority of the college students were sleeping less than 8 hours. This showed that students used to prolong their stay on social media, especially in bed, and the trend had to yield adverse effects on students' daytime sleepiness. However, the empirical evidence seems to be problematic. For example, the American Academy of Sleep Medicine and Sleep recommend between 8 to 9 hours per night regularly for young adults (Hirshkowitz et al., 2015; Watson et al., 2015). Sleep length suggestions given by such specialists are fundamental guidelines and help inform the populace regarding mediations, approaches, and healthy sleep practices (Hirshkowitz et al., 2015).

As earlier indicated, students' CSMU could result in negative consequences, which in turn affects the quality of sleep (Garett et al., 2018; Lin et al., 2019). Some adverse effects may arise from behavioural, whereas others may be generated by physiologic (Hershner & Chervin, 2014; Garett et al., 2018; Scott et al., 2019). For example, studies indicate that CSMU around bedtime is associated with reasons students develop difficulties falling asleep, repeated awakenings, or waking up too early (Hershner & Chervin, 2014). Most young adults prefer to leave their phone on during sleep, with only a few turning it to silent or vibrate modes (Hershner & Chervin 2014). Equally, a study that was done by Levenson et al. (2017) in the USA reported that CSMU during the day might displace time that was intended to be given to finishing various tasks (Levenson et al., 2017). The situation has been consistently voiced by other scholars who showed that time spent using social media might dislodge other daytime exercises as such school work that is then postponed and upset bedtime schedules (Vorderer et al., 2016; Scott et al., 2019).

Besides, other studies have also advanced physiological aspects as reasons that make students experienced more challenging to fall asleep. For example, Oche et al. (2019) surveyed the prevalence and effect of social media on sleep among Nigeria students. They indicated that more than half of the students complained of poor sleep quality, fatigue, and sleepiness during the day and difficulty coping with academic activities. Consequently, it is conceivable that

students are bound to stay watchful for incoming online media alarms or react to these during bedtime, thus exacerbating excitement and eye pains due to prolonged exposure to phone light that adds to difficulties falling asleep once more (Garett et al., 2018).

Regarding the direction on the relationship between social media use and quality of sleep, Lin et al. (2019) carried a cross-sectional study to investigate its relationship, using a total sample of 503 students in Taiwan. The study's findings demonstrated a significant negative association between the degree of Internet addiction and sleep quality. In another related study, Yang et al. (2019) revealed that up to 95% of respondents were in the routine of using their smartphones before their sleep. The study showed a negative correlation between smartphone dependence and sleep duration. Given the evidence from other parts of the globe, it may be assumed that the situation may also be apparent in Zambian. However, until now, there has been a shortage of studies investigating the aspect of CSMU and quality of sleep in the context of students on the Copperbelt Province of Zambia. In an attempt to fill up the observed gap, three questions were raised as guides. These include:

1. What are the reasons behind students' use of social media at night?
2. How much time do students spend at night sleeping after using social media?
3. What relationship exists between students CSMU at night and sleep quality?

SIGNIFICANT OF THE STUDY

Social media use has become one of the leading daily activities of college students. However, there is a dearth of literature on various aspects of social media, particularly on the quality of sleep, which is now a vital part of many college students' lives in Zambia. As such, the findings may help generate public awareness of the adverse effects of CSMU on sleep quality. It may also better support realistic discussions on best practices that consider the context of current students' social media norms. Lastly, the study may also stimulate more investigation in a similar field.

METHODOLOGY

The research employed the interpretive and positivist paradigm, a mixed-methods approach to carry out the research. The two approaches provide insight into the research problem than the single-handed system (Baskarada & Koronios, 2018). From this understanding, it's undoubtedly that the truth from the two standpoints closes up gaps in one approach by the other (Creswell & Creswell, 2018). Data was solicited from a sampled of five hundred and seventy-nine (579) college students who were drawn from three (3) public and three (3) private colleges of education on the Copperbelt. Two sampling techniques were utilised to draw the sample, that is, stratified random and simple random sampling. Modified Bergen Social Media Addiction Scale (BSMAS), a self-reporting survey, was used to assess students' CSMU (Silomba et al., 2021). Similarly, the Pittsburgh Sleep Quality Index (PSQI) was used for poor sleep data collection quality. PSQI scale developed by Buysse et al. (1989) is a commonly used instrument to evaluate sleep quality and is believed to be valid and reliable (Xu et al., 2016; Zhang et al., 2016). The scale has 19 questions and seven clinical themes. It includes subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbance, sleeping medication and daytime sleepiness (Cole et al., 1989). The benchmark for measurement is that the higher the score, the poorer the quality of sleep. In the current study, six-items were adapted and utilised. Cronbach alpha for overall sleep quality was .846 in the present study. Data obtained was analysed using the Statistical Package for the Social Science, Version 23 and thematic analysis. The strength of the correlation between CSMU and poor sleep quality was measured based on Akoglu (2018) guidelines. The researchers obtained ethical clearance from the University of Zambia (UNZA) ethical clearance committee, and the Ministry of General Education authorised permission to conduct the study in the sampled colleges.

RESULTS
Respondent's Demographic Characteristics (Quantitative)

Six hundred questionnaires were circulated; out of which 579 were returned, yielding a response rate of 96.5%. Table 1 presents the respondents' demographic characteristics broken down as follows: 434 (74.9%) of the respondents were from public colleges, and 145 (25.1%) were from private colleges. Two hundred and ninety-two (50.4%) were females, and 287 (49.6%) were males. Furthermore, 92 (15.9%) were aged 19-20 years, 327 (56.5%) were aged 21-25, and 160 (27.6%) were over 26 years old. Besides, most of the respondents (73.7%) were single, while only 26.3% were married.

Table 1: Demographic Characteristics

Variables	Values	Frequency (n= 579)	Percentage
College status	Public	434	74.9%
	Private	145	25.1%
Gender	Male	287	49.6%
	Female	292	50.4%
Age in years	19-20	92	15.9%
	21-25	327	56.5%
	Above 26	160	27.6%
Marital Status	Married	152	26.3%
	Single	427	73.7%

Discussant' Demographic Characteristics (Qualitative)

Forty-two discussants (18 females and 24 males) participated in the FGDs, which comprised six groups. To ensure confidentiality, the discussants are represented by the symbol: FGD 1, 2, 3, 4, 5, and 6. The numbers 1 to 6 are symbols for a college where the discussants were drawn.

Social media use and Student's quantity of sleep
Student's degree of social media usage

Respondents were asked to rate themselves regarding the magnitude of their usage of social media at night in the past one year, most of the respondents (55.3%) rated themselves very heavy users of social media, whereas 25.9% of the respondents rated themselves heavy users. Equally, 14.7% of the respondents rated themselves, moderate users of social media, while the minority (4.1%) rated themselves rare users of social media (Table 2).

Table 2: Degree of social media use at night

Type of user	Frequency	Percentage
Rare user	24	4.1
Moderate user	85	14.7
Heavy user	150	25.9
Very heavy user	320	55.3
Total	579	100.0

Students' Logging Status and Number of Followers

Respondents were asked to determine how long they stayed logged on their social media sites during the night. Table 3 reveals that 86% of the respondents were permanently online during the night, while 80.3% were ever online during both day and night times. The results further revealed that 13.3% of the respondents had 1-10 followers, 12.4% had 11-50 followers, whereas 11.7% had 51-100. Additionally, the majority (62.5%) had above 500 followers (Table 3).

Table 3: Logging status and the number of followers

Variables	Values	Frequency	Percentage
Permanently offline during bedtime till morning	No	498	86.0%
	Yes	81	14,0%
Permanently online during day and night	No	114	19.7%
	Yes	465	80.3%
Number of Followers	1-10	77	13.3%
	11-50	72	12.4%
	51-100	68	11.7%
	>500	362	62.5%

In addition, one of the main concerns that the discussants highlighted was the demand for responding to the increasing numbers of followers on social media. Most of them reported that it was not easy to log out of social media as they had more than 100 followers. The quest to attend to their demands as well as to the needs of their followers ignited frequent visitations to their preferred platforms. Below are extracts from three discussants expressing their views on this issue:

I frequently check my phone before I sleep to see what is going on or what has come up. When I find an update, I respond, view, read, and post new messages, thereafter wait for feedback from friends while surfing other areas. Moreover, I have more than 600 social media friends, especially on Facebook, so I fear losing essential information from them (FGD 2).

The number of my followers is not static; it changes weekly. Currently, I have 650 followers with whom I constantly interact' (FGD 3).

I have above 1000 friends, and I receive a lot of requests from them on a daily basis, particularly on Facebook as well as other platforms. So I have less hours sleeping because of the need to attend to them' (FGD 6).

Student's quantity of sleep

Respondents were asked to estimate the number of hours they spent sleeping at night. As shown in Table 4, 19.7% reported that they slept for 8 hours and above whereas the majority (51.3%) slept between 5 and 7 hours; and the rest (29.0%) slept below 5 hours. Overall, 80.3% of the respondents slept for less than 8 hours.

Table 4: Time student spent sleeping after visiting social media

Time	Frequency	Percentage	Cumulative Percent
8 hours and above	114	19.7	19.7
Between 5 and 7 hours	297	51.3	161.4
Below 5 hours	168	29.0	100.0
Total	579	100	

Findings from focus group discussions yielded similar trends in comparison to those of the quantitative outcome. Majority of the discussants were spending less than 7 hours, while very few reported spending more than 8 hours of sleep. For example, one discussant gave a worrying comment: "*each time I am on Facebook at night, the hours I spend does not matter. Sometimes I break the night interacting with friends particularly those whose status show online*" (FGD1).

REASONS FOR USING SOCIAL MEDIA AT NIGHT

Table 5 shows the reasons that compel respondents to use social media for extended hours during bedtime. Most respondents used social media to read the latest news (93.6%), check what was going on in the world (91.5%), update their status (84.8%), public messaging (81.8%), seeing friends on WhatsApp videos (75.6%), posting selfies (71.6%), following their favourite stars (68.5%), reducing restlessness (63.0%), and spreading rumors (46.2%).

Table 5: Reasons for using Social Media at Night

	Responses		Percent of Cases
	N	Percent	
Reading latest news and updates	541	13.8%	93.6%
Checking what is going on online	529	13.5%	91.5%
Updating own status	490	12.5%	84.8%
Public messaging	473	12.1%	81.8%
Love to see a friend on WhatsApp videos	437	11.2%	75.6%
Posting selfies	414	10.6%	71.6%
Follow my favourite stars	396	10.1%	68.5%
To playing games	364	9.3%	63.0%
Spreading rumors	267	6.8%	46.2%
Total	3911	100.0%	676.6%

Findings from FDGs revealed that most discussants used social media mainly to connect with friends, seek information from online communities One discussant said that:

Social media makes my relationship more splendid and more trustworthy. With its power, I chat with friends and get more information from them (FGD 5).

In addition majority of the discussants narrated that social media was an agent of socialization as it provided a source of entertainment. This was captured in the statement from one discussant below:

I love spending time socializing through social media at night. Facebook provides me with entertainment. I like downloading funny

fancy video materials and watch them besides Facebook is quite an excellent socializing venture (FGD 3).

Figure 1reveals that 66.8% found it difficult to sleep because of fear of missing out; 66.2% use to experience headaches or pain in the eyes; 64.7% could not sleep because of thinking about things they had not done on social media; 64.4% of the respondents reported that their mobile phone screen lights kept on disturbing them even when they were switched off during bedtime; 64.3% of the respondents reported that they often dosed during lessons due to lack of adequate sleep at night. Finally 60.8% woke up prematurely in the night to attend to social media demands.
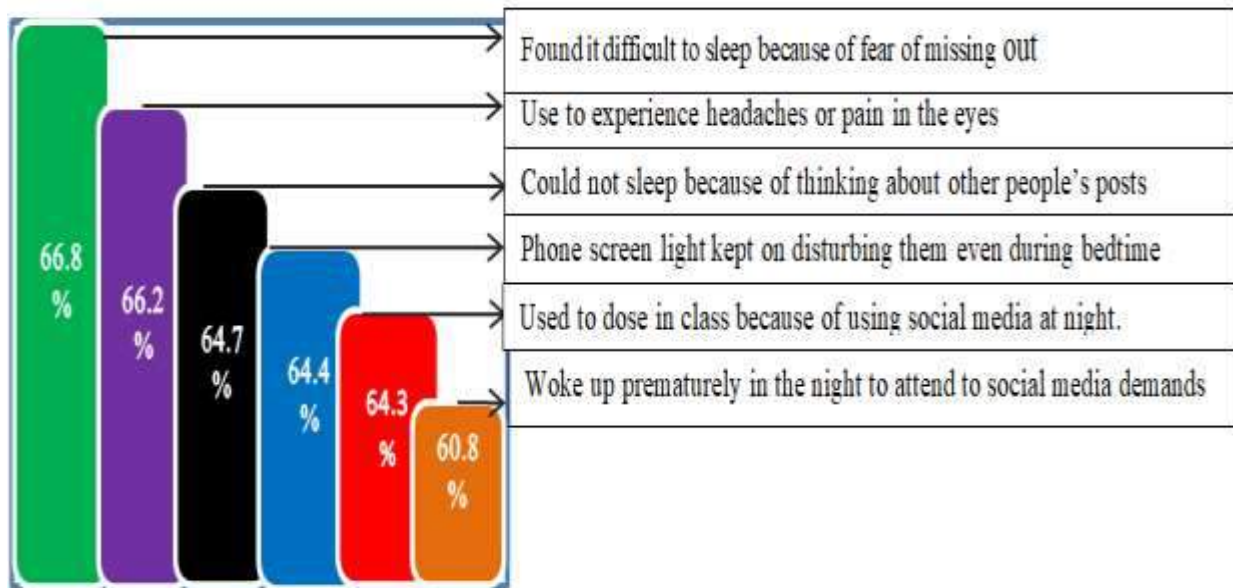
Figure 1: Effects of social media use at night

CSMU and students' quality of sleep

Quality of sleep was measured using six (6) items which were scored on a 1-5 Likert scale. In this regard, sleep quality were classified as Very poor quality (24-30), poor quality (18-23), good quality (12-17), and very good quality (6-11). Summarized in Table 6, the results reveal that 39.6% of the

respondents experienced very poor quality sleep, 23.5% experienced poor quality sleep, 26.4% experienced good quality sleep, and 10.5% experienced very good quality of sleep. When the first two levels (very high and high) are combined, the results revealed that 63.1% of the respondents experienced very poor quality sleep behaviors.

Table 6: Classification of quality of sleep

	Frequency	Percentage	Cumulative Percent
Very poor quality	229	39.6	39.6
Poor quality	136	23.5	63.0
Good quality	153	26.4	89.5
Very good quality	61	10.5	100
Total	579	100.0	

A Pearson correlation test was conducted at alpha = 0.01 to examine the relationship between CSMU and sleep quality among the students during bedtime. Results as presented in Table 7 below revealed that CSMU was negatively correlated with quality of sleep (rho = -0.113, p = 0.006).

Table 7: CSMU and Quality of Seep Correlation

Health conditions	Mean	SD	Pearson Correlation Statistic	P-Value	Comment
Degree of quality of sleep	14.41	6.861	-.113**	.006	Negative correlation
**. When the correlation is significant at the 0.01 level (2-tailed).					

Discussants were also asked to narrate their views about their social media habits around bedtime and what they thought social media had on their sleep quality. The findings were categorized into three subthemes, namely: difficulties falling asleep, premature awakening and sleep disturbances due to unhealthy related condition (Table 8).

Table 8: Impact of excessive usage of social media at night on quality of sleep

Theme	Extracted Narration
Difficulties falling sleep	*Most of the times, I fail to catch up on sleep because of my quest to be fully updated all the time with online feeds. But sometime, I blame myself. You know, I would set time to myself that I will sleep at 21:00 hours, but once I open my Facebook page, I lose track of time, and I end up sleeping very late, mostly around 02:00 hours (*FGD 4).
Premature awakening	*I encounter the problem of sleepless nights due to the desire to maintain online interaction. So I wake up even in the night prematurely to interact, and sadly, it becomes challenging falling asleep again. It has impaired my night sleeping style (*FGD 3).
Sleep disturbances due to unhealthy related conditions	*My eyes sometimes pain a lot when I stay long online. Although I know that staying long online is quite harmful, I can't back out logging online because it makes my interactive social life to be at peace. So, I check the phone frequently, and in the end, I lose track of sleeping time* (FGD 5). *The phone light keeps on reflecting in my eyes even if the phone is off. So I struggle to sleep, my eyes pain and sometimes I develop body weakness and even headache, which makes me inattentive in other activities. I also doze off during boring lectures* (FGD 1).

DISCUSSION

This study has established that students were using social media during bedtime to read the latest news, check what was going on worldwide, update their status, public messaging, see friends on WhatsApp videos, post selfies, follow their favourite stars, reduce restlessness and spread rumors. These motives are similar to what prior scholar obtained (Lin & Lu., 2011; Sharma & Shukla, 2016; Cramer & Inkster, 2017; Buran & Doǧan, 2018; Meşe & Aydın, 2019). However, the general explanation in the current study may be that students seem to point at using social media at night for leisure gratifications driven by entertainment and socializing. In this regard, the motives seem to point at the provision of pleasure as they interact with many friends. This reflects college student's strong incentives to pursue their inner and external gratifications at night. However, based on the constant increase in the number of captivity apps and continued technological advancements (Meşe & Aydın, 2019; Kemp, 2021), the implication could be that students will continue with such a trend more than ever before in the near future. As such, the situation seems to be alarming and require urgent attention.

Furthermore, a significantly poor quality of sleeping behaviour among the students was revealed with varying consequences such as difficulties falling asleep, premature awaking and sleep disturbances due to unhealthy related conditions. The findings of this study are in line with previous studies (Galambos et al.,

2011; Levenson et al., 2017; Garett et al., 2018: Lin et al., 2019). The findings have established a weak negatively correlated between excessive use of social media and quality of sleep. However, finding appears to be situational or bio-directional, and it depends on the student's behavioural usage of social media during bedtime. The results imply that when a student engages in excessive use of social media poor quality becomes apparent. Similarly, when a student experiences low levels of social media use this may results into high levels of good quality sleep. In this regard, the finding may support the discoveries that were done by Yang et al. (2019) and Lin et al. (2019). These studies found a negative association between the degrees of Internet addiction and sleep quality.

CONCLUSION

This study has established pleasure as the motives that compelled students to engage in excessive social media usage, resulting in less sleep during bedtime. Besides, results demonstrate a significant relationship between excessive use of social media and the quality of sleep. Therefore, the researchers recommend that college managements should conduct awareness programs to educate students on the negative effects of excessive usage of social media, particularly during bedtime.

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Settings of Teak Community Forest of *Tectona grandis* L.F Results in the Delay Cutting System as Environmental Sustainability Development in South Konawe Regency, Indonesia

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ABSTRACT

The community forest was previously managed simply by cutting down the system needed to meet the needs of community life. The results obtained by the community with the system are less than optimal and not sustainable. This study aims to analyze the size of the Teak (Tectona grandis L.F) community forest cutting allowance in the settings of harvesting delayed forest products in the Mepokoaso Farmer Group in South Konawe Regency. This research was conducted in community forests in Watudemba Village (Palangga District) and Ulu Lakara Village (South Palangga District), South Konawe Regency from June to August 2018. The object of research is divided into two, namely farmers and teak community forests. Data is collected by census for the first object of 8 (eight) farmers and for the second object using a random sampling method to place 17 plots. Analysis of cut data uses a method based on area and increment. Findings revealed that Palangga and South Palangga sub-districts in South Konawe Regency have the same type of soil and different types of soil. The Palangga Subdistrict has Gleisol soil type with an area of 1.396.3 ha or 7.9%, Mediteran area of 4.117.1 ha or 23.2% and Pedsolik area of 12.266.6 ha or 69%. While South Palangga Subdistrict has Kambisol soil type with an area of 2.578.72 ha or 20.1%, Litosol with an area of 3.547.28 ha or 27.7%, Mediteran with an area of 1.678.37 ha or 13.1% and Pedsolik with an area of 5.000.62 ha or 39.1%. Regulation of teak community forest products in the delayed cutting system is based on the area having a yield of 0.66 ha.year-1 (117.44 $m^3.year^{-1}$) and the method based on volume-increment using the Von Mantel approach has a harvest yield of 234.88 $m^3.year^{-1}$. Whereas based on the Austrian approach it has a harvest yield of 134.85 $m^3.year^{-1}$.

KEY WORDS: *cutting quota, delayed cutting system, setting of forest products, teak community forest, type of soil*

INTRODUCTION

The many benefits obtained from the development of community forests, make many areas in Indonesia, especially Watudemba Village, Palangga District and Ulu Lakara Village, South Palangga District, South Konawe Regency which develop teak community forests (*Tectona grandis* L.F). The community forest was previously managed simply by cutting down the system needed to meet the needs of community life. The results obtained by the community with the system are less than optimal and not sustainable. Anticipating the problem, in 2016 the people who are members of the Mepokoaso Forest Farmers Group (FFG), participated in the delayed cutting system program which was considered as a solution to overcome the need for cutting system. According to Eldeeb et al. [1], the succession of forest management systems in the world and especially in Indonesia shows the uncontrolled destruction of forests. It was triggered by the existence of a forest management paradigm in timber extraction [2]. Although this paradigm later turned into timber management which was a little more advanced at the level of the concept, but the practice is not much different from the era of timber mining which still continues to this day. The application of conventional forest management systems has failed due to human concern which is only oriented to economic benefits alone, without regard to aspects of ecosystem balance. It was then made worse by increasing population. The logical consequence of the increase in population is the increasing need for food, fuel wood, wood for tools and carpentry, livestock forage food and a decrease in the ratio of agricultural land ownership [3].

The increasing social and economic problems that lead to forest destruction, a new forest management paradigm is needed [4]. Thus, through the 8th World Forestry Congress in Jakarta in the theme of forest for people, the paradigm of timber management changed to a more holistic and comprehensive social forestry addressing the problems of community welfare and environmental sustainability [5]. One implementation of the social forestry paradigm is the development of community forests.

The development of community forests has many benefits, both from the economic and ecological aspects [6]. The economic benefits of community forests can help meet the demand for wood, increase community income and be able to provide employment, while the ecological benefits of increasing the productivity of critical land, able to play a positive role in controlling erosion, improving soil fertility, regulating water systems, providing oxygen, and carbon sink.

Cutting delayed system is a scheme to not cut or delay the felling of trees in order to reach the age of harvesting in order to obtain optimal economic and ecological value of the tree [7]. In order to achieve the fulfillment of economic and ecological benefits in accordance with the objectives of the delayed felling program loan from the Public Service Agency for the Center for Forest Development Financing, forest product regulation is needed. Thus, based on the description, this study aims to analyze the regulation of teak community forest products in the delayed logging system.

MATERIAL AND METDOS
Research location and time

This research was carried out in a community forest in the delayed cutting system in Watudemba Village, Palangga District and Ulu Lakara Village, South Palangga District, South Konawe Regency. The research was conducted from June to August 2018. The topography of Watudemba Village is at an altitude of 136 m above sea level, while Ulu Lakara Village is at an altitude of 23 m above sea level. The location of Watudemba Village is in the forest, most of which are outside the forest area. However, a small portion is included in the forest area. Meanwhile, Ulu Lakara Village has a large portion of the forest outside the forest area, but a small part is inside the protected forest.

Population and sample

The community, namely the community forest farmer group with a delayed felling system in Watudemba Village, Palangga District and Ulu Lakara Village, South Palangga District, totaling 8 people. The selection of respondents uses a census approach, meaning that the use of the entire population without having to draw research samples as units of observation. If the subject is less than 100 peoples should all be taken, if the subject is large or more than 100 peoples can be taken 10-15% or 20-25%. Population (teak stands), namely: all teak stands included in the delayed felling program in Watudemba village, Palangga sub-district and Ulu Lakara village, South Palangga sub-district with an area of 13.2 ha. While the area of tree samples in this study was determined with an intensity of 5% of the population that is 0.66 ha. Where, the area of one plot is 0.04 ha, so the number of plots taken is 17 units. Placement of plots is done by using random sampling without replacement ie members of the population who have been selected do not have the opportunity to be re-elected as samples.

Research variable

The variable observed in this study was tree growth include: diameter (cm), tree height (m), volume (m^3), increment volume (m^3), cutting rotation, and land area.

Data analysis

Analysis of the data used in this study to determine the regulation of harvest results using the

analysis of methods based on area and method based on volume-increment [8].

1) The Method based on area

$$Ht = \frac{A}{R} \quad \text{..} (1)$$

Where:
Ht = yield of felling (ha.y^{-1})
A = Area of forest area (ha)
R = Rotation length (20 years)

2) The method based on volume-incremen
The approach to regulating harvest yields used in this method is:

a. Von Matel's Approach

$$Ht = \frac{2 . AG}{R} \quad \text{………………………………………………} (2)$$

Where:
Ht = yield of felling (m^3.y^{-1})
AG = Actual stand reservoir (m^3)
R

b. Austria Approach

$$Ht = Ia - \frac{Vn - Va}{R} \quad \text{………………………………………} (3)$$

This formula is used when the contents of the stand are <normal

$$Ht = Ia + \frac{Va - Vn}{R} \quad \text{………………………………………} (4)$$

This formula is used when the contents of the stand are > normal
Where:
Ht= yield of felling (m^3.y^{-1})
Ia = Actual average volume increment (m^3)
Vn = normal stand volume (m^3)
Va = volume of stands in the field (m^3)
R = Rotation/cycle (20 years)

RESULTS
Communities that develop
The community forests in Watudemba Village, Palangga Subdistrict and Ulu Lakara Village, South Palangga Subdistrict are included in the Mepokoaso FFG with a postponed cutting system, based on interviews that the community members of the community forest farmer groups have received loan funds from the government through the Center of Public Service Agency and Forest Development Financing by making teak stands as collateral for manager loans. The delay period for the felling system that has been set is 8 years which is obtained based on the cutting cycle which is 20 years, where when the loan agreement is reached, the teak age has reached 12 years.

Arrangement of yields of teak (Tectona grandis L.f) community forest rationing by area
The use of area-based methods in determining ration yields first calculates the area of logged plots with the same area. The area of felling is based on the area of teak community forest in the delayed logging system of 0.66 ha/year with a total of 20 cutting plots.

Arrangement of teak forest ration result (tectona grandis l.f) based on volume and riap
The arrangement of harvest yields based on volume and increment in this study uses the Von Mantel and Austrian approaches.

Table 1. Results of teak (*Tectona grandis* L.F) community forest felling based on volume and increment

No.	Based on Volume and Riap	
	Approach	Cutting Ration Results (m³.y⁻¹)
1	Von Montel	234.88
2	Austria	138.85

Source: Processed from Primary Data, 2018

DISCUSSION

Result showed that's during of the period manager is required to return the principal amount on an annual basis plus an interest rate of 6% per year. If the loan cannot be returned annually or until the time limit specified, repayments are made in the 8th (eighth) year as a whole. This was done because at the end of the teak community forest cycle can be harvested. The yield settings method is the most important thing to do in community forests in determining the felling volume (ration) so that the number of fells is equal to the total increment of all stands without reducing forest potential. The arrangement of harvesting ration results in this study uses a method based on area and based on volume and increment.

The harvested quota was obtained from the area of teak community forest area divided by a cycle of 20 years. Based on the calculation of 0.66 ha, based on the calculation result, the stand volume was 117.44 m³. The important thing to know in carrying out logging based on area is to pay attention to fertility that is relatively the same. The method of regulating harvest yields based on area can be effective if the logging system is used with the assumption that fertility is relatively the same that is above normal teak growth. Based on the conditions in the field, the growth of teak stands is relatively similar to fertile. This can be seen from the actual volume at the predicted age of 20 years obtained by 177.94 m³.ha⁻¹. Meanwhile, based on the normal stand table at the age of 20 years with bonita IV a volume of 110.5 m³.ha⁻¹ was obtained.

Determination of cutting quota according to Von Mantel, begins with the determination of the actual standing reservoir or volume in the field. The actual volume in this study was 177.94 m³.ha⁻¹. As for the total area of 13.2 ha, the actual volume is 2348.78 m³. When using the Von Mantel formula an annual harvest ration of 234.88 m³.year⁻¹ is obtained (Table 1.) Determination of the cutting allowance according to the Austrian method is done by determining the normal standing volume earlier. The normal standing volume for teak stands in this study refers to the Wolf Von Wulffing normal teak stand table. Based on the table by using a 20-year rotation prediction, where at the time of data collection in the field the age of the teak stands around 14 years, so the prediction for the average height up to that age should

be added to the average height growth for 6 years. Thus, an average height of 20 years is obtained at 23 meters. From the age of 20 years and 23 meters high, Bonita IV was obtained. By paying attention to bonita IV at the age of 20 years and the volume of tree wood (Vbm) a normal standing volume of 110.5 m3.ha⁻¹ is obtained. Next thing to know is the average actual volume increment (MAI). The average increase in actual volume per year is the volume in the field at the time of data collection divided by the age of 14 years, so that a gain of 6.84 m³.year⁻¹ is obtained. By using the Austrian formula, a harvest quota of 134.85 m³.year⁻¹ was obtained (Table 1).

The larger ration calculation for the two approaches is the Von Mantel approach. In calculating the results of felling rations, the Von Mantel approach uses only stand volume in the field without considering increment. In contrast to the Austrian approach in calculating the yield of harvest considerations increment. In addition, the drawings from the Von Mantel approach have drawbacks. Use of the Von Mantel approach illustrates the similarity between total volume and increment, whereas the growth of stand volume should be sigmoid (like the letter S).

The lower the yield of felling, the better it is to be used, compared to the yield of larger felling. However, the results of logging rations that have a large value can be used, but taking into account field conditions. Based on the conditions in the field that the growth of teak stands when viewed from the increase in diameter and volume can be said to be good. The quality of growing sites is an indication of the ability of a land to reproduce. This means that the better the quality of the place to grow, it will enable the ability to produce a better growth of stands.

One of the natural environmental factors which is certain to influence the growth and yield of teak plants is the soil factor. Palangga and South Palangga sub-districts in South Konawe Regency have the same type of soil and different types of soil. South Palangga Subdistrict has Gleisol soil type with an area of 1.396.3 ha or 7.9%, Mediteran area of 4.117.1 ha or 23.2% and Pedsolik area of 12.266.6 ha or 69%. While South Palangga Subdistrict has Kambisol soil type with an area of 2.578.72 ha or 20.1%, Litosol with an area of 3.547.28 ha or 27.7%, Mediteran with an area of 1.678.37 ha or 13.1% and Pedsolik with an area of 5.000.62 ha or 39.1%.

The type of soil at the research location is suitable for teak growing sites with calcareous or Mediterranean soil types. In line with the results of research by Widiatmala et al. [9], that in Indonesia, teak plants in calcareous soils with a slightly acidic to neutral pH have good growth ability. Teak stands can grow and produce well in a variety of conditions, but high productivity can only be achieved in locations with good soil and environmental conditions. The best growth in teak plants is also supported by climatic conditions in the study area. Watudemba and Ulu Lakara villages are generally tropical with a maximum temperature of 32^0C and a minimum of 23^0C. Average air pressure of 1,010.4 billion with average humidity of 82 percent. Wind speed generally runs normally at around 3 m.s^{-1}. The highest rainfall and rainy days in Palangga and South Palangga Sub-districts, Konawe Selatan District in the 2008-2017 period were highest in May with rainfall of 278.05 mm and rainy days occurred for 18 days. While the lowest amount of rainfall occurred in August with rainfall of 59.36 mm and rainy days occurred for 9 days.

The climatic conditions such as rainfall and rainy days, solar radiation, humidity and other climatic elements put good pressure on the conditions of the study area, thus providing good carrying capacity on the growth of teak plants in his research that climate is one of the most important factors for determining plant growth, climate elements such as air temperature, solar radiation, and humidity support and play an important role in plant production. The best growth in plants is also supported by climatic conditions in the area. Climatic conditions such as rainfall and rainy days, solar radiation, humidity and other climatic elements put good pressure on the conditions of the study area, thus providing a good carrying capacity on the growth of teak plants. According to research Karyatin et al. [10], that's climate is one of the most important factors for determining plant growth, climate elements such as air temperature, solar radiation, and humidity support and play an important role in plant production.

CONCLUSIONS AND RECOMMENDATION

Findings in this research showed that the regulation of teak community forest products in the delayed cutting system is based on the area having a yield of 0.66 ha.year^{-1} (117.44 m^3. year^{-1}) and the method based on volume-increment using the Von Mantel approach has a harvest yield of 234.88 m^3.year^{-1}. Whereas based on the Austrian approach it has a harvest yield of 134.85 m^3.year^{-1}.

This research discover that's the best growth in plants is also supported by climatic conditions in the area. Climatic conditions such as rainfall and rainy days, solar radiation, humidity and other climatic elements put good pressure on the

conditions of the study area, thus providing a good carrying capacity on the growth of teak plants. This study will help the researcher to understanding the aims to analyze the size of the Teak (*Tectona grandis* L.f) community forest cutting allowance in the settings of harvesting delayed forest products. Thus, a new theory that's the the quality of growing sites is an indication of the ability of a land to reproduce.

Conflict of interest
All authors declare that there is no conflict of interest in this paper.

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DEMOCRACY, LEADERSHIP AND GOVERNANCE: A MEANS TO SUSTAINABLE DEVELOPMENT

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ABSTRACT

This paper attempts to synthesis the fast growing research in the field of Democracy, leadership and Governance towards the attainment of Sustainable Development in Nigeria. Thepaper relies on secondary source of data in an attempt to beam a searchlight on the research topic. Nigeria is a country blessed with great and abundant human, natural and mineral resources with potentials to be a great country. Despite these abundant human and natural resources, the country suffers from the problem of good and effective leadership cum democracy which could guarantee good governance that will enhance Sustainable Development, and that can harness and manage these resources judiciously in order to facilitate socio-economic development of the country. As a result of poor leadership drive, bad governance and inability to imbibe consolidated democratic values, the country remains one of the third world countries with problems relating to deficit of basic social and infrastructural amenities. The leadership problem which culminated into bad governance and epileptic democratic practices has not made sustainable development achievable. These vices are manifested in leadership failure, poor governance, insecurity related problems, electoral violence, policy summersault, corruption, unemployment and wide spread poverty. In essence, this study is carried out with a view to enhance the understanding of the parameters and contents of Sustainable Development in order for Nigeria to key into the current waves of Sustainable Development Goals among the comity of nations. The paper concludes that for Nigeria to reach the goals of Sustainable Development, the country needs responsible leadership, and a properly coordinated democratic principles and good governance apparatus in all ramifications.

KEY WORDS: *Development, Democracy, Leadership, Governance, Sustainable, Sustainable Development.*

INTRODUCTION

Generally, democracy involves the opportunity to participate in decision making in the political process. It repudiates arbitrariness and authoritarianisms. It entails the consent of the governed and it protects human personality and values. Democracy, whether liberal African or modern includes fundamental recognition of peoples sovereignty, equal opportunity for all, majority rule, representativeness, minority rights, right of choice between alternative programmes, popular consultation, consensus on fundamental issues and, more essentially, periodic elections (Oke, 2005). The concept of democracy affords workers the opportunity to participate in decision making by all adult citizens. The citizen enjoys widespread participation in the political process. Democracy

provides a veritable platform for the entrenchment and consolidation of good governance through institutional correspondents of citizens' participation.

Nevertheless, the ongoing democratic experiment in Nigeria is yet to engender good governance, as a result of the increasing rate of poverty that rose from 17.7 million in 1980 to 34.7 million in *1985,* 67.1 million in 1996, 70 million in 2004 and well over 70 million in 2011 (Omotoso, 2011).To worsen the situation, as at November 2019, it was reported that Nigeria is the capital of poverty stricken people in the world (The Nation, 2019).

This coupled with the high rate of employment, inflation, deteriorating social institutions and structures, as well as increasing population, which is due basically, to the specific policy choices and

strategies pursued by the Nigerian government.

These include deliberate withholding of resources, both fiscal and jurisdictional, from states and local entities for political and ideological reasons, central bureaucratic rigidity and weakness; a turbulent economic and policy environment which has undercut local institutions; absence of complementary reforms needed in national administrative lawsystem, unprecedented electoral violence in Kogi and Bayelsa and underdeveloped local civil society that has left local government "reckless" as they try to develop policy and deliver services (World Bank, 2004:).

In the original Greek, democracy is associated with ideas as well as with a form of rule. Even though the meaning of democracy has changed over time, the classic Greek conception of it viewed it as rule by the people (Held, 1996). The Greeks left no one in doubt about who the people are. For example, Aristotle argued that democracy "exists where the sovereign authority is composed of the poorer classes and not the owners of property" (Aristotle, 1981). It is noteworthy that the word democracy derived from the combination of the Greek noun *demes*, meaning 'people or common people' and the verb *kratein,* that is, to rule. Thus, even though democracy in Ancient Greece was associated with all citizens, it was nevertheless understood to be a form of class rule. That is, government by and for the benefit of the lower or working class. It was meant to cater for all adult citizens especially those without property.

Democracy, according to Lineberry (1993), is a form of government that stipulates the modalities for selecting policy makers and organizing governments to ensure that policy represents public preferences as well as corresponding to same, while governance is an exercise of economic, political and administrative authority at both micro and macro levels. It includes the mechanism, processes and institutions, through which the national and individual groups are able to communicate their interests, make use of their constitutional and legal rights besides meeting their obligations and mediating their differences (Sahni, 2003). Anchored on socio-political principles like freedom, human rights and rule of law, democracy is deemed the best form of government.

Given its appealing prospects, democracy has become evidently relevant in the contemporary world's governance. Thus, nations operating other forms of government have over time either strongly sought democracy or are compelled to do so by external forces. Dissatisfied with a long-term period of military rule, Nigerians clamored for democratic rule and the nation has since 1999witnessed civilian transitions of power within democracy. For Nigerians, the beauty of their hard earned democracy lies in its proclivity towards integral and sustainable national development. The thrust of democracy anywhere is determined hugely by the manner and style of leadership by which the system of government is run. Any democracy driven by bad leadership not only stunts nation building but engenders expedition for political alternatives. From a philosophical stance, this paper critically examines Nigerian democracy and identifies corruption as a major leadership problem be deviling Nigerian nation building. It proposes attitudinal-change based orientation of leadership for service as more dignifying and rewarding which in turn enhances progressive and sustainable development of Nigeria and indeed Africa.

Conceptual Clarification

The definition of democracy depends on the perspective from which it is being considered, as it means different thing to different people in different contexts. Thomas Hobbes, John Locke and Jean Jacques Rousseau are popular social contract theorists who conceptualized political institution to entail organic transition from the precarious state of nature to civil society. Whereas Hobbes conceived of an unappealing commonwealth of absolute monarchy, Locke thought that the natural rights to life, liberty and property are to be best preserved in a democratic system of government. Prior to the era of modern philosophy, theories of democracy were manifest in the ancient Greek political thoughts "…as rule by the citizens in general(nevertheless excluding women and of course slaves) in contrast to government by the rich and aristocratic." (Oxford Dictionary of Philosophy, 2005). In the *Republic* Book VI, Plato graded democracy below oligarchy, monarchy and aristocracy for lacking the enterprise and expertise for adequate governance of society. He was apprehensive that, in a democratic rule, those who are expert at winning elections and nothing else will eventually dominate democratic politics. Aristotle considered democracy (rule by the people) the most moderate form of government besides monarchy and oligarchy. Whereas monarchy remains the tyrannical instruments of kingship, oligarchy is a form of aristocracy favouring mainly the rich, but democracy is the rule to the advantage of the poor. In Book IV, Chapter four of his *Politics*, Aristotle enunciated forms of democracy. In his words: There are several kinds of democracy. The first set is based particularly on equality, where the poor and the well-off are treated equally and the majority rule since both groups have equal authority to rule. Other kinds of democracy include having the rule of law but allowing all to take part in offices, or allowing the multitude and not the law to have authority. In such a case, "the people become a monarch, from many combining into one." Properly

speaking, however, such an arrangement is not really regime, because "where the laws do not rule there is no regime."

The contemporary popularity of democracy with much emphasis on rule of law, freedom and rights tends to have evolved from the Lockean social contract thesis with its stipulations of the prevalent democratic arms of government- the executive, legislative and judicial. Considered as a mainly constitutional driven system of government, Locke vested much of democratic importance to the legislature in view of its participatory role. Given its participatory and liberating tenets together with its developmental prospects, democracy has its Lincolnian definition as government of the people, by the people and for the people and adjudged the best form of government. Zakka (2014) puts it that: Throughout history, the most important aspects of

democratic way of life have been the principles of individual equally and freedom. Accordingly, therefore, citizens in a democracy should be entitled to equal protection of their persons, possessions, and rights; have equal opportunity to pursue their live sand careers; and have equal rights of political participation. In addition, the people should enjoy freedom from undue interference and domination fry government. They should be free, within the framework of the law, to believe, behave, and express themselves as they should as they wish. Democratic societies seek to guarantee their citizens certain freedom, including freedom of religion, freedom of the press, and freedom of speech. Ideally, citizens also should be guaranteed freedom of association and assembly, freedom from arbitrary arrest and imprisonment, and the freedom to work and live where and how they choose. In practice, many countries of the world Nigeria inclusive have embraced democratic rule in replacement of loathsome military regimes.

What Is Leadership?

It is difficult to define the term "leadership". It is understood that an investigator' compiled a list of 130 definitions by 1949. It may not be surprising if this list has already expanded two-fold by 1982, as major researches into the leadership phenomenon have been undertaken only during this period. However, as a starting point, we may proceed with the workable definition that a leader is one who leads others and is able to carry an individual or a group towards the accomplishment of a common goal. He is able to carry them with him, because he influences their behaviour. Leadership is always a fundamental issue in any human endeavour. It is vital to the actualization of dreams and vision whether at micro or macro level. He is able to influence their behaviour,

because he enjoys some power over them. They are willing to be influenced, because they have certain needs to satisfy in collaboration with him.

Leadership within Nigerian Democracy

Almost sixty years after independence, Nigeria is still battling with so many debilitating problems as unemployment, poverty, infrastructural decay, corruption, electoral frauds, political debacle, insurgency, insecurity, militancy, dependency on monolithic source of revenue and many other problems that are tied closely to inefficient and ineffective leadership style and bad governance. It has however been stressed by scholars that for any country to achieve growth and development socially, structurally, economically and technological wise, its leaders has to be effective and efficient in the art of governance or service delivery to the generality of its population. This is absolutely important because everything rises and ends at the table of the leader. In fact, leadership ability to a very large extent determines the progress of nations in every area of their endeavour as a country and the key to success in such endeavorus is the ability to lead others successfully.

Although, the various definitions of leadership revolve around the ability to organize individuals for the achievement of a common goal, the trait theory of leadership, which projects the idea that leadership is based on individual attributes, was prevalent in the earlier scholarly period as a seeming response to Plato's quiz of the constituent quality of a leader. Unable to subsist the attendant 'leaders are born 'versus 'leaders are made' debate, the trait theory has, over the era, competed with alternate theories. Prominent scheme of the post-trait theories is to present vigorously a situational leadership philosophy. Leadership roles and dispositions vary with given situations. Leadership variation is as natural as existential situations and leaders, whether substantial or developed, are situational emergency leaders. Certain existential circumstances turn out concomitant leadership features. Within the political setting, leadership tends to strongly equate ruler ship. Any political setting guided by laws presupposes ruler ship. Hence various systems of government embody appropriate ruler.

In his article, "Leadership Philosophies", Kimberly Pendergrass (2013) adumbrated nine leadership traits one of which is the democratic (participatory) leadership philosophy. He maintained that, a leader who practices this leadership philosophy offers guidance to organization members while still being a part of the group. This type of leadership is democratic, considerate, participative, and consultative. It focuses on creating and maintaining good working relationships that are supportive and interactive.

Followers are encouraged to participate and engage with the decision making process and their input is considered. This results in the group being more motivated and creative as a whole. This kind of leadership is supposedly the vision of Locke, Rousseau and Mill's theories of democracy. Leadership in the democratic system of government remains the exercise of political powers within the frame of constitutional provisions duly legislated for common good. Such leadership approximates Brad Smith's (2014) view in his article "Personal Leadership Philosophy" thus:"your title makes you a manager; your people will decide if you are a leader". Leadership is not the job of putting greatness into people, but rather the recognition that greatness already exists. The role of a leader is to provide the grand challenge, create the environment and invest in the individual to inspire that greatness to emerge. Leadership is about inspiring a group of individuals to achieve extraordinary things. According to him, the qualities of a good leader include:

Integrity: I am a principles-based leader, and will always say what I mean, and mean what I say. In the end, my words and my actions should be synonymous.

Humility: Mankind has many gifts, and I do not view myself as one of them. I seek to learn from others, treat every success and failure as a learning opportunity, and strive to be a better version of myself each and every day.

Teamwork: I believe that a player that makes the team great is far more valuable than simply a great player. A team plays for a cause greater than itself or any individual, and believes that only together can we create outcomes that will echo an eternity.

METHODOLOGY

The paper relied essentially on secondary source of data in an attempt to examine the comparison between democracy and leadership practices in Nigeria. Documents on leadership roles in Nigeria as well as journals relating to environmental factors affecting leadership role in sustainable development was used. The major benefit of working with secondary information is economic and breadth of data available, which create easier way for providing comparative and contextual information that may result in unforeseen discoveries of subject matter under investigation.

DISCUSSION

The Federal Republic of Nigeria's embrace of democracy in 1999saw the transition of political power from the grip of the military to civilian rule. The country adopted a model of democracy that is basically representative with three tiers and arms of government. Thus the exercise of political power resides mainly within the confines of three arms of government viz; the executive, the legislature and the judiciary both at the federal, states and local governments. At the federal level, Nigeria runs a bicameral legislature of the Senate and House of Representatives. The Senate is constituted of 109 members, three of which are elected from each of the thirty-six existing States of the Federation. The House of Representatives have 360 seats drawn from federal constituencies across the country. Leadership within Nigerian democracy as in every other democracy is either by election or executive appointment. Hence, seekers of political offices either contest election or lobby for appointments.

From the inception of the Nigerian democratic dispensation of the fourth republic headed by Olusegun Obasanjo, to the present, Nigerian political leadership has witnessed civilian to civilian transitions and even from one political party to another party. Of course, the constitution of the Federal Republic of Nigeria stipulated leadership tenures for mainly key political leadership positions occupied through elections. After the general election of 2007, Obasanjo handed over power to Late Umar Musa Yar'Adua whose administration was short-circuited by his demise in2009. The 2011 general election propped up Jonathan Good luck, who was vice president during Yar'Adua's tenure but sworn-in as president and completed that tenure. It was Goodluck Jonathan of PDP that handed power to another democratically elected president, Mohammadu Buhari from APC, another political party.

Despite the laudability of current sustenance of democracy in Nigeria, the question remains as to the extent Nigerian democratic leaders have justified the essence of democratic leadership. If Nigerians' clamour for democracy was propelled by the quest for good governance aimed ultimately at enhanced national development, then Nigerians must have clamored for the assurances of the general benefits of democracy. This definitely includes visions for real democratic governance. It simply entails that Nigerian democratic leaders must be disposed to lead the citizenry on the parts of rule of law, protection of human rights and freedom, enhanced public participation as well as integral and sustainable development. So far, the benefits of democratic governance are evident in Nigeria. The current rating of Nigeria as Africa's greatest economy is owed to democracy. A relative advancement in Nigerian politics rests in the actuality of successful civilian to civilian transitions within twenty years of uninterrupted democracy. On the minimum, Nigerians could presently boast of quasi satisfaction as regards, the replacement of civility of governance against the preceding military dictatorship. Aside these and more, some leadership challenges within the democratic setting are discernible.

Challenges of Leadership in Nigeria Democracy

The 1999 democratic military-to-civilian transition saw the emergence of retired army General Olusegun Obasanjo as the first Fourth Republic Democratically elected Nigerian President. That administration was fraught with a subtle militarization of a civilian government. This view is corroborated by Akuta's (2009) submission that: sincerely speaking, the only gain we have got in the past 10 years of democracy in Nigeria is simply that we have had a civilian regime. Besides it has not been truly civilian in the true sense of it. 8 years out of the last 10 years (Obasanjo's administration) was a aquasi-military government because Obasanjo ruled Nigeria like a military head of state .Obasanjo's military approach to democratic rule popularized presidential arbitrary imposition of elective candidates with sheer impunity, a situation from which the citizenry developed the slogan' selection' in place of election. The Odi military massacre of November 20, 1999 remains one of the most undemocratic and ignoble actions of that administration (Ogirisi,2015). The military-styled democratic rule of the government which was nothing much short of despotism and dictatorship institutionalized the cankerworm of Nigerian democratic leadership- corruption. Though, the current leadership situation in Nigeria raises more questions than answer. There is flagrant disregard for the rule of law in Nigeria today, the country is being governed as it was during military regime. It is even worse now because, during the military, the constitution is suspended and this is clear and understandable to every citizen, rather than now that the current leadership appears to be pretending to be practicing democracy with nonchalant attitude and total disregards for the rule of law and flagrant disobedience to court orders. This type of attitude on the part of the present leadership in Nigeria is inimical and strange to democratic practices.

Public Sector Corruption

In Nigeria, corruption is not a term specific to the nation's democracy but a reality rooted and developed within the military era. Transparency International defines corruption as "… the use of entrusted power for private gain", corruption in any political setting represents gross betrayal of public trust. Nigeria's notoriety forAdvanced Fee Fraud popularized as 419 together with the spate of economic and financial crimes germinated and sprouted within the military regimes of Ibrahim Babangida and Sani Abacha. Ranging from treasury looting and embezzlement of public fund to money laundering, abuse of power, bribery, the leadership of these administrations thrived on so much corruption. Hence, researched revelations about them could be gleaned from Wiki account thus: The regime of General Ibrahim Babangida is seen as the body that legalized corruption. His administration refused to give account of the Gulf War windfall, which is estimated to be $12.4 billion. He annulled a democratic election in Nigeria on June 12, 1993 and decided to install Ernest Shonekan as his successor on August 27, 1993 when he stepped down as head of the military regime. However, within three months of the handover, General Sani Abacha seized control of the government while Babangida was on a visit to Egypt. He lives in a very exquisite mansion in his home state (Niger State)in the Northern part of the country. The death of the general Sani Abacha revealed the global nature of graft. French investigations of bribes paid to government officials to ease the award of a gas plant construction in Nigeria revealed the global level of official graft in the country. The investigations led to the freezing of accounts containing about $100 million United States dollars. In 2000, two years after his death, a Swiss banking commission report indicted Swiss banks for failing to follow compliance process in allowing family and friends of Abacha access to accounts and depositing amounts totaling $600 million US dollars into the accounts. The same year, a total of more than $1billion US dollars were found in various accounts throughout Europe.

Nigerians clamour for democracy during the protracted military rule became an expression of the people's desire for political positive change. Most unfortunately, the corrupt leadership inherited from military rules equally permeated the democratic era. Apart from economic and financial corruption, political corruption ranks very high with the greatest feature of electoral malpractices. Being one of the greatest oil producing nations of the globe, Nigeria is economically wealthy with prosperous oil explorations and businesses. The nation's economic resource is controlled by the Federal government which makes monthly allocations to both State and local governments with a stipulated sharing formula. The control and distribution of the wealth of the nation is constitutionally placed in the hands of both elective and political appointive leaders. Despite the level of Nigeria's economic wealth, majority of its citizenry are living below poverty level. Global Development Index (GDI)continually place Nigeria at the baseline of global development. The reason remains that instead of ensuring adequate wealth distribution and national development, Nigeria's riches are confined to the coffers of few corrupt leaders.

To inflate the situation, Nigeria's political offices are so constitutionally empowered in some cases with the immunity clause that protect certain

office holders from public prosecution. With frail checks and balances and given the wide access to national wealth provided through the acquisition of political power, political offices become unduly attractive. Thus, such offices become gravely competitive as many individuals consider it avenue to gain access to the national cake. The Marxist theory of dialectical materialism in which the economic structure is the propeller of other structures plays out strongly in Nigeria democracy. The motivating factor of craze for political office is no more than self-interest of economic empowerment at the expense of common good and national development. The unfortunate situation is that those who do not possess leadership capacity seek leadership positions and often acquire power either by hook or crook. In praxis, most Nigerian democratic leaders are oblivious of either the workings of governance or the principles of democracy. The result is that Nigerian democratic setting has become a terrain of more visionless and purposeless leaders without integrity. Most unfortunately, the institutions designated with the duties of protection of democratic ideals are degraded into mechanisms for achieving corrupt objectives. The June 2003 final report of Nigeria Survey and Corruption Survey Study, Institute for Development Research, Ahmadu Bello University, Zaria (IDR, ABU Zaria), provides a practical insight into the reality of Nigeria institutional corruption (Nweke, 20011). Such institutional corruption are manifested in the following:

Rating Institutions
1. Nigerian Police
2. Political Parties
3. National and State Assemblies
4. Local and Municipal Governments
5. Federal and State Executive Councils
6. Traffic Police and Federal Road Safety Corps
7. Power Holding Company of Nigeria

One of the greatest manifestations of corruption in Nigerian democratic leadership is the inability to ensure once a free and fair election. Even the judiciary considered the last hope of the common an is equally enmeshed in collaborative corruption with the political bigwigs. Thus it is possible within Nigerian democracy for political moneybags to influence judicial decisions in order to install cohorts in power.

Ethnicity and Religion
It may not be so much out of place to hold that the 1914Lugardian amalgamation of Northern and Southern protectorate to produce the present Nigerian State was the genesis of Nigeria's ethnic rift. If the formation of a nation-state should be the product of a social contract, the most feasible States must be the ones founded on commonality. Common origin ensures the 'we' feeling to impel a nation on the path of common purpose. Stable sovereignties are anchored on homogeneity and natural sense of indigenship. Without prejudice to certain multi-cultural polities, a heterogeneous sovereignty administers its affairs with much exertion, since it struggles with the management of expanded diversity, irrespective of its presumed harmony. A country of over two hundred ethnic nationalities coalesced into three major tribe (Yoruba, Hausa and Igbo) with two major religions (Christianity and Islam), Nigerian governance, from the point of colonial independence, has been a display of ethnic/religious politics. Within the current democratic setting, ethno-religious politics entrench strong leadership tussle between the North (Muslims) and South (mainly Christians) giving rise to series of ethno-religious crises resulting in religious bigotry, born to-rule orientation, incessant killings and wanton destruction of property, insurgency and terrorism. The Yar'Adua administration bore the stings of Niger Delta militancy guised as ethnic struggle for emancipation from political cum developmental marginalization. After the 2011 general election that threw up Jonathan Goodluck as President from the region of Southern minority, the nation witnessed wide post-election violence in the North where comments of making the tenure ungovernable for the President preceded the current virulent Boko Haram insurgency. The sub-division of Nigeria into six geo-political zones and introduction of federal character are measures put in place for ethnic harmony in the polity. Hence, the distribution of democratic leadership is widely guided by zoning formula at various levels. Aside the ruling People's Democratic Party (PDP) which is vividly an umbrella party reflecting some level of national unity, the formation of most other political parties are motivated by ethno religious factors.

Good Leadership as a Parameter for Nigeria Political Development
If democracy is deemed the best form of government consequent upon its people oriented prospects, leadership within democracy ought to reflect the will of the people. In simple terms, leadership of any democracy should basically before service. Of course service could be double-dimensional. There is apparent difference between objective service and self-service. Leadership of self-service approximates the attitudes of corrupt leaders who utilize the privileged positions of leadership for personal aggrandizement. This is the kind exhibited by many corrupt Nigerian democratic leaders a situation that results in developmental retardation of the nation. Leadership of objective service refers to purposeful leadership aimed basically at the common good. Such leadership is most

appropriate for democratic governance. For such kind to be feasible in Nigeria democracy, philosophy would prescribe adequate capacity building for prospective leaders. The designers of the 1999 Nigerian constitution which the current democracy operates, makes openness for people of low education to vie for political offices. As such, it invariably provides for even touts to occupy positions of leadership. The Nigerian constitution ought to be amended to make stipulations for quality leadership. What kind of law would an illiterate legislator make? Nigerian parliament is filled with many half educated, less effervescent and nominal legislators who only grace the seats of the hallowed chambers, collect their entitlements without any meaningful legislative contributions. Many of them are simply ignorant of the principles of democracy, let alone legislative business. Some others are just aloof because their interests are far from legislation. Although Plato did not subscribe for democracy, he placed high intellectual capacity as the greatest parameter for quality leadership which of course is found within the class of philosophers. Hence, unless philosophers become kings, the society cannot progress developmentally. Plato philosopher king postulation signifies the import of critical thinking as a requisite for quality leadership even in a democratic setting. The over concentration of political decisions at the centre necessitates quest for devolution of power and fiscal federalism.

Nigerian democratic leaders ought to be driven by the visions of common good without ethno-religious favoritism. The establishment of some institutions like Nigerian Institute of Peace and Strategic Studies (NIPS) together with other activities designed for leadership capacity building is a commendable attempt. Nevertheless, critical thinking studies, with emphasis on leadership for service, are highly recommended as pre-requisite for any leadership position. Importantly, there ought to be legislation for constant compulsory leadership training for occupants of leadership offices in Nigerian democracy with pragmatic and sustainable policy implementation mechanisms. With these human development indices in place, it could be held that Nigerians can be assured of rapid, sustainable and integral development through democratic governance.

Leadership within Nigerian Democracy

The various definitions of leadership revolve around the ability to organize individuals for the achievement of a common goal. The trait theory of leadership, which projects the idea that leadership is based on individual attributes, was prevalent in the earlier scholarly period as a seeming response to Plato's quiz of the constituent quality of a leader. Unable to subsist the attendant 'leaders are born' versus 'leaders are made' debate, the trait theory is, over the era, competed with alternate theories. Prominent scheme of the post-trait theories is to present vigorously a situational leadership philosophy. Leadership roles and dispositions vary with given situations. Leadership variation is as natural as existential situations and leaders, whether substantial or developed, are situational emergencies.

Certain existential circumstances turn out concomitant leadership features. Within the political setting, leadership tends to strongly equate ruler ship. Any political setting guided by laws presupposes ruler ship. Hence various systems of government embody appropriate ruler. In his article, "Leadership Philosophies", Kimberly Pendergrass (2013) adumbrated nine leadership traits one of which is the democratic (participatory) leadership philosophy. He maintained that: A leader who practices this leadership philosophy offers guidance to organization members while still being a part of the group. This type of leadership is democratic, considerate, participative, and consultative. It focuses on creating and maintaining good working relationships that are supportive and interactive. Followers in this case are encouraged to participate and engage with the decision making process and their input is considered. This results in the group being more motivated and creative as a whole. This kind of leadership is supposedly the vision of Locke, Rousseau and Mill's theories of democracy.

Leadership in the democratic system of government remains the exercise of political powers within the frame of constitutional provisions duly legislated for common good. Such leadership approximates Brad Smith's (2014) view in his article "Personal Leadership Philosophy" thus:
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Despite the laudability of current sustenance of democracy in Nigeria, the question remains as to the extent that Nigerian democratic leaders have justified the essence of democratic leadership. If Nigerians' clamour for democracy was propelled by the quest for good governance aimed ultimately at enhanced national development, then Nigerians must have clamored for the assurances of the general benefits of democracy. This definitely includes visions for real democratic governance. It simply entails that Nigerian democratic leaders must be disposed to lead the citizenry on the parts of rule of law, protection of human rights and freedom, enhanced public participation as well as integral and sustainable development. So far, the benefits of democratic governance are evident in Nigeria. The current rating of Nigeria as Africa's greatest economy is owed to democracy. A relative advancement in Nigerian politics rests in the actuality of successful civilian to civilian transitions within twenty years of uninterrupted democracy. On the minimum, Nigerians could presently boast of quasi satisfaction as regards, the replacement of civility of governance against the preceding military dictatorship. Aside these and more, some leadership challenges within the democratic setting are discernible.

CONCLUSION

This paper identified corruption and ethno-religious politics as the major problems of leadership in Nigerian polity. Reflection on the nature and various leadership concepts reveals that our leaders are situational leaders. The most important ingredient of leadership is integrity. Integrity is a state of being complete and unified. This paper concludes that integrity is fundamental to efficiency which is the foundation for survival and effectiveness is the foundation to success.

Recommendation

For a thriving and stable Nigerian democracy, visionary driven leadership with critical thinking orientation is prescribed. It has been shown in this paper that at the level of development, Nigeria must learn to embrace policies that will initiate transformational leadership structure so as to provide a more solid basis for structural transformation and transition to a people centred democratic system. Efficient and effective leadership is required to translate the demands and aspirations of the citizens to concrete reality. Nigeria leaders should develop a passionate skill and prowess about development to ensure that corruption, apathy, wastage would become a thing of the past in the country.

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ON LINGUISTIC COMPETENCE AS THE COMPONENT OF COMMUNICATIVE COMPETENCE

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ABSTRACT
This article gives general overview of the linguistic competence, explores the differences linguist scholars forward in distinguishing two main terms linguistic competence and language competence and the important place linguistic competence holds within speech activities (reading, speaking, writing, speaking). The article also emphasizes the significance of linguistic competence which includes grammar, phonology, orthography, and vocabulary in producing utterances.
KEYWORDS: *linguistic competence, language competence, communicative competence, speech activity.*

DISCUSSION

The context of personality-oriented developmental education puts forward new requirements for the personality of a graduate of a modern tertiary institution from the point of view of his successful socialization. There is a rethinking of the goals, objectives, content, methods and techniques of teaching, clarification of the structure and content of the goal-setting concepts of a foreign language as a training course and, in particular, linguistic competence, identification of approaches and principles, methods and techniques and their description taking into account the goals and specifics of training.

At different stages of the introduction of the course "foreign language" the problem of the formation of knowledge about the language (linguistic competence) was the most important. However, the solutions to this problem were different and depended on the place given to this subject in the educational system and what tasks it was intended to solve.

Linguistic competence is interpreted ambiguously in the methodology of teaching a foreign language, this concept is used as a synonym for language competence. However, the distinction between linguistic and language competencies is to a certain extent conditional, and in the modern theory of foreign language teaching, the concepts of linguistic and linguistic competence are also used differently.

Language competence represent a combination of language knowledge and skills mastery of which allows foreign language speech activity function in accordance with the language rules the target language in various spheres of activities and contributes developing the language abilities of the trainees (V. V. Safronov, D. I. Isaenkov, etc.).

Linguistic competence involves mastery of phonemic, spelling, grammatical, lexical means and according to N. Chomsky, it is an ideal grammatical knowledge, always correlated with the knowledge of the language system. The basis of language competence consists of two components: knowledge, which is based on the rules taught, and the ability to understand and produce speech. For speech practice, it is not enough to develop only language competence: the language includes the language and communicative competence, i.e. knowledge (views) on the system of language and its structure; ownership of the system information about the language levels: phonetics, vocabulary, structure of words and word formation, morphology, syntax, and the basis of style the text; ability to use the language in practice (E. M. Vereshchagin, V. G. Kostomarov, D. Slobin, S. Moirans, S. Savignon, L. F. Bachman, Jan Van Ek, M. N. Vyatyutnev, G. V. Kolshansky, etc.).

Learning about the language system is not an end in itself. In the process of forming language competence, it is important to develop the student's personality, his ability to use knowledge about the system of the language being studied. That is, it is supposed to form educational and language skills that

are already within the framework of linguistic competence.

Linguistic competence has received several definitions at different times from different researchers. In the Russian science L. Berdichevsky expressed the idea of forming linguistic, linguistic-cultural and communicative competencies. The main components for mastering the communicative competence are linguistic and linguistic-cultural competence. Following I. A. Zimnaya [1], A. L. Berdichevsky understands linguistic competence as "knowledge of the language system and the rules of its functioning in foreign language communication, i.e. linguistic competence includes the presence of language tools with a certain communicative meaning. Potential, knowledge of language tools and their functions, knowledge of the background mechanisms of speech activity". In order to master speech activity, it is necessary to know the language, to master language activity. The system of a foreign language, i.e. linguistic competence is a prerequisite for communication, since speech activity occurs due to the fact that communicants are proficient in the language system.

L. Bim includes sociolinguistic aspects into linguistic competence, defining it as "language proficiency, the process of generating and recognizing text" [2].

E. V. Tikhomirova in her dissertation research notes that linguistic competence is manifested in the correct use of linguistic forms in a foreign language (phonology, morphology, vocabulary, syntax), and offers the following definition of linguistic competence: the ability to build correct, from the point of view of the norms of the studied language, own statements and perceive others' [3].

In the concept of professionally oriented training (first of all linguistic competence is understood as a parity communicative competence (A. I. Surygin) [4]. Therefore, there is only one component of linguistic competence, which is based on knowledge:

a) Of the language of units;

b) Of the rules for the formation and functioning of language units;

c) About the language;

d) About the language system.

R. K. Minyar-Beloruchev suggests defining linguistic competence as "knowledge of the language system and the rules for operating with language means in the process of speech activity" [5].

Member of the Council of Europe, British linguist Van Eck in 1990 proposed his own model of communicative competence and among its main components identified linguistic competence as "knowledge of the vocabulary of the language and the ability to combine lexical units into meaningful utterances through knowledge of the grammatical rules of speech design".

In the monograph "Common European competences of foreign language proficiency: study, training, evaluation" linguistic competence is understood as a theoretical foundation on the basis of which communicative competence is formed [5].

By its structure linguistic competencies distinguishes existential competence (individual characteristics of a person, his character traits, views, introversion/extroversion), as well as the ability to learn, which creates prerequisites for mastering the language and the ability to influence the result of this process. Thus, linguistic competence is understood as the ability to construct grammatically correct forms and syntactic constructions, as well as semantic segments in speech organized in accordance with the existing norms of a foreign language, and to use them in the meaning in which they are used by native speakers.

Linguistic competence is the result of understanding the student's speech experience. It includes knowledge of the basics of a foreign language, involves the assimilation of a complex of linguistics concepts. Linguistic competence also involves the formation of ideas about how a foreign language is arranged, what changes it and how, the assimilation of information about the role of language in the life of society and a person, on which a constant steady interest in the subject, feelings of respect and love for a foreign language are brought up. Linguistic competence also includes elements of the history of a foreign language, of its outstanding representatives.

Linguistic competence also involves the formation of educational and linguistic skills. These include, first of all, identification skills: to recognize sounds, letters, parts of a word, morphemes, parts of speech etc. to distinguish one phenomenon from another. The second group of skills – classification, is the ability to divide language phenomena into groups. The third group – analytical skills: to produce phonetic, morphemic, word-forming, morphological, syntactic, stylistic analysis.

Linguistic competence provides the cognitive culture of the student's personality, the development of logical thinking, memory, imagination, mastering the skills, self-analysis, self-assessment, as well as the formation of linguistic reflection as a process of students' awareness of speech activity. Linguistic competence is the main component of communicative competence.

The allocation of linguistic competence as an independent competence is important for understanding the cognitive function of the subject "foreign language". Language acquisition involves more than just mastering the knowledge of the language and mastering the language material itself. It is known that it is possible to know the rules of

pronunciation, words and rules, the use of grammatical forms and constructions, to be able to use different ways of expressing the same thoughts (own a synonym), in other words, to be competent in the language and to be able to use these knowledge and skills adequately in the real speech situation or, as scientists say, in the communicative situation. In other words, language skills are important for language proficiency. The skills of using certain words, grammatical constructions in specific conditions of communication always matters.

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PUPPETS IN THE CLASSROOM: IMPACT ON EXPRESSIVE LANGUAGE SKILLS OF STUDENTS WITH INTELLECTUAL DISABILITY

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ABSTRACT

The study under investigation is an experimental one which aims to find out the effectiveness of Puppetry Method on Expressive language skills of students with Moderate level of Intellectual Disability. Research design used in the study was Non Equivalent Groups Pre-test-Post-test Control Groups Design. Sample size of the study were confined to 32 where 16 included in experimental group and rest 16 included in the control group. All the students were having moderate level of Intellectual Disability and selected from a special school exclusively made for children with Intellectual Disability. The experimental group students were taught through the Puppetry Method. Existing method of teaching was adopted to teach students in the control group. Language test for children with Intellectual Disability was used as the tool for data collection. For the analysis of the collected data, the investigator used descriptive statistics like Mean, median, mode, standard deviation and Mean Difference Analysis. The study reveals that there exists significant difference between post test scores of Experimental and Control group with respect to Expressive Language skills. Students in the experimental group show significantly better performance in terms of Expressive Language performance than that of students in the Control group as higher mean scores are attached with them.

KEYWORDS: *Puppetry method, Expressive language, Students, Intellectual Disability, Experimental Approach, Existing method of Teaching, Language skills*

INTRODUCTION

Language can be considered as an effective means of communication. Expressive language and receptive language are two categories of language domain. Expressive as well as receptive language is essential for a person to be independent in life (Liang et al., 2017). Expressive language enables to express one's ideas, feeling, concepts etc. without losing its intensity. Expressive language stands the language which is used to express our ideas, concepts etc. Strategies to develop expressive language skills among children with intellectual disability are a matter of debate for a long time. Exceptional children are those who have some special needs which is to be addressed using specialized strategies (Brownell et al., 2010). In the present study, a new strategy is being attempted to enhance the expressive language skills of children with Intellectual Disability.

Children with Intellectual disability have certain special needs of their own. Any intervention which caters the needs of children with Intellectual disability can be considered as suitable intervention for them (Fidler et al., 2019). Repeated practice will enable them to achieve a new skill/ concept

(Göransson et al., 2016). Puppetry will serve as a suitable academic intervention for children with Intellectual Disability since it offers a platform for them to have repeated practice. Hence the study can be considered as a significant one in terms of expressive language skill among children with Intellectual Disability.

The present study tries to find out the effectiveness of Puppetry method on expressive language skills of children with Intellectual Disability. Puppetry method is a pleasure based strategy which arouses interest among receivers. In the present study, expressive language skills are being taught to the experimental group through hand puppets. It has been a matter of debate for a long time, which is the most efficacious academic mode of content transaction for special learners. But, fortunately or unfortunately it is unanswered till the time. Effectiveness of any academic intervention depends mostly upon the efficacy of content transaction and cooperative attitude of students in the academic activity. Puppetry method is presented as a strategy to enhance the expressive language skills

through purposeful and deliberate attempts of special educational efforts.

OBJECTIVES OF THE STUDY
Objectives of the present study are:
- To study whether there exists any significant difference between the mean pretest scores of experimental and control groups with regard to Expressive language skills.

- To study whether there exists any significant difference between the mean posttest scores of experimental and control groups with regard to Expressive language skills.

HYPOTHESES OF THE STUDY
The present study was to test the following hypothesis.
- There will be no significant difference between the mean Pretest scores of Experimental and Control group with regard to Expressive language skills.
- There will be no significant difference between the mean Posttest scores of Experimental and Control group with regard to Expressive Language skills.

METHODOLOGY
Research method adopted for the study was experimental in nature and the particular design opted was Non Equivalent Groups Pretest-Posttest – Control Groups Design. Students in the Experimental Group were taught through the Puppetry method and

Conventional teaching strategies were used to teach students in the control group..

Participants
Thirty-two students from a special school exclusively set up for intellectually challenged were selected as the sample. 16 students from the total sample were included in the experimental group and 16 students were in the control group. Age group of the students was in between 12-14. The experimental group students were taught through the Puppetry method. Conventional teaching strategies were made used to teach students in control group. Hand puppets were used to transact expressive language skills to children with Intellectual Disability.

Tools Used for the Study
For the present experimental study, Expressive Language Domain of Language Test developed by Hameed and Aiswarya (2016) was used. General Data sheet were also used to collect preliminary details of the sample.

Statistical Techniques Used for Analysis
For the analysis of the collected data, the investigator used descriptive statistics like Mean, median, Mode, Standard deviation etc. Mean Difference analysis was done using paired sample student's t test .

RESULTS AND DISCUSSION
Results of Mean Difference Analysis
Results of the Mean Difference Analysis in case of Expressive language skills are summarized and discussed in this section.

Data and results of the t-test done for the comparison of pretest scores in respect of Expressive language skills are presented in Table 1.

Table 1
Data and Results of the Comparison of Pre test Scores Between Experimental and Control group for the Total Sample

Sl. No.	Variables	N	Mean	SD	t- Value	Level of Significance
1.	Pretest (Experimental)	16	15.00	2.39	0.82	Not Significant
2.	Pretest (Control)	16	14.37	1.45		

The obtained t value is 0.82 and it is found below the table value set for significance even at 0.05 level. Hence it can be concluded that there is no significant difference exists between pretest scores of experimental and control groups. Expressive language performance of both experimental and

control group found to be almost same without any significant difference. The result signifies the comparability of both groups.

Data and results of the t-test done for the comparison of posttest scores in respect of Expressive language skills are presented in Table 2.

Table 2
Data and Results of the Comparison of Posttest Scores Between Experimental and Control group for the Total Sample

Sl. No.	Variables	N	Mean	SD	t- Value	Level of Significance
1.	Posttest (Experimental)	16	17.87	1.74		
					3.14	0.01
2.	Posttest (Control)	16	15.56	2.50		

From Table 2, the obtained t value is 3.14 and it is greater than the table value set for significance at 0.01 level. Hence, it can be concluded that there is significant difference exists in between posttest scores of Experimental and Control group with respect to Expressive Language skills. From the Mean Difference Analysis it is understood that students in the experimental group show significantly better performance in terms of Expressive language skills than that of students in the Control group as higher mean scores are attached with them.

CONCLUSION

Any teaching strategy which is designed according to the level, needs and interest of children will definitely work in a desirable way. Puppetry method can be presented as an advisable strategy for enhancing expressive language skills among children with Intellectual Disability. Puppetry method is being designed with an aim to arouse the interest of learners. As we all know, arousal of interest can be considered as the first step to achieve any behavioral objective from learners. In Such a way, puppetry method can be cited as an innovative strategy tailored according to the needs of children with Intellectual Differences.

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CHALLENGES TO HIGHER EDUCATION IMPACTS OF COVID-19

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ABSTRACT

Today we are facing pandemic as the Corona virus is sweeping its way around the globe and it's impact is only beginning to be visible. The pandemic has brought in many deaths, thousands have been quarantined and has led to a serious situation of global health emergency.To curb the spread of this virus, lockdown has been implemented very strongly. In order to handicap the virus from spreading, social distancing and limiting contact with each other is a necessary evil. All walk of life has been severely affected due to this lockdown which is an effect, this is turn has crippled the economy painfully.Like other sectors education institutions are also affected in terms of lagging behind in the annual academic calendar of events. This paper construe the capacity of the country and it's teaching fraternity to endure the education process at the college and universities in the form of online distance learning methods and challenges during this process,this paper reviews the different available online platforms that are used and challenges face by both the teaching faculty and the students during the online classes.

KEY WORDS: *pandemic, lockdown, online education, online platforms.social distance.*

INTRODUCTION

Corona virus which was detected in Wuhan,China on 31 December 2019, the Corona virus spreads through the human to human transmission which was confirmed by the World Health Organization (WHO) on 20 January 2020. Today that the COVID has challenges the advancements not only in the Health sectors but in many different several sectors as like finance sector, All education, automotive and engineering sectors etc. The very important need of the hour is social distancing and lockdown and excellent medical care. The pandemic situation has led to a total lock down world over and India is no exceptions because the present day s is many people are affected by COVID -19.A of today around seventy eight lakh fifty nine thousands people have been reported as infected by the virus and around four lakhs thirty two thousand have been reported as dead. This has warraned a complete shutdown of all the industries and various sectors, educational institution is not an exception to this. The shutdown of the education institutions has led to many apprehension among the students and teaching fraternity. However the teaching fraternity has been innovative methods to interact with the students and focusing on the curriculum.

With this back drop the paper is based on the following objectives:-
1. To highlight the sources and importance of e learning and e teaching.
2. To discuss the challenges in digital learning.
3. To study the measures and methods in out coming in the situation challenges.

1. SOURCES AND IMPORTANCE OF E LEARNING AND E TEACHING

Challenges in higher education on covid 19.The teaching fraternity with the use of many e teaching and e learning applications such as Google classroom, Google Zoom,Easy class,Go To Meeting, Remind, Slack and many others have been adopted to reach the students as far as possible.Now the bigger challenges was to select an application among the ocean of applications available on the internet catering to every one's needs with low data consumption and better stability during the live streaming.Figure 1: Various online platforms available for teaching .
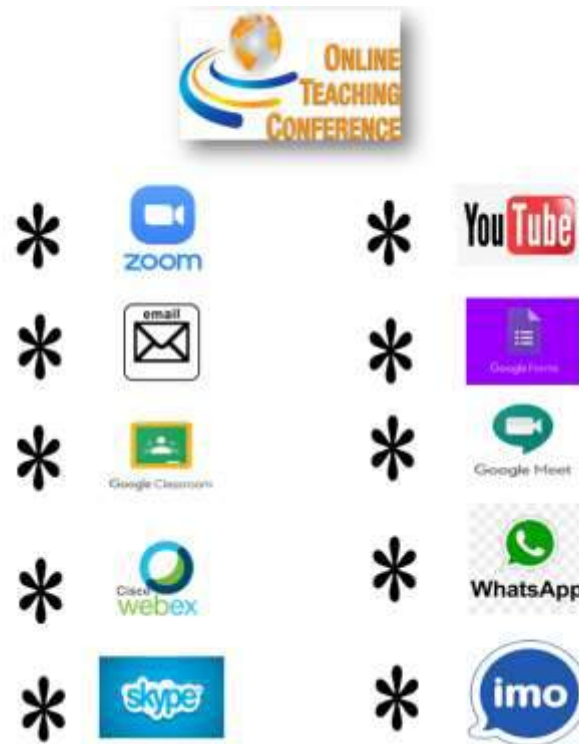
Figure :-1

It is clear that the above figure there are many online platforms available at our disposable.Defferent apps for defferent purposes for teaching the students for the live streaming/conference/lecture series zoom app has been used and for assigning students assignments the Easy Class app and Google Classroom application are utilized . For students who cannot join the online Classroom Posts were uploaded in side share an online platform so that the students can download the PPT whenever they get internet access and any doubt clarification is clarified through the calls.

To enable the practical knowledge of Labs,many universities and Organization have come forward and provided virtual Labs for the students. Keeping in mind the financial crisis during the lock down many Organizations have offered the freeonline courses for the students one such example TATA STEEL ,and many other universities or many Organizations and higher education sectors which offered online courses with the registration fee of RS.1/- just by login to www.capablitydevelopment.organd signing with the details and take on the courses. They provide nearly 27 course. Same of them are: Advanced Microsoft Excel, Basic Metallurgy, Basic TQM, Bearing, Machine learning industry 4.0,MS office,PLCs Basic, Induction

Motor, Transformer and many more.As it has been noticed that courses offered not only targets just one branch of engineering but encompasses All the steams of engineering such as computer science, Electronics and Communication,Machanical, Info science,Instrumention and technology.

2. CHALLENGES IN DIGITAL LEARNING

The first challenge was to access the students access to Internet connectivity.Specially , the students hailing from rural area and backward areas. The students were expected to have a smart phone and laptop with 4G connectivity to enable streaming of the live teaching and learning.The second challenge was to have good internet connectivity even in urban areas to avoid buffering and lagging of the live stream, this can happen when Internet connection speed is inadequate to accommodate the encoder s bitrate or if there is excess load on the server which will make the application to crash.The third challenge is the live streaming focuses only on the theoretical imparting of the subjects with out actual use of the laboratory,as technical education

is more important factor to practical oriented.challenges to students.

From the students point of view the challenges were, the students had to leave the hostel and PGs immediately due to lock down and they could not carry their textbooks and laptops to their native and as such it was not possible for them to take part in the e- learning. The final year student's are worried and are anxious to know if they will have an extension of the current semester due to which there joining dates for companies are extending. Students who are planning to take admission in foreign universities and Organization and who want to pursue their higher education in India are worried that due to this lockdown they might have to lose one year.I have been also counseling the students to in still confidence in them.

3. OUTCOME OF E-LEARNING AND CHALLENGES OF E- LEARNING

The online learning process initiated by the lock down (becouse covid 19 in pandemic situation) on a large scale is not just platform for the students but we saw a greater platforms for the faculty as well offering many short- term certificate courses.There are many Organizations and higher education and online platforms which have been offering Various development course s to the different faculties as well. The teaching faculties are making use of this Lock down to 1upgrade their knowledge by enrolling themselves in various faculty development programs offered by ATAL,NPTEL and MOOC. Many IITs are offering two weeks long online faculty development programs/ courses which are a boon to the teachers the faculties have been upgrading themselves from the various online courses conducted by IITs or other Institutions sectors and a good knowledge exchange process has been initiated which otherwise would have not been able or possible in the absence of the online platform.

CONCLUSION

In Challenges to conclude, the students have accepted the online teachings and learning more important to other courses with open heart.They are really happy that Institutions are putting efforts to keep the curriculum on track amidst the lock down period,on top of All the issues and against the back drop of these situations challenges.The Online education is " not a substitute but an appendage to class room teaching and learning also other methodologies. It is temporary aid during the different situation that we are facing."

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VALUE OF WATER AT "AVESTA"

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ANNOTATION

In this article, immortal ideas on water appreciation, the extraction of canals, the extraction and irrigation of water, as well as the development of farming using groundwater were put forward in our rich spiritual heritage "Avesta".
KEYWORDS: *Avesta, Zardusht, Ahura Mazda, Vandidod, Yasna, independence, farming, irrigation farming, farm culture, farmland land, garden plot.*

DISCUSSION

In Central Asia, Water has been appreciated and respected since ancient times. Particular attention is paid to the development of farming, using the water resources of rivers, extracting, extracting and watering canals. Our predecessors honored him for the fact that they thought that life begins with water.

Since the territory of Central Asia is considered a land of drought, the water here has been valued as a golden example from ancient times. Our people have not said in vain that "there is life where there is water." Therefore, the water in our country was used as a saving and saving investigation.

On the territory of Turonzamin there are very few rivers than in other countries of the world, their low water, unfavorable for the passage of ships, and on top of that, they do not go to the sea, disappear and sink in dry steppes or sand deserts, lack of precipitation, and a small number of domestic waters have come up with a number of problems the extreme shortage of water, the inability of cool air to fully meet the needs of Turonzamin, like many other countries of the ancient East, necessitated the development of farming by the extraction of canals, the extraction and irrigation of water, the use of water resources of large rivers, as well as groundwater. This object of necessity dictates the creation of a unique complex irrigation system, the development of artificial irrigation in the practice of farming.

Our grandfathers conveyed to the minds of men through their wise sons the waste of water, the impossibility of poisoning the air, the absence of life without water, without air, through their words of wisdom, the caress of water, the end of life in a place without water, the destruction of progress, degradation, even more precisely the extinction of mankind, rightly prophesied three to

In this issue, a rare book of zaraostrism - "Avesta" has a special scientific-practical, educational significance. "Avesta" is an encyclopedic work that teaches life lessons about the fact that there is life on Earth where there is water, water is the basis of the total existence of living organisms, without which is inevitable to strike the universe, the nabototov animal world and humanity unbalanced. It is not only valuable for ancestors, ancestors, but also serves as a guide for the present and future generations. About water we give some examples from "Avesta":

"We finally applaud the waters.

We praise the low-flowing, aggregating and flowing, noble-minded lime waters.

- O Waters!

You are fluent in goodness. You wash the contradiction clean and you deserve two world happiness. We respect you.

We applaud you, O good waters, with the names that Ahura Mazda has become a gift of sympathy. We praise you by means of those names. We dream of friendship from you through those names. We pray with those names. We will leave our gratitude with those names."

"I applaud the best waters Mazda has created. I applaud the waters of the community ashavan, which Mazda has built."

("Avesta". Yasna, 17- hot, 61 page, 38- hot, 77 page)

Worship in our ancestors, the glorification of water has existed since ancient times. The following opinion was expressed about this in our historical heritage "Avesta:

"O Sipiytmon Zardusht!

Whoever exulteth purgation, it is he who hath entertained the fire. Water will please... It will please the trees. Ashavan husbands and ashavan women will

have made pleased."

According to the Zarathustra doctrine, it is strictly forbidden to throw dirty things into the water and air to pollute, river, sea, fountain, ditch, well and pond waters. On the banks of rivers and ditches it is not allowed to feed cattle, to tie horses. It is estimated that our ancestors, who spit on the water, sweep the garbage depending on the water,take water from the ditches and ponds in clean unwashed dishes, look at the water without being unclean are unethical in terms of their religious beliefs. They revered the river, the sources of water.

Those who did not spit, looking at it, did not wash, knocking on the arm. No one was arrogant about the water, it was not even allowed.

Dogs, animals let alone the dead, even the body of people-the corpse is not laid on the ground, the water does not flow. If the water is polluted, then everything both the soil and the air, and the plants that enjoy it, and the herbs, too, the animals believed that it would be unclean in poultry, and those who follow it.

Our ancestors knew very well that a person who ate dirty sucking, breathed dirty air, stepped on unhealthy soil cannot become energetic, spiritually trigger, his life will be short. Therefore,the basis of life is water as the pupil of the eye the honorable duty of a certain person, but also the honorable duty of mankind, people of all ages and sexes, was considered a human duty.

In the chapter titled "Vandidod" of Avesta, it is also reflected in the provisions on the rational use of water, what punishment will be imposed for air pollution:

- O Truth!

If he encounters water on the road, and the water is smeared, what will be the punishment?

Ahura Mazda answered:

-Aspahih - ashatra and saravushu-charana will be rewarded 400 times with whips."

He also emphasized that fresh and mineral water can be used for medicinal purposes in the "Visparad", "Vandidod" and other departments of Avesta.

Later, the opinions put forward by scientists in the Zarathustra doctrine about the healing of water were given on the basis of the correctness of science. Natural sciences have proved that water has a curative effect on the human body with its thermal fluidity, abundant thermal conductivity, good solubility of various salts and gases and other properties. Mineral water-soluble gaseous substances penetrate into the body through the skin and respiratory tract, are used to stimulate the activity of the nervous cardiovascular systems in the vascular walls and organs, accelerate the exchange of substances in fat, as well as to temper the body.

From ancient times to now, water is used as a healing blessing in the care of babies.Water-standing-finished miracle. In the religious and secular sciences it was said that all living things came out of the water. Our ancestors created many proverbs and proverbs about how necessary and valuable it is for the life of mankind and nature, the value of water, the need to save, not pollute, and keep clean, based on the doctrine that there is life on Earth there is water. They still live in the distant past, despite the fact that they appeared many centuries ago, passing from languages to languages, from ancestors to generations as masterpieces of human thinking.

Turonzamin, who lived in certain periods of our past history and lived a long life - tales and proverbs about obihayot, which were told by the ancestors of Turkestan, are now also keeping its significance in full.

Below you can read examples from them: «Сув олтиндан азиз», «Сув зар сувчи заргар», «Сув келди - нур келди», «Сув келди, сув келди, ариқ тўла нур келди», «Сувнинг қатраси - офтобнинг зарраси», «Сув - ёруғлик», «Элнинг ҳаёти ер билан, ер ҳаёти сув билан», «Ариқдан сув узилмаса, саватдан нон аримас», «Сув йил оқар Йамга гул тақар», «Сув таралар тупроққа, оро берар япроққа», «Томчи сувда тол кўкаррар», «Сувсиз ерда тол бўлмас, қовоғарида бол бўлмас», «Сувсиз ер -мозор, сувли ер - гулзор», «Сувсиз ер - жонсиз жасад», «Сувсиз ерга қуш қўнмас, Ўтсиз ерга юрт қўнмас», «Сувни қум тагидан қидир», «Қум бор жойда сув бор, сув бор жойда жон бор».

Our wise patriarchs predicted that air pollution is extremely dangerous for life, human life and prospects. They say that a person, an animal and a plant that breathes polluted air, perishes gradually, without being able to live, is exterminated. Air pollution is a source of common diseases. Both the father and mother of the herbalist are peasants. Thanks to this profession, people have grown accustomed to living in a certain place, making a place where the blood of navel drops, putting kindness and prosperity in the same place, laying a bottom on the same sacred ground and spreading the oak. More life is this civilization. This is the first step towards cultural, spiritual, educational maturity. This is the fact that each nation and nation has its own destiny and destiny, its own labor, mind and vision, and a strong waist for the prosperity of its village, its hunting, its meat.

Capricorn life is self - realization, a manifestation of what strength, abilities and opportunities one has in himself. In other words, water on this floor, is a special love for the source of life, an unusual eye, an unusual approach to thought and worldview, loving them, fondness.

The bowl of nation, a person who does not have love for the earth,water, air, does not flow, is

left behind by progress, cannot achieve prosperity, cannot develop the peasant culture at the level of secular criteria. If the first stage of farming is lalmiculture, then the upper stage is irrigation farming. But in any land, too, watering can not be done as a peasant. To do this, the land with fertile soil, which is located at the bottom, needs saturated water for natural mines, sufficient sunlight and a moderate climate. Due to the happy fate of our people laughing at the manglai, there are four such dachnas in the oasis and valleys of Turkestan – Uzbekistan, for this reason, in our country, irrigated farming has developed since time immemorial, a rich and high-quality harvest is obtained.

Water plays a big role in irrigation farming, such as land, sunlight, climate, human labor. In other words, water is the most important, decisive factor in farming in general, especially in the fate of irrigation peasants. Our ancestors understood this deeply. They learned that the solution of the water issue, which occupies an irreplaceable place in the life of mankind, is an extremely difficult task. It is possible to learn from the wise sons of our people that the prosperity of the land will not fall from the hands of any person: «Экин экмоқ осон, сув келтирмоқ қийин», «Сув келтирар мард киши, экин экар ҳар киши», Сув келтирган мард сув бермаган номард», «Сув қадрини қудуқ қазиган билади», «Сув ичсанг,қудуқ қазиганни унутма», Сувни севган сув келтирар», «Сув берган савоб, ўт берган кабоб», «Сув ичаётганга илон ҳам тегмас», «Сувни ич, чашмани булғатма», «Қудуққа тупурма, қайтиб ичаринг бор». To convey to our children and young people that great meaning and meaning lies in the time of these proverbs is the duty of every citizen to patriotism is a requirement of today.

Therefore, it should be said that our ancestors Jayhun and Sayhun, respected and honored their rivers. In this regard, it is worthwhile to mention Istakhri's words: "Khorezm is a country that has achieved all the benefits of Jayhun (Amudarya)".

Since our predecessors imagined that life begins with water, they made it divine, created legends about the god of water, the mermaid, and these legends are preserved even today in ancient Khorezm they called the God of water in the name of the Hubbi. This proves that they imagine water as a divine power. Academician Yahyo Gulomov wrote: "It is interesting to note that in the Ferghana Valley, a number of legends about Erhubbi have been preserved, and since both is also a water god-murakkili, his image is similar to the image of the Hubbi, the god of Khorezm. Such an analogy can be continued again: in the Valley of Ohangaron, for example, they also respect the Hubbi, when passing through the river of the vibrant Ohangaran, they ask for help from the Hubbi. It is not far from the truth that the healing "Khuja Hubbon" well, located in the

desert in the western part of Bukhara, is also associated with the name Hubbi .

There is another important aspect of the teachings of our ancestors about water. This is a warning against the risks associated with flooding. When snow or glaciers melted, when the rains burned, the water levels of the river rose, droughts, invaded cities and villages,as a result of which animals, people died a lot.

As is known from history, terrible natural disasters have occurred on earth, including in Turonzamin several times. The descendants of our grandparents, who experienced such a terrible accident,noted that great grandson was careful with his grandchildren, did not miss vigilance. «Ўт билан сув- тилсиз ёв», «Сувнинг иши- ўпирмоқ, ўтнинг иши - куйдирмоқ», «Сув бузади ҳам тузади ҳам», «Сувнинг ози ҳам бир бало, кўпи ҳам бир бало», «Ўт балосидан, сув балосидан ўзинг сақла», «Сув ўпириб кетган тўғонни дўппи билан беркитиб бўлмас», «Сув келмай банд ташла» the words of wisdom, the echo of centuries, preserved so far as the eternal call of the past, are coming without losing its significance.

Life begins with water, any living being cannot live without water, the wisdom of Avesta that water is the sacred duty of every person to honor as the basis of divine favor foundations is an eternal lesson for mankind. Mankind has come to the test, having noticed that pure air and pure water are incredibly necessary for man in the process of his many millennial life experiences and in his proverbs, the wisdom says that it is necessary to use both air and water as wisely as possible: «Соф ҳаво- танга даво», «Тоғ ҳавоси - дард давоси» like proverbs about the inevitability of water and air in full harmony with the ideas of "Avesta".

Avesta said that one of the most important in nature conservation problems is to prevent water pollution. Because of the lack of rational disposal and appreciation of water, pollution of materials, lakes, seas and oceans and from this the world of mankind, plants and animal suffered in vain, and even the inevitability of destruction were realized by our ancestors. In many works on folk oral medicine, written monuments, literature, art, history, medicine, philosophy, even water has expressed an excellent opinion about its usefulness.

The history and practice of mankind for several millennia gives the following conclusion: "the best of the waters is spring water. But not all springs, but the water of the spring, where the husband is clean and does not have any foreign properties and mood in the soil; or (where the water flows) should be rocky, because it does not sound like a slime, but a clean earth is better than a rocky ground. Not everyone will be a spring with clean soil (the water is good); it must be water that flows again, because these are the things that give the water a

virtue.

Sheikh ur-rais Abu Ali ibn Sina said: "rain water also comes into the sentence of good waters, especially if it is burned from thunderstorms in the summer... Rain water is considered the best water, but it is quickly calming, because it is very liquid, and the deterioration of the Earth and air quickly affects it. The sound of such water becomes the cause of the hoarseness of the hilts, and the chest also damages the voice.

According to the teachings of scientists, well water, such as springs and rainwater, as well as water that can be dissolved from ice and snow, also have its own characteristics. "After the waters of the Springs, - says Mir Muhammad Hussein al-Oqili in his book Mazhan al-adviiya ("Davolar xazinasi"), - in beauty stands the waters of the river and stream. The river and the river stream water, flowing from the top to the bottom, the soil is clean, the top is open, the wind is beating, it is itself sweet, pure clean, flowing from the West or south to the East and North is the cleanest water. They say that as long as there are all the available adjectives on the Nile River. Such water will also be clean, if the rivers and rivers flow quickly, mixing it with the water of sand and mud on the shore or in itself, but when taken to a container, it will quickly become turbid. For example, in rivers such as Amudarya, Sirdarya, Tigris and Euphrates, these adjectives exist. The water of rivers and rivers without these qualities is not considered clean.

Superficially looking at the issue, the water on our planet seems to be infinitely boundless. But while in fact it. If all the waterworks in the world if1,500 million cubic. kl, then its 94% is Ocean, sea water. And 6 percent of the water reserves are groundwater and glaciers. And the world's water reserves are only 0,0221 percent of all water reserves. Apparently, the issue of drinking water is being addressed as one of the most serious problems in the world.Today, a sharp shortage and pollution of water resources, including surface and groundwater, is of great concern to Uzbekistan. Rivers, canals, reservoirs and even groundwater in our region are affected by human activity. In irrigated areas, water is an invaluable gift of nature. All life is connected with water. Already in the place where the water ends, life also ends. Nevertheless, water reserves in Central Asia are very limited. Amudarya, which brings 78 cubic kilometers of water a year, and Syrdarya, which brings 36 cubic kilometers of water, are the main water sources..

Therefore, water protection, water saving investigation, rational use, prevention of waste is one of the important directions of the environmental policy of the Republic of Uzbekistan.

This is stated in the works of the Constitution of the Republic of Uzbekistan, Islam Karimov «Биздан озод ва обод Ватан қолсин», «Ватан саждагоҳ каби муқаддасдир», «Ўзбекистон XXI аср

бўсағасида: хавфсизликка таҳдид, барқарорлик шартлари ва тараққиёт кафолотлари», «Ўзбекистон XXI асрга интилмоқда», "Ўзбекистон мустақилликка эришиш остонасида", and President Shavkat Mirziyoyev "Эркин ва фаровон, демократик Ўзбекистон давлатини биргаликда барпо этамиз", "Танқидий таҳлил, қатъий тартиб-интизом ва шахсий жавобгарлик- ҳар бир раҳбар фаолиятининг кундалик қоидаси бўлиши керак", "Буюк келажагимизни мард ва олижаноб халқимиз билан бирга қурамиз", "Қонун устуворлиги ва инсон манфаатларини таъминлаш- юрт тараққиёти ва халқ фаровонлигининг гарови" and important steps were taken in his speech at the 72 - session of the General Assembly of the United Nations on September 20, 2017. In particular, it is noted that "there is no other rational way to solve the water problem than to equally take into account the interests of the countries and peoples of the region".

As defined in the Constitution of the Republic of Uzbekistan "water, like land, underground resources, plant and animal world and other natural resources, is a state property - a national wealth, rational use of which is necessary and they are in state protection" .

The work carried out in our country on the rational use of water saving and its care is evidence of the fact that the immortal ideas put forward on the care of water in the great heritage of our ancestors "Avesta" still retain its significance today.

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CLASSIFICATION OF ENGINEERING AND CONSTRUCTION TERMINOLOGY AND WAYS OF THEIR TRANSLATION

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ANNOTATION
The article considers the translation of terms in construction, operation, maintenance and repair. Terminology related to construction and engineering has been classified. Major groups of the terminology have been considered. Illustrations of translation of specific vocabulary and machine translation are compared.
KEY WORDS: *English terms, terminology, classification, civil engineering, heavy construction equipment, unambiguity, computer translation.*

КЛАССИФИКАЦИЯ ИНЖЕНЕРНОЙ И СТРОИТЕЛЬНОЙ ТЕРМИНОЛОГИИ И ВИДЫ ПЕРЕВОДА

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Аннотация. В статье рассматривается перевод терминов в сфере строительства, эксплуатации, обслуживания и ремонта. Терминология, связанная со строительством и инженерией классифицирована. Рассмотрены основные группы терминологии. Сравниваются иллюстрации перевода конкретной лексики и машинного перевода.
Ключевые слова: английские термины, терминология, классификация, общественное строительство, тяжелая строительная техника, точность, компьютерный перевод.

DISCUSSION

There are many definitions of the term, but today there is no single generally accepted definition of the term. According to O. Akhmanova, the term is "a word or phrase of a special (scientific, technical, etc.) language, which is created, received or borrowed to accurately define special concepts and designate special objects" [1].

According to I. Arnold, terms differ from common words in that they have a definition that reveals the most essential features of special concepts [2].

The main requirements for the term: independence from the context, accuracy and conciseness, unambiguity, motivation, simplicity, consistency [3].

Table 1 Examples of computer translation of English terms.

Term in English	Meaning	Computer translation
steel channel	швеллер	стальной канал
steel beam	двутавр	стальная балка, луч
construction equipment	строительное оборудование	оборудование конструкции
vibrating roller	виброкаток	вибрация валика
stationary asphalt mixing plant	стационарный асфальтовый завод	стационарный завод мешания асфальта
turbulent mortar and concrete mixer	турбулентный бетонораствросмеситель	буйный миномет и конкретный миксер
mono-pitched roof (mono-pitched roof)	моно-скатная кровля (односкатная шедовая крыша)	монотонная крыша
fair-faced brickwork	облицовочная кирпичная кладка	гладкая лицевая кладка
bar system	стержневая конструкция	барная система

Terminology is more than just words. Dictionaries and glossaries are helpful, but often they do not tell us the whole story. Meaning always involves the context - not only the way the word is used within the sentence, but often also the social context in which the word is used in the country where the text originates. This is illustrated by a few terms that I have seen in the course of my translation work.

There is a great necessity to give equivalent or relevant translation in a definite required language. Knowledge of how to render these specific vocabulary in to another language is still a challenge. The Table 1 illustrates the difference between the meaning of the terminology and the computer translation.

It is obvious, the working dictionary of a specialist in a particular industry contains common vocabulary, professionalism and scientific terms (general scientific and general technical, highly specialized, terms of related industries).

General scientific and general technical terms express the general concepts of science and technology. Therefore, in the terminological vocabulary related to the field of construction and equipment for the construction, operation and repair of buildings and structures, three areas can be distinguished:

1) narrow specialized terms (motor grader – автогрейдер; maneuverability– маневренность; digging depth– глубина копания; breakout force – усилие отрыва (ковша экскаватора); attachments–навесное оборудование; implements– рабочее оборудование; work tool – рабочий орган; bulldozer blade –отвал бульдозера; boom lift – подъём стрелы);

2) general scientific and general technical terms that are used in various fields of knowledge and belong to the scientific style of speech in general (analysis – анализ; parameter – параметр; aspect – аспект; experiment – эксперимент; equivalent – эквивалент; frequency – частота; process –

процесс; equipment –оборудование; production – производство; transfer – переносить, перемещать, etc.);

3) terms from related industries such as road construction (concrete – бетон; lane– полоса движения; pavement – дорожное покрытие; дорожная одежда; subgrade – земляное полотно), материаловедение (alloy steel – легированная сталь; hardfacing – наплавление твёрдым сплавом; wear resistant – износостойкий), трибология (boundary lubrication – граничная смазка; icroasperity – микронеровность; surface-active substance – поверхностно – активное вещество, ПАВ); maintenance and repair (troubleshooting – отыскание и устранение неисправностей; repairability – ремонтопригодность; serviceability – эксплуатационная пригодность, ремонтная технологичность; uptime – время наработки на отказ), terms related to chemical or physical processes, etc.

Based on the material studied, the following classification of highly specialized terms related to the construction, operation and repair of buildings and structures is proposed:
- **types of equipment** (material handling equipment – погрузочно-разгрузочное оборудование; compaction equipment –оборудование для уплотнения грунта; earthmoving equipment – землеройное оборудование; оборудование для земляных работ; землеройно-транспортные машины); – types of machines and equipment (backhoe loader, backhoe – (погрузчик) обратная лопата; cold planer – холодный планировщик (грунта); excavator – экскаватор); – системы машины (AWD system – система полного привода; hydraulic system– гидравлическая система; fuel system – топливная система); front frame structure– конструкция передней рамы; drawbar – тягово-

сцепное устройство; tubular design – трубчатая конструкция);

- operations performed by machinery and equipment (digging – земляные работы, выемка грунта; grabbing – захват, погрузка грейфером; grading – профилирование (дороги), планировка (грунта); lifting – поднимание, поднятие; pile driving – забивка свай, сваебойные работы); structural durability– выносливость, долговечность конструкции);

- production technology (cold milling – холодное фрезерование, soil stabilization– стабилизация грунта; hot recycling – горячая переработка, asphalt paving – укладка асфальта; surface mining – разработка открытым способом); – материалы (forged steel – кованая сталь; dirt– земля, почва, грунт; gravel – гравий; mortar– строительный раствор; transmission oil – трансмиссионное масло).

The most important problem of achieving the equivalence of translation of scientific and technical texts is the transmission of the original content of the text using the terminology system of the translated language.

The difference between the terminological systems of a foreign language and the translated language is the reason for the greatest difficulties in the translation of scientific and technical texts. Hence, it is necessary to study terminological systems and develop techniques for translating partially equivalent and non-equivalent vocabulary.

This classification of English-language terminology related to construction machinery and equipment which are used during construction process, operation and repair of buildings and structures creates the basis for the formation of an English-Russian and English-Uzbek dictionary that will help meet the existing need for an accurate translation of terms related to this area.

Thus, the sublanguage of architecture and construction differs from the common language in its differential properties; universal properties are a common feature. Architectural vocabulary was not the object of great attention; the classification of construction vocabulary is unique. In the study of the classification of architectural vocabulary, the following groups were defined: the type of the building, part of the building, structural elements; there were also identified classifications based on hierarchical relationships; classifications characterizing specific functional types of buildings, residential buildings by building material, names of subject concepts, borrowed terms, which underwent significant overview during assimilation.

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CAUSES OF DEVIATION FROM THE SOCIAL NORM

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ANNOTATION
In this article, the concepts of social norms, values and social institutions that cause the individual to be a deviant-minded or educated person have been studied and their attachment to them and the resulting form of behavior have been analyzed.
KEYWORDS: *social norm, value, social institution, deviant behavior, crime, suicide, drug addiction, alcoholism.*

DISCUSSION

In the scientific literature, a fair opinion is expressed that the very wording of the definition of a social norm is important only for methodological reasons. From the point of view of its research, it is more important to develop the concept of social norms. Apparently, this is why many textbooks on the theory of law do not formulate a definition of the concept of a social norm.

Thanks to social norms, the society creates stability and order in the relations between people and their associations. At the same time, the content of social norms is constantly changing, depending on a variety of subjective and objective factors. Therefore, it is impossible to fully understand this category, to fully determine its role in social development. That is why social norms have always been and will always be the focus of attention of both scientists and practitioners.

The German scientist Conrad Laurens, who lived in the twentieth century, came to such a conclusion by studying the comparative behavior of humans and animals. The behavior of animals depends on innate instincts, and in each problematic case there will be a pre-programmed solution in animals. Therefore, if any emergency does not occur, they will not have difficulty living in this world, they will continue to move with the help of instincts. This regulation mechanism Lorens called "natural morality". And man, in the course of his development, sought to subjugate nature to himself, developed his intelligence, and along this path he also moved away from his instincts. As a result, a modern man has become a creature that, if he does not work with the mind, will have difficulty living in life. That's how we are different from other creatures. We cannot live with the help of instinct, neither relations between people, nor instincts do not regulate, in a word we are no longer animals. For millennia, humanity, along with the development of its own mind, developed "artificial morality", which was the product of this mind, serving to regulate human relations. Relations today in sociology are regulated with the help of generalized rules under the term "social norm".

The concept of "social norm" was first studied by thinkers of antiquity. In particular, Plato states that in the work of "laws" people cannot live like animals, but are guided by laws developed with the mind. The great thinker, referring to all the manifestations of the social norm under the term "law", proved at that time that in the life of society they occupy an important place. Later, he developed his views on the work of Aristotle "morally". The great thinker considered maintaining moderation and normality in all actions as a virtue. He noted that "virtue is a situation between an anti-dependent character and inclinations." Even in the views of medieval Eastern thinkers, we can observe close views on the approach of Plato and Aristotle. They were one of the manifestations of social norms in the regulation of human relations – recognizing the place of morality, focusing on the issues of educating more perfect morality.

Later, European scientists also followed in the footsteps of Eastern thinkers and continued to look at morality and its place in human relations with high importance. In particular, the great German philosopher I.Kant talks about universal morality, which is reflected in every person, the scientist

explains that morality is a high human understanding. He says that the laws that regulate behavior and behavior must be formed as a result of human morality, that is, morality is the basis for all manifestations of social norm.

In the work of Kant and pre-thinkers, it was emphasized that morality is for all, although it does not have to be fulfilled, is a general rule, and those who studied it as a universal, abstract concept. And representatives of "utilitarianism", which appeared in the XVIII-XIX century, considered "more happiness of a person" moral. That is, if the kantists talked about the fact that a person should limit himself to the total morality, then I.Bentham and his followers consider the morality itself also a changing phenomenon.

The division in the methodology of Science and philosophical approaches also divided the approaches to social norms from the nineteenth century into two great directions. The first direction – supporters of the metaphysical approach, like other social phenomena, characterize the social norm as a concept that has hardened itself separately from society. In their eyes, the social norm is the starting point, the specific base program. Each individual moves out of it. The second direction – supporters of dialectical methodology, however, consider the social norm as an element of a complex structure of society that changes.

In sociology, "social norms" are widely studied as a factor that greatly affects the relationship between people. Initially This is about E.Dyurkgeym widely touched on the work of "suicide". Later T.Parsons and R.Merthons in his works, the analyzed the issues of social norm, its role in the life of society, its structure, its validity. Representatives of the school of classical sociology interpret the social norm as a behavior that must be recognized and fulfilled by society.

Today in sociology, the social norm is the patterns of behavior that arise on the basis of the experiences of these people who have lived together for a long time, and as a result of joint activity, forms and windfalls of proper behavior are created that are acceptable to all. Social norms indicate what a person should do, how he should do it, and, finally, how he should be.

Social norms govern the behavior of a person, although sometimes it goes against the will of a person. That is, some of our lives are led by something we "do not like"- events, too, we are forced to subordinate them to our own will. If it is not done so, it is difficult for mankind to survive. All social norms are created according to the norms of international law, primarily based on this need.

As noted above, "social norms" regulate human relations. By performing this task, it affects human behavior. However, this is not the only factor that controls behavior. Man moves in two or more

rounds within the framework of one norm, Without Borders. In particular, building a family without marriage is a social norm. If you follow it, you do not violate the order established in society. However, when choosing a marriage couple, everyone has their own opinion, and this is a huge variety. Someone is looking for a rich bride, someone appreciates beauty. For whom else training is important. So one more factor that drives our behavior is social values. That is, what is dear to us, we strive accordingly.

A person lives by striving for events-something that is dear to him, and when two situations that are dear to him contradict each other, he strives, depending on what is of paramount importance to him. The values that drive a person are what we call the purposes of his values. In addition to the variety of values in these purposes, it will also have a sequence according to its priority. That is, each person will have placed all the cases that he considers valuable in a row in the style of hierarchy, both according to their importance. This complex system is largely absorbed through the knowledge obtained in youth, and some can also be acquired through later life experiences. Therefore, along with education in youth, special attention is required to be paid to upbringing, in particular to teaching what is valuable in society, and to determine the priority value in the diversity of existing values and to be taught to follow it in activities. But what if the educational institutions and social institutions in general have different problems in themselves? It is of course necessary to come up with various problems and to study in-depth the undesirable situations in social institutions.

The concept of "social institute" in sociology was originally conceived by the English scientist by G.Spencer it was used as a concept that represented a stable structure of social behavior. The founder of the organist School of sociology says that society at certain stages of its development creates devices that ensure its survival, and such devices as biological organism-like nutrition system (such as the nutrition system), system (such as the circulatory system), regulation system (such as the nervous system) as an example. That is, the structural element that society has created as a device to facilitate the satisfaction of its needs is the social institution. In modern sociology, the social institution is understood as relatively stable types and norms of social practice that make up the life of society, ensure stable relations and relationships within its social structure. Sociology is primarily aimed at meeting the basic needs of members of society (family and education), aimed at ensuring material living (economic), uniting social groups and communities (political, legal) and preserving spiritual values (culture) institutions are more interesting.

In this way, violations in social norms, values, as well as in social institutions eventually undermine

social relations. The correct formation and accurate functioning of relations in this triangle will help to ensure that the deviant circumstances associated with young people in our country – crime, alcoholics, drug addiction, suicide, family conflicts, all-help us to overcome and prevent what concerns us today regarding the upbringing of young people. Therefore, in order to prevent the deviance of youth today, special attention should be paid to the following:

- in the era of reforms, deviantities of different views on the scale of society abound, and in sociology it is considered a natural state;

- the fight against extrovert deviants (actions directed at the external environment, for example, crime directed against another person or his property) does not bring up a deviant-minded person, but rather develops introvert behavior (deviancy directed at the person himself, for example, suicide, alcoholism or drug addiction). In our country, the decline in youth crime can naturally lead to an increase in suicidality, drunkenness or drug addiction. Therefore, the fight against deviant situations should be taken into account, in order to prevent it, a wider attention should be paid to the family education, the educational environment in the kindergarten and the school;

- scientists of the social sphere, educators should develop the values that are important in the education of young people and their sequence according to their priority;

- Globalization and the liberalization of information exchange, the process of liberalization in society can lead to the emergence of some manifestations of immorality as the norm in the population, especially in young people.

In order to prevent these cases, the normative requirements corresponding to the values that have traditionally prevailed in our country should be developed strictly and the barge should be interpreted equally by representatives of social institutions – family, educational institutions, media, state and public organizations. In this regard, especially youth organizations are required to take the initiative into their own hands.

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NEW CONSIDERATIONS ON THE ANCIENT URBAN CULTURE OF THE JIZZAKH OASIS

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ABSTRACT
This article discusses the emergence and development of the urban culture of the Jizzakh oasis, which was an important cultural, economic and political possession of Ancient Ustrushana in the era of antiquity.
KEY WORDS: *Ustrushana, Jizzakh oasis, Nurtepa, Khantepa, Kaliyatepa, Eski Hawas, Kulpisar, dolmen, Sirdarya, Fergana Valley*

INTRODUCTION

In Ustrushana, including the Jizzakh oasis, the ancient stage of the emergence and rise of urban culture took place in connection with the invasion of Alexander the Great and the influx of Hellenistic culture, a political event that left an important mark on the history of Eurasian peoples.

During this period, researchers confirmed that sedentary life and irrigated agriculture, handicrafts and trade were practiced in the whole territory of Ustrushna. As noted in the scientific works of Ustrushan scholars, "Greek authors testify that in Central Asia, especially in Ustrushana, urban life developed as early as the 4th century BC, and a culture of farming based on artificial irrigation systems developed.

MATERIALS AND METHODS

For that period, the city of Kiropol, the largest and most famous among the cities of Central Asia, had the status of the central city of Ustrushna. The authors of the ancient period report on the Khojand fortress and five cities with Alexandria Eskhata built on its ruins. The authors mention only the names of Gaza and Baga among these cities [1:49-73].

Ancient cities of Ustrushan mentioned in the works of Greco-Roman authors and information about castle-dwelling settlements has been studied by contemporary experts, and many opinions have been expressed on the question of linking them with existing archeological monuments. In particular, it was noted that Kiropol was initially localized with

Mugtepa in Uratepa, and later the site of the large city monument Nurtepa. Opinions about the location of Gaza include Gaza-Dizak-Jizzakh (V. Tomashek, M. Andreev), Gaz-Nov Atrophy (F. Schwartz), Gaza-Gazan-Darak. [2: 221-226].

According to T.Belyaeva, Gaza was located on the site of a village in the Khojand region. Commenting on the location of the city of Baga mentioned in the sources, V.Tomashek admitted that it was in the place of Zaamin, while P. Skvarsky and I. Kastane admitted that the city of Baga was in the place of Fagkat (Vagkat). In this regard, the opinion of T.Belyaeva "On the banks of the ancient canal from Aksu around Baga Nov" is noteworthy [3; 35-40].

While thinking about the place of unnamed cities 5, 6, 7 in the works of Hellenic authors, experts say "Sabat, Shovkat, Havos" (V.Tomashek), "Sabat, Zaamin, Shahristan" (V.V. Grigorev), Begovat, Kizil Langar, China ... around the village" (N.Negmatov) [4; 57-58б]. According to archeological sources, A. Gritsina connects the last of these cities with Khantepa in the village of Sovat, located in the south-eastern part of the Jizzakh oasis [5; 23].

In our opinion, the sixth of the seven cities that revolted against Alexander the Great was the site of the Old Havasu monument, where the first ancient cultural strata have been identified in recent years.

A number of scientific discoveries have been made on research into the problems of the historical topography of the ancient Ustrushona, in particular the archaic and early antiquity period of the Jizzakh oasis. According to the geography of

archeological monuments, the first Iron Age monuments were located in the upper reaches of the Nurtepa and Korpa rivers, and later such settlements began to be built in areas with large springs and plains for farming. Examples of this are the settlements of Khontepa, Sag'anaqtepa I, Sag'anaqtepa II, Old Havos, formed in the lower reaches of the Khojamushkentsoy and Muzbuloksay.

According to Chinese sources, between 203 and 174 BC, two powerful alliances of nomadic tribes in Central Asia clashed, and in these battles the Huns eventually won, and the defeated Yuezhi were driven westward into the Yaksart Basin. The main part of the Yuezhi, which squeezed the Saks in the middle and upper basin of the Syrdarya, the Great Yuezhi, invaded the Greco-Bactrian regions in the Oxus (Amudarya) Basin to the south. Archaeological evidence shows that some of the Yuezhi (yuechji-chjaovu) remain in the Syrdarya basin, while some tribes migrate west along the Syrdarya. These events will lead to the material, cultural and ethnic intermingling of many settled, semi-settled and nomadic peoples, and in the future the formation of new historical cultural lands, political structures and alliances of tribes. It was during this period that the formation of Kangyuy, a powerful state of its time and a union of nomadic tribes, took place [6; 7-14].

In the lower delta of the Syrdarya, it was found that the first fortresses and cities surrounded by defensive walls were built by the Dah tribes (Chirikrabot) and massagets (Golden Fortress, etc.).

Archaeologist R.H. Suleymanov writes that as a result of tectonic upheavals in Central Asia in the III century BC, the landscape of the lower reaches of the Syrdarya changed dramatically, and the river began to flow into the Aral Sea from the north, taking on a modern appearance. The southern tributaries of the Syrdarya - Akchadarya, Kuvondarya, Inkordarya - have dried up, and as a result, the land of the Chirikrabot culture is in crisis due to the drought. The dahs, who in their time were famous for their warlike, semi-sedentary, semi-nomadic way of life, were forced to migrate to the western, southern, and eastern countries. Some of the Dah tribes, who migrated to the upper reaches of the Syrdarya, entered the Chach and Ancient Ustrushona areas of the Middle Syrdarya, and then into the Fergana Valley. Of course, this migration was not rapid, but gradual over time. The dahs, who mastered and occupied new lands, laid the foundation for the formation of the cities of the Syrdarya basin - Signak, Savron, Otrar, Turkestan, Tashkent, Shymkent, Taraz. At the same time, the development of the lands of the lower basin of the Sangzor River took place in the III-II centuries BC [7;7-10].

In the early 60s of the last century, a short-term survey was conducted by an expedition led by Ya. Gulyamov in the irrigation zones Qaliyatepa and Kulpisarota in the lower reaches of the Sangzor. As a result, long-lived settlements, tombs and sagans such as Kulpisarota Cemetery, Dunyotepa (200x170m), Turtkultepa (110x110m), ancient sagan and dolmen are recorded here. Dunyotepa, a guard fortress of the 1st century AD, and Turtkultepa rabota, which operated in the 9th-10th centuries AD, were erected on this place, which blocks the northern and western borders of the Jizzakh oasis. According to Ya.Gulamov, the term Kulpisar means "the main lock of the road". An ancient road connecting the Jizzakh oasis with the cities of Chimkurgan and South Kazakhstan passed through Kulpisar. The Dunyotepa military fortress really closed that road. Turtkultepa, on the other hand, is surrounded by a strong defensive wall, and in terms of its interior layout and location, the building resembles a chain of rabots (later served as a caravanserai-P.M.) built every 30 km along an old, main road that connected Otrar with Nurata in the IX-X centuries. Kulpisar raboti is also part of this system [8; 92-96].

One of the rarest finds in the Kulpisarota complex is the wordless dolmen. Apparently dating back to pre-Islamic times, the dolmen is the only (60 years have passed, but the "analogue" of this dolmen has not yet been found - P.M.) burial structure found in Central Asia for the first time in Central Asia, 120 meters east of the sagan, which stretches up to 18 meters in a west-east direction, contrary to Muslim burial customs.

The dolmen is traditionally made of several rocks, covered with a large flat stone, measuring 1.8x1.5 meters and 1.2 meters high. Like this type of structure found in Western Europe, the Kulpisarota dolmen is surrounded by a series of boulders. The author of this unique find writes that "worshipers of the kulpisarota tomb also offer sacrifices to the dolmen, where the flat stone on top of the structure serves as a kind of altar and bleeds there. Dolmen is a site dedicated to the religious beliefs and burial rites of the Bronze Age 2000 BC [8; 92-96].

CONCLUSIONS

Thus, according to recent archeological research, in the V-IV centuries BC in the Jizzakh oasis were built settlements surrounded by defensive walls - Xontepa, Cag'anaqtepa I, Sag'anaqtepa II, Korpasay fortresses, which are widespread in the country. As a result, on the basis of these fortresses in the III-II centuries BC, such perfect urban settlements as Qaliyatepa (Jizzakh), Dunyotepa (Kulpisar), Kurgantepa, Oktepa, Jartepa (Zomin) began to function. The activity of these city centers lasted at least until the end of the VIII century AD (Qaliyatepa…) and some before the conquest of Genghis Khan (Qurghontepa…).

These factors indicate that in the Jizzakh oasis all the processes of ancient settlements, in particular, urban planning culture, as in neighboring countries, took place.

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ON SOME FEATURES OF THE FORMATION OF ELECTRONIC CULTURE

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ANNOTATION

This article examines a new type of culture that is rapidly developing in our time. It is noted that the days have passed when we limited ourselves to narrower topics such as personal culture, culture of behavior, and clothing culture. It is emphasized that these days there are changes when the economy, industry, market relations, agriculture, medicine, leadership, politics and international relations have their own culture.

KEY WORDS: *"culture", information culture, information technology, a way of communication, personality formation, ecological culture, electronic culture, electronic means, a broader concept of culture.*

DISCUSSION

We are living in a time when the age-old concept layer of meaning is growing endlessly. Today, the term "culture" is also experiencing such a process of colorization. The period of limitation was left behind by topics that were somewhat narrow, such as personal culture, culture of treatment, culture of dressing. Now the economy, production, market relations, farming, medicine, leadership, politics and international relations have their own culture, that is, there is no sphere, Network, front without the concept of "culture". Even the core of any society, that is, the basis of progress, has become a reality that does not require proof of the existence of culture

According to the well-known scientist A.A. Umarov, "as the role of information in society and human life increases, the issue of formation of information culture plays an important role. To do this, first of all, it is necessary to content the information culture of the individual.

In simple terms, the person who owns the information culture should not only be literate in the field of library science, bibliography and computer science, but also be aware of the legal aspects of information and informatization, know the features of modern information resources and information systems (libraries, archives, databases and banks), be able to use information technologies, be able to advance and master the"[1]

The information culture of the society is characterized by the ability of its members to access information resources, the extent to which the use of Information Technology has been formed for the benefit of personal life activities and the development of the society. For free movement in the flow of information, a person must have a culture of information as part of general culture. The culture of information is associated with the specific needs of the social nature of the individual. The level of Information Culture is determined by the formation of skills for mastering information communication technologies and its use in daily activities and satisfaction of various exteriors. Without communication, the development, socialization of a person, the formation of an individual as a person, his connection with society simply can't imagine. Communication is also considered one of the primary needs inherent in a person.

Also, the essence of the concept of "information culture" is determined not only from the point of view of analyzing different information, but also from the point of view of mastering methods of management.

Formation of skills of information transmission is a multifaceted problem that must be solved. The information culture is important in terms of attitude towards information, the creation of the methodology for the formation of the worldview, the explanation of the philosophy of the society in which information is communicated to the population, the formation of the skills for selecting the necessary, necessary information from among the information flow. According to the famous scientist Norbert Viner, "information exchange is like a specific cement that unites society" [2]

Social communication is a specific form of human interaction in which information transmission is carried out with the help of language and other character systems.

In the opinion of Canadian sociologist Marshal Maklyuen, the exchange of the method of communication expresses the stages of development of history. Accordingly, he divided the following periods of human development:

- Oral communication, that is (in this period, the communicative environment within the community was directly covered in all respects by communicants);

- Communication through written communication, that is (the period when written messages cross the barriers of time and space);

- Publication-communication IE (an increase in the level of gross coverage of communicants, the period associated with the invention of printing technology of printed books.

- Multimedia communication, that is, a period of achieving direct access to communication on a global scale.

Find the content of a culture of communicative environment specific to these periods. For the first time M.Maklyuen defined the features of the culture of the communicative environment. In his opinion, modern culture is visual in meaning, and culture at the end of the XIX beginning of the XX century is mainly written.[3]

From this case, we will be able to add a new term "electronic culture" to the composition of specific features of modern culture.

The term "electronic culture" appeared relatively recently in scientific literature and has not yet been interpreted one by one. This term is not yet available in specialized dictionaries, encyclopedias and philosophical publications. Its prevalence is associated with the predominance of the practice of presenting various objects of cultural heritage: museum collections, paintings, architectural monuments and other works of art - in the electronic media.

Let's note that the provision of information on objects of social significance of culture and art in electronic form was initially considered as one of the ways of preserving the cultural heritage of society for future generations.

However, as the process of informatization of society develops, this is becoming increasingly clear and another important possibility of social use of electronic copies of cultural objects arises. Since it is very easy to give mass access to remote users with the use of modern telecommunications, this is due to their convenience.

Thus, with the development of the process of global informatization of society, a fundamentally new stage of cultural development is being formed. Now not only the objects of culture and art that are exhibited in the halls of the Bay of museums and galleries of art in the world, but also those that are in the rooms and are not exhibited for general viewing

for various reasons, are also presented to wide layers of the population.

Nevertheless, today the content of the concept of "electronic culture" should be a new, rather extensive interpretation. This need is due to the growing number of electronic Informatics used in almost all areas of social practice, becoming an integral part of modern culture. The use of these tools significantly changes the traditional stereotypes of the behavior of millions of people, their ideas about space and time, quality of life, the structure of personal, corporate and national wealth.

To formulate a general and adequate definition of the current situation in the composition of the term "electronic culture", we use the following definition of the concept of culture, which is given in the new philosophical encyclopedia:

Culture (activity, behavior, communication), in which a person's life is historically developed, which promotes reproduction and change in all manifestations of social life).[4]

This definition covers almost all important aspects of the life of man and society and is therefore the widest of those given in other works. On the basis of this approach, the following definition of the concept of electronic culture was proposed in our work:

Electronic culture is a new direction of development of modern culture of society, formed on the basis of the use of electronic means of informatics and related information and communication technologies in all spheres of human life. Electronic culture is a subsystem of information culture and includes new information attributes, tools, methods and results of human activities in this field.

From this definition it follows that electronic culture covers not only electronic culture, but also the entire sphere of culture, with the development of the information society and the electronic means of informatics. It should be remembered that this rule is important.

When it comes to the interconnectedness of the concepts "information culture" and "electronic culture", how do the concepts "information and electronic culture" relate based on the above definitions? "the idea comes of course. In our opinion, these concepts are very close in terms of their meaning, but they are not the same, although they are often confused both in responsible government and international documents. The reason for such confusion is that the system term has not yet been established in this area.

The difference of the concepts under consideration is that only those aspects that are directly related to the use of electronic means in Information Culture or the creation, study and development of these means in the interests of culture should be related to the term "electronic culture". At

the same time, as shown above, the culture of information is broad and includes such components that are not associated with the use of electronic Informatics.

Thus, in our opinion, the concept of "Information Culture" refers to a wider field of culture in comparison with the concept of "electronic culture". To some extend, although electronic culture is very important, it is one of the subsystems of information culture that is still developing rapidly and therefore deserves the most thorough analysis and study as it is in the system.

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SPIRITUAL AND MORAL VALUES OF YOUNG PEOPLE AS A COMPONENT OF SOCIAL LIFE

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ABSTRACT

In the article, the content of the moral values of young people and the analysis of the moral values as a component of social life, as well as the tests of the study of moral values, the use of samples of oral creativity of the people, the importance of the moral values of young people in the present day are mentioned.
KEY WORDS: *value, moral value, culture, proverb, analysis, self-assessment, correction, systematic approach, contradiction.*

DISCUSSION

The social and political changes that are currently taking place are the impetus for the emergence of new social norms and principles of behavior. And the change in the system of cultural and historical values, in turn, is reflected in the content and essence of the leading values of man. The socio-normative abstract that arises as a result of conflicts of habits and traditions in different systems leads to a violation of the boundaries between right and wrong, nobility and evil, law and morality, freedom and responsibility. In addition to the eternal values of the Ideal world, local "one-day", "erroneous values", which have no significance, are emerging. The reality of the present day is that living in a concrete place with certain geographic coordinates, a person feels the pressure of various polar cultural traditions. Since the axiological landscape of the social world is the first to appear in the history of mankind such an anti-orientation, the choice of "who to be", "how to be" is perceived by the region and traditions. Changes in the axiological landscape of the universe increase the relevance of the problem of research on values.

Issues of formation, development and change of pedagogical and psychological values of a person are in the center of attention of philosophers, sociologists, political scientists, economists, psychophysiologists, pedagogues and psychologists. C.Tulenov, E. Yusupov, S. Komilova, I. Karimov, S. Valiyeva, K. Tulenova and others first covered various aspects of the axiological problem as a separate line of philosophy. C. Yoldoshev, F. Yuzlikayev, R. Ahliddinov, M.Quran, R. Ibrahimov, Sh. Mardonov, T. Toshlanov, N. Egamberdiyevalar tried to illuminate values from a pedagogical and psychological point of view in his research.

Extensive research of vital values covers all layers of analysis: cultural-historical, socio-economic, individual-psychological.

Cultural values exist in the form of traditions, which are strengthened in the sciences of art. The values that govern social relations are expressed in the form of a normative picture of goodness and evil, justice, beauty, honesty. Collective or group and evaluations determine the necessary criteria that determine social activity through imperatives and prohibitions. Individual consciousness level polished values are the negatives of organizing and managing a person's lifestyle and activities, they lie on the basis of any assessment of a person and influence his decisions [2]. The difference of the Individual-psychological approach is in the difference of the subjective component in the system of values, in their reflection in the individual consciousness.

Values are immanent in activity and behavior (companion invisible on the surface), they are harmonious in its structure (design — implementation — cost of result) and dictates the need for expression in life. Deprivation of the ability to manifest values about a person lies in the fact that its solution is based on the development of a person or on internal conflicts, conflicts, tension, manifested in the destruction manifested in deviant, delincvent, criminal behavior [3]. This means that the study of the moral values of the young people we plan to carry out at the same time allows to a certain degree of correction of the educational and educational process that we need to carry out. Our research will serve to find out the reasons for the rejection of moral values by young people and the reasons for such protective functions in the minds of young people in this situation.

In conclusion: crises in our life, drastic changes, abstract situations and social instability not only change the usual social environment of a person, but also decrease his personal potential, change the criteria of his life activity, lead to a mistaken perception of the landscape of values of the universe, make it difficult for a person to realize himself and his potential: the factor of — the development of the individual and the recovery in ontogenesis (individual development, a set of consecutive changes that occur from the beginning of its formation to the end of life), the realization of self is an integral part of its holistic psychological image, which greatly affects the formation. Already, a person assimilates the content of value in the course of practical activities; values serve as a mediator, forming a system of vital activity of a person in the social space. The values of a person become the most important spiritual resource of a person.

This study examines the issues related to the definition of the term "life values", defines the features of the perception of the phenomenon presented in the work as one of the most important consituents of the formation of the reality surrounding the subject. An important factor in the formation of the personality of a subject involved in the educational process in a higher educational institution is the awareness of a person of his own self, the ability to study constantly, not stop at the results achieved, to have a unique opportunity to adopt the best characteristics of another culture, to be an educated person and remain a person in difficult market conditions and conditions, sometimes unfair competition.

A society is a conglomerate of subjects that accept certain values expressed by linguistic and non-linguistic means and presented in the form of abstract and concrete concepts shared by representatives of this particular community. The process of assimilation of people's experience and value orientations of a certain society forms the formation of a person, this process is called socialization. Throughout their life, a person learns to perform special social roles ─ child, parent, spouse, student, employee, etc. Personality is determined not by the structure of the brain, but by the system of social relations of a person to a person, mediated through the things created by him. In the field of the individual, the individual realizes himself as a fundamentally different social entity from the body and brain. The formation of a person as a person requires society to constantly and consciously organize the improvement of the system of public education, overcoming stagnant, traditional, spontaneously formed forms. Consequently, the recipient uses certain markers of behavior and value orientations, directly participating in their creation. Psychologists divide values into personal and social ones.

Personal values are directed directly to the inner world of a person. His mental comfort. It should be noted that the value characteristics of each individual are purely individual and represent a unique symphony of intricacies of personal orientations. For example, for one person, saving someone else's life at the expense of their own will be valuable. But, even with this characteristic, he can support and be a follower of the xenophobic community in his own social space. For another person, the highest value will be the upbringing of their own children, so to speak, in the fortissimo style - but this process will only affect the interests of the children of this subject. All other children will perform the function of certain stimuli in terms of their benefit or harm to his offspring.

Such a subject will spare no effort and opportunities to harm other members of society in order to extract personal benefit. It is important to note that the actions of the above recipients will have a diametrically opposite logic of performing certain steps when achieving a given goal. Summarizing these examples, we can say that the values of even representatives of the same communicative and social community, held together by the narrative practices of structured experience of life cognition, can differ significantly and have different meanings of perception, processing and interpretation of the reality surrounding them. It should be remembered that values should not be confused with beliefs or needs. The register of values includes such concepts as home, beauty, work, family relations, culture, morality, and spirituality.

The social world is built on the basis of the division of its individuals into groups, the division can be of different nature: ethnic, economic, social status, educational, etc. According to the division of different groups of the social community, we can speak of society as a symbolic system, objectively represented within the social world, where the space of existence of status groups and their lifestyles is regulated by the different attitude of society to their behavioral characteristics. Thus, it can be argued that the perception of the social world has a dual structure. Images of objects or processes of real reality that were perceived by the subject earlier, and can be mentally reproduced, are called representations. The physiological basis of representations is the revival in the cortex of the large hemispheres of" traces " of excitations that were formed during the perception of objects or phenomena. Representations serve as material for the processes of memory and imagination and are called up by images of memory. The ideas that arise in an individual are classified according to the following criteria:

1) By the type of prevailing sensation underlying the representation;

2) By the nature of the reflection perceived earlier in the representation;

3) By the participation of volitional effort in the appearance of the representation. Therefore, we can talk about such a phenomenon as the presence in the consciousness of an individual of value perceptions of previously experienced social experience. Values are a special kind of reality, the basis of which is the direct connection with human existence, they become relevant only under special conditions, in a special unique environment with a certain turn of a certain society. Social orientations and positions - a set of goals, attitudes and value criteria of a person, objectified in the corresponding stereotypes of social behavior. The main sign of the existence of values is their directly related significance of something or for someone. Here we can say about the stretching of the meanings of objects-signs, when the same sign is endowed with different meanings from the point of view of the evaluation position, changes under the influence of the social interactive space and takes on a new meaning different from the previous one, despite the fact that the form of its visual embodiment has remained the same.

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AGRICULTURE AND HORTICULTURE OF KASHKADARYA OASIS: TRADITIONAL AND MODERNISM

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ABSTRACT

   This article XX century Kashkadarya oasis have the economic life of the population of the importance of horticulture and agriculture, improving process analysis.
   Farming in Uzbekistan in the past, brass period. Types and characteristics of agriculture are related to natural-geographical and climatic conditions. According to the farms in the valley and the river developed.
   KEY WORDS: *Kashkadarya, valley, Central Asia, irrigation system, culture and lifestyle, Dehkanabad.*

I.   INTRODUCTION

In the Kashkadarya oasis, as in other Central Asian nations, the Uzbeks built ancestral irrigated and non-irrigated farming traditions, powerful irrigation facilities; creation of head distributors and water-lifting devices, diversification of field irrigation - different methods, different types of agro-techniques.

Zarafshan, Kashkadarya, Syrdarya and Amudarya located in the vicinity of agriculture to entertain. Shakhrisabz district, including water areas in 1989 - the year following growing products: 1500 hectars , 11 thousand tons of vegetables and melons, cotton, 457 tons of various fruits, 1,300 tons of grapes were grown.

Depending on what is planted in the ground, it is plowed 1-2 times, 4-5 times. In order to have an abundant harvest in the oasis areas, grain sowing has become a tradition on Wednesday. 4-5 pounds of tax was levied on 50 pounds of grain at the expense of the state. During the Emir of other property and pay [1].

" Qoratut " Shahrizabs district specializing   in agriculture every year, one of the village of 4,200 tons of grapes, 820 tons of fruit produced 460 tons of milk and   other   products. But   the   cold   of winter fruit , livestock   products   not   the   many years [2] .

Mongolian, Datura seeds Arabsoy villages of 50- 7-8 family lived in the early recovery.

It was the post-war years, the semi-nomadic population accelerated [3].

II.   MAIN PART

Placing   the   culture   and   lifestyle of   the population   of   water   resources,   natural   plants, underground   and   surface   sources, due   to the structure. Types of economic cultures are determined not only by the environment, but also by the level of socio-economic development of certain ethnic groups.

The territory of the Republic, including the Kashkadarya oasis, can be divided into three economic and cultural types on the basis of scientific literature.
1. Irrigated agriculture;
2. Mountain and foothill farming along with horticulture and animal husbandry;
3. The steppe is divided into agricultural and pastoral areas [4] .

The first area includes Kitab and Shakhrisabz districts of Kashkadarya region, the majority of which have long been engaged in irrigated agriculture, the second part includes residents of Yakkabag and Dehkanabad districts. Third arriving in the region Chirakchi, safe, Karshi-Guzar, professional and other areas, laundry name . The withdrawal of water from the Amudarya led to the development of the Karshi desert and the transformation of the population into obedient farmers and gardeners, the active assimilation of various ethnic groups and groups. After the settlement of the population engaged in animal husbandry in the past, not only the economic situation, but also the material and spiritual culture of the lifestyle will change radically. Area 18.2% of irrigated land in the mountainous and foothills area, consisting of 20.5% and the rest is pasture - deserts. However, in

the 60s and 80s of the XX century, millions of hectares of new lands in Uzbekistan were developed and turned into agricultural lands. After he found z thousands of new families live in the desert steppes of new settlements.

The traditions and practices of farming have been passed down from generation to generation. The presence of precipitation and hot climate led to the creation of complex systemic irrigation facilities in the Kashkadarya oasis [5] . It is famous for its Khorezm, Chigir, Nurata melons and Syrdarya. Therefore, agriculture is studied in relation to irrigation structures. Population farming , gardening, nutrition settled among the population as a result of ethnocultural contact their development. Groups of people who have been pastoralists in the settled past learn farming practices from the locals.

According to ethnologist U.S. Abdullayev, the development of livestock farms and husbandman and handicraft farms was impossible without interaction [6] .

Interaction of agriculture and animal husbandry:

- leads to the rise of ethnic relations, consolidation, assimilation, integration.

- ensures the specialization of sedentary, semi-nomadic and nomadic economy in a particular direction, the formation of life and new traditions. Call the Kashkadarya oasis mangit, kenegas, qarluq, turkish, ethnic groups remained to maintain the traditions of their livestock at the beginning of the twentieth century [7] .

Irrigated agriculture is called "obikor", non-irrigated lands or spring by the locals as irrigated land, branch or in Tajik term.

The land used is also divided into parts of the field, open garden and melon (life, reserve garden), which make up the majority of crops. The locals call the fields outside the village fields. Non-irrigated lands are divided into hilly and mountainous types depending on their geographical location.

In the past, it took a lot of work to build irrigation structures and keep them in order . In particular, in 1939, the construction of the Fergana Canal attracted hundreds of thousands of people, and only from the second half of the twentieth century began the construction of large irrigation facilities with special state organizations and equipment. The Himoran and Talimarjan reservoirs built in the Kashkadarya oasis do not reflect the flow of water from the Amudarya to the Karshi main canal in our historical traditions [8] .

Some researchers divide high-altitude irrigated agriculture into a separate field. This is due to the fact that in mountainous conditions, irrigation facilities are smaller in size than in oases [9].

In mountainous conditions, the use of river and river water is widely used. In the literature, this type of farming is also called spring farming.

Use of crop farms to obtain a good harvest in some mountainous villages that you want 80 - 90 years of the twentieth century mountain villages hammer to release dozens of looks. In particular, in Gilan and other villages where 60% of the land is inaccessible to tractors, there were dozens of animals that were added to the plow on state-owned farms. How to use them studio's film "Gilan" we see a documentary film.

The main tools of agriculture were plows, hoes, sickles, sickles and so on. If we consider the iron plug as a relatively modern tool of labor, in 1913 an average of 800 farms had one plug [10].

According to archeological data was used in Khorezm from the IV-VI centuries. This is a universal instrument of labor is so versatile perfect future generations, it is made of recycled household and farming to be the most useful instrument of labor.

A unique form of irrigated agriculture in Uzbekistan is the widespread use of land-water neighborhood communities [11] . In the Kashkadarya oasis it was called Paykal. Traditional collective farming was well preserved in mountainous, foothill, or semi-steppe areas (especially in the Karshi oasis).

According to the researcher D.Basiv, by observing the historical development of land use methods, the paikals originated from ancient times . But Pike will change during the development of the system , and will appear again [12] . Ethnologist A.Qayumov of this scientific opinion and the agent can not be justified as follows. The reason for the end of the nineteenth century - the beginning of the twentieth century, the population and the resulting increase in the number of irrigated land increase in the demand for products and livestock livelihoods in the past part of a growing process and other ordinary l symbols to influence land use patterns.

Water shortages were felt in the Lower Kashkadarya oasis, as in many other regions. To get rid of water shortages, agricultural products were grown using springs, ponds and small mountain rivers. In the foothills, ponds have been built and the collected water is distributed to farm plots in turn. Information about locked pools can be found in the research of academician K. Shoniyazov [13] .

Older people start plowing the land and then bless the neighbors. Over the past ten years, this superstition began to disappear [14].

In wet areas, wheat barley is watered 5 to 6 times. A handful of grain was taken to the right month and given to the poorest family in the village. As the donkey was used, 3 - 4 hundredweight land of wheat or barley was given and the remaining grain became. Finally, the hay is cleaned. After the grain is completely removed, 2 to 3 kilos of grain are sprinkled on the birds and animals.

Population growth, the specific results of the Oasis surveyed every inch of land, effective use of liters of Bayonne. Even on uncultivated, finally steep

mountain slopes, people are planting vegetables in small areas, cultivating poplars , and planting fruit trees .

The grain is called the early spring, that is, the period after the grass freezes. Then began the period of rebellion, in which everyone came out and bowed their heads. It is the flowering period of wheat.

Millet and flax play an important role in the life of the population. Millet , flax second half of June. Yield a maximum of 6 - 8 hundredweight. Flax was of great importance in the economy of the population . He was given cattle and straw. Oasis villages 3 and 4 woman of 10 kilograms of flax seed oil 2,5-2,8 kg.

In Kashkadarya, flax was traditionally grown until the 1960s. In agriculture, n oats are also planted. Adas (Tajik-style) used instead legumes, lentils pea sprouts after irrigation.

E refractive watered three times, smeared with fresh water, the beginning of the second, third, cooking in advance. Xokobi after the first hearing, on the other[15].

III.CONCLUSION

The developed lands in the foothills of the hill are irrigated by a ditch from Aqdarya in the Shahrisabz district of the oasis. There are three canals on the northern side of Gilan from ancient times (IV - V centuries). This canal was used by the population until the XX century. The same period of hard work in order to facilitate the people in mountainous areas is one of the innovative discoveries the top of the wire through the garden of wheat or hay caught in the ring with a steel cable down the city invented the technique.

A distinctive feature of the oasis 's economy is that tradition and modernity go hand in hand. But natural climatic conditions are forcing the population to use traditional tools of labor. At a time when it is impossible to imagine farming without machinery in the plains of the oasis, able - bodied people in the mountainous areas of the population are turning rocky fields into arable land .

The result should say that, instead of Kashkadarya raining population of agriculture and horticulture from year to year as a result of the development of the twenty-first century and the end of the twentieth century and struck ya Season equipment and technologies et il vulnerable. How the village market for fruit and vegetables in order to build businesses that operate a T become a priority of state policy.

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ON THE HOMOGENEOUS TERNARY QUADRATIC EQUATION

$$7x^2 + 3y^2 = 220z^2$$

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ABSTRACT

The ternary quadratic equation given by $7x^2 + 3y^2 = 220z^2$ *is considered and searched for its many different integer solution. Five different choices of integer solution of the above equations are presented. A few interesting relations between the solutions and special polygonal numbers are presented.*
KEY WORDS*: ternary quadratic, integer solutions*
MSC subject classification: 11D09

1. INTRODUCTION

The Diophantine equations offer an unlimited field for research due to their variety [1-3]. In particular, one may refer [4-8] for quadratic equations with three unknowns. This communication concerns with yet another interesting equation $7x^2 + 3y^2 = 220z^2$ representing homogeneous equation with three for determining its infinitely many non-zero integral points. Also, few interesting relations among the solutions are presented.

2. NOTATIONS

- $t_{m,n} = n^{th}$ term of a regular polygon with m sides.

$$= n\left(1 + \frac{(n-1)(m-2)}{2}\right)$$

- $p_{r_n} =$ pronic number of rank n

$$= n(n+1)$$

3 .METHOD OF ANALYSIS:

The Quadratic Diophantine equation with three unknowns to be solved is

given by

$$7x^2 + 3y^2 = 220z^2 \qquad (1)$$

Consider the linear transformation

$$\left. \begin{array}{l} x = X - 3T \\ y = X = 7T \end{array} \right\} \qquad (2)$$

Substituting (2) in (1) we get,

$$7\left(X^2 - 9T^2\right) + 3\left(X^2 + 49T^2\right) = 220T^2$$

$$7X^2 + 63T^2 + 3X^2 + 14T^2 = 220T^2$$

$$10X^2 + 210T^2 = 220T$$

$$X^2 + 21Y^2 = 22Z^2 \qquad (3)$$

(3) Is solved through different approaches and the different patterns of solutions of (1) obtained are presented below.

PATTERN: 1

Assume

$$z = a^2 + 21b^2$$

(3) Can also be written as

$$X^2 + 21T^2 = 22 * T^2 \qquad (4)$$

Write '22' as

$$22 = \left(1 + i\sqrt{21}\right)\left(1 - i\sqrt{21}\right)$$

In equation (4), we get

$$\left(X + i\sqrt{21}T\right)\left(X - i\sqrt{21}T\right) = \left(a + i21b\right)^2\left(a - i\sqrt{21}b\right)^2\left(1 + i\sqrt{21}\right)\left(1 - i\sqrt{21}\right)$$

Consider the positive factor

$$X + i\sqrt{21}T = \left(a + i\sqrt{21}b\right)^2\left(1 + i\sqrt{21}\right)$$

$$X + i\sqrt{21}T = \left(a^2 - 21b^2 + i2ab\sqrt{21}\right)\left(1 + i\sqrt{21}\right)$$

$$X + i\sqrt{21}T = \left(a^2 - 21b^2 - 42ab\right) + i\sqrt{21}\left(a^2 - 21b^2 + 2ab\right)$$

Equating real and imaginary parts

$$\left. \begin{array}{l} X = a^2 - 21b^2 - 42ab \\ T = a^2 - 21b^2 + 2ab \end{array} \right\} \tag{5}$$

From (2), we obtain the non-zero distinct integral solution of (1) as

$$x(A, B) = -2a^2 + 42b^2 - 48ab$$

$$y(A, B) = 8a^2 - 168b^2 - 28ab$$

$$z(A, B) = a^2 + 21b^2$$

PROPERTIES:

1. $x(A,1) + y(A,1) - 82t_{4,a} + 76p_{ra} \equiv 0 (\bmod 2)$

2. $y(A,1) + z(A,1) - 37t_{4,a} + 28p_{ra} \equiv 0 (\bmod 3)$

3. $x(A,1) - y(A,1) - 10t_{4,a} + 20p_{ra} = 210$

PATTERN: 2

In (4) '22' can also written as

$$22 = \frac{\left(19 + 3i\sqrt{21}\right)\left(19 - 3i\sqrt{21}\right)}{5^2} \tag{6}$$

Substituting (4) & (6) in (3) and employing the method of factorization, we get

$$\left(X + i\sqrt{21}T\right)\left(X - i\sqrt{21}T\right) = \left(a + i\sqrt{21}b\right)^2\left(a - i\sqrt{21}b\right)^2 \frac{\left(19 + 3i\sqrt{21}\right)\left(19 - 3i\sqrt{21}\right)}{5^2}$$

Consider the positive factor

$$X + i\sqrt{21}T = \frac{19 + 3i\sqrt{21}}{5}\left(a + i\sqrt{21}\right)^2$$

$$X + i\sqrt{21}T = \frac{19 + 3i\sqrt{21}}{5}\left(a^2 - 21b^2 + i2\sqrt{21}ab\right)$$

$$X + i\sqrt{21}T = \left(19a^2 - 399b^2 - 126ab\right) + i\sqrt{21}\left(3a^2 - 63b^2 + 38ab\right)$$

Equating real and imaginary parts of the above equation, we get

$$X = \frac{19a^2 - 399b^2 - 126ab}{5}$$

$$Y = \frac{3a^2 - 63b^2 + 38ab}{5}$$

From (2)

$$x = 2a^2 - 42b^2 - 48ab$$

$$y = 8a^2 - 168b^2 + 28ab$$

We obtain the non –zero distinct integral solution of (1) as

$$x(A, B) = 2a^2 - 42b^2 - 48ab$$

$$y(A, B) = 8a^2 - 168b^2 + 28ab$$

$$z(A, B) = a^2 + 21b^2$$

PROPERTIES:

1. $x(A,1) + y(A,1) - 30t_{4,a} + 20p_{ra} + 210 = 0$

2. $x(A,1) + z(A,1) - 51t_{4,a} + 48p_{ra} \equiv 0(\bmod 7)$

3. $y(A,1) + z(A,1) + 19t_{4,a} - 28p_{ra} + 147 = 0$

PATTERN: 3

Write the equation (4) as

$$X^2 + 21T^2 = 22z^2 * 1 \tag{7}$$

'1' can also be written as

$$1 = \frac{(2 + i\sqrt{21})(2 - i\sqrt{21})}{5^2} \tag{8}$$

Write '22' as

$$22 = (1 + i\sqrt{21})(1 - i\sqrt{21}) \tag{9}$$

Substituting (7), (8) & (9) in (3) and employing the method of factorization, we get

$$(X + i\sqrt{21}T)(X - i\sqrt{21}T) =$$
$$\left[(a + i\sqrt{21}b)^2(a - i\sqrt{21}b)^2(1 + i\sqrt{21})(1 - i\sqrt{21})\right] * \left[\frac{(2 + i\sqrt{21})(2 - i\sqrt{21})}{5^2}\right] \text{Conside}$$

r the positive factor

$$(X + i\sqrt{21}T) = \left[(a + i\sqrt{21}b)^2(1 + i\sqrt{21})\right] * \left[\frac{(2 + i\sqrt{21})}{5}\right]$$

$$(X + i\sqrt{21}T) = \left[(a^2 - 21b^2 + i2ab\sqrt{21})(1 + i\sqrt{21})\right] * \left[\frac{(2 + i\sqrt{21})}{5}\right]$$

$$(X + i\sqrt{21}T) = \frac{(-19a^2 + 399b^2 - 126ab) + i\sqrt{6}(3a^2 - 63b^2 - 38ab)}{5}$$

Equating real and imaginary parts of the above equation, we get

$$X = \frac{-19a^2 + 399b^2 - 126ab}{5}$$

$$T = \frac{3a^2 - 63b^2 - 38ab}{5}$$

From (2)

$$x = \frac{-28a^2 + 588b^2 - 12ab}{5}$$

$$y = \frac{2a^2 - 42b^2 - 392ab}{5}$$

Assume a=5A, b=5B in the above equations, we obtain the non-zero integral solution of (1) as

$$x(A,B) = -140A^2 + 2940B^2 - 60AB$$

$$y(A,B) = 10A^2 - 210B^2 - 1960AB$$

$$z(A,B) = 25A^2 + 525B^2$$

PROPERTIES:

1. $x(A,1) + y(A,1) - 1890t_{4,A} + 2020p_{ra} \equiv 0(\bmod 5)$

2. $x(A,1) + z(A,1) + 55t_{4,A} + 60p_{rA} = 3465$

3. $y(A,1) + z(A,1) - 1995t_{4,A} + 1960p_{rA} \equiv 0(\bmod 5)$

PATTERN: 4

'1' can also written as

$$1 = \frac{(2 + 5i\sqrt{21})(2 - 5i\sqrt{21})}{23^2} \qquad (10)$$

Substituting (10) and (9) in (7) and employing the method of factorization, we get

$$\left(X+i\sqrt{21}T\right)\left(X-i\sqrt{21}T\right)=\left[\left(a+i\sqrt{21}b\right)^2\left(a-i\sqrt{21}b\right)^2\left(1+i\sqrt{21}\right)\left(1-i\sqrt{21}b\right)\right]*\frac{\left(2+5i\sqrt{21}\right)\left(2-5i\sqrt{21}\right)}{23^2}$$ Consid

er the positive factor

$$\left(X+i\sqrt{21}T\right)=\left[\left(a^2-21b^2+i2\sqrt{21}ab\right)\left(1+i\sqrt{21}\right)\right]*\left[\frac{\left(2+5i\sqrt{21}\right)}{23}\right]$$

$$\left(X+i\sqrt{21}T\right)=\left[\frac{\left(7i\sqrt{21}-103\right)\left(a^2-21b^2+i2\sqrt{21}ab\right)}{23}\right]$$

$$\left(X+i\sqrt{21}T\right)=\frac{\left(-103a^2+2163b^2-294ab\right)+i\sqrt{21}\left(7a^2-147b^2-206ab\right)}{23}$$

Equating real and imaginary parts of the above equation, we get

$$X=\frac{-103a^2+2163b^2-294ab}{23}$$

$$T=\frac{7a^2-147b^2-206ab}{23}$$

From (1) we get

$$x=\frac{-124a^2+2604b^2+324ab}{23}$$

$$y=\frac{-103a^2+2163b^2-294ab}{23}$$

Assume a=23A, b=23B in the above equation, we obtain the non-zero distinct integral solution (1) as

$$x(A,B)=-2852A^2+59892B^2+7452AB$$

$$y(A,B)=-1242A^2+26082B^2-39928AB$$

$$z(A,B) = 529A^2 + 11109B^2$$

PROPERTUES:

$$1.\ x(A,1) + z(A,1) + 9775t_{4,A} - 7452p_{rA} = 71001$$

$$2.\ x(A,1) - z(A,1) + 10833t_{4,A} - 7452p_{rA} \equiv 0(\text{mod}\,3)$$

$$3.\ y(A,1) + z(A,1) - 39215t_{4,A} + 39928p_{rA} = 37191$$

PATTERN: 5

(3) Can also written as

$$X^2 - z^2 = 21(z^2 - T^2)$$
$$(X + z)(X - z) = 21(z + T)(z - T) \tag{11}$$

Case: 1

(3) Can be written as in the form of ratio as

$$\frac{X + z}{z + 1} == \frac{21(z - T)}{X - z} = \frac{\alpha}{\beta} \tag{12}$$

which is equivalent to the system of double equations as

$$\left.\begin{array}{c} \beta X - \alpha T + (-\alpha + \beta)z = 0 \\ -\alpha X - 21\beta T + (\alpha + 21\beta)z \end{array}\right\} \tag{13}$$

Solving (13) by method of cross multiplication, we get

$$\left.\begin{array}{l} X = -\alpha^2 + 21\beta^2 - 42\alpha\beta \\ T = \alpha^2 - 21\beta^2 - 2\alpha\beta \\ z = -\alpha^2 - 21\beta^2 \end{array}\right\} \tag{14}$$

Substituting (14) in (2) and the non-zero distinct integer solution of (1) are given by

$$x(\alpha, \beta) = -4\alpha^2 + 84\beta^2 - 36\alpha\beta$$

$$y(\alpha,\beta)=6\alpha^2-126\beta^2+56\alpha\beta$$

$$z(\alpha,\beta)=-\alpha^2-21\beta^2$$

PROPERTIES:

$$1.\ x(\alpha,1)+y(\alpha,1)-94t_{4,\alpha}+92p_{r\alpha}+42=0$$

$$2.\ x(\alpha,1)+z(\alpha,1)-31t_{4,\alpha}+36p_{r\alpha}\equiv0(\text{mod}\,3)$$

$$3.\ y(\alpha,1)+z(\alpha,1)-61t_{4,\alpha}+56p_{r\alpha}+147=0$$

Case: 2

Equation (11) can be written as

$$\frac{X+z}{21(z-T)}=\frac{z+T}{X-z}=\frac{\alpha}{\beta} \tag{15}$$

Which is equivalent to the system of double equation as

$$\left.\begin{array}{l}\beta X+21\alpha T+(-21\alpha+\beta)z=0\\-\alpha X+\beta T+(\alpha+\beta)z=0\end{array}\right\} \tag{16}$$

Solving (16) by method cross multiplication, we get

$$\left.\begin{array}{l}X=21\alpha^2-\beta^2+42\alpha\beta\\T=21\alpha^2-\beta^2-2\alpha\beta\\z=21\alpha^2+\beta^2\end{array}\right\} \tag{17}$$

Substituting (17) in (2), the non-zero distinct integral solution of (1) is given by

$$x(\alpha,\beta)=-42\alpha^2+2\beta^2+48\alpha\beta$$

$$y(\alpha,\beta)=168\alpha^2-8\beta^2+28\alpha\beta$$

$$z(\alpha,\beta)=21\alpha^2+\beta^2$$

PROPERTIES:

$$1.\ x(\alpha,1) + y(\alpha,1) - 50t_{4,\alpha} - 76p_{r\alpha} + 6 = 0$$

$$2.\ x(\alpha,1) + z(\alpha,1) + 69t_{4,\alpha} - 48p_{r\alpha} \equiv 0(\mathrm{mod}\,3)$$

$$3.\ y(\alpha,1) + z(\alpha,1) - 161t_{4,\alpha} - 28p_{r\alpha} + 7 = 0$$

Case: 3

(11) can also be written in the form of the ratio as

$$\frac{X+z}{7(z+T)} = \frac{3(z-T)}{X-z} = \frac{\alpha}{\beta} \tag{18}$$

which is equivalent to the system of double equations as

$$\left.\begin{array}{l} \beta X - 7\alpha T + (-7\alpha + \beta)z = 0 \\ -\alpha X - 3\beta T + (\alpha + 3\beta) = 0 \end{array}\right\} \tag{19}$$

Solving (19) by method of cross multiplication, we get

$$\left.\begin{array}{l} X = -7\alpha^2 + 3\beta^2 - 42\alpha\beta \\ T = 7\alpha^2 - 3\beta^2 - 2\alpha\beta \\ z = -7\alpha^2 - 3\beta^2 \end{array}\right\} \tag{20}$$

Substituting (20) in (2), the non-zero distinct integral solution of (1) is given by

$$x(\alpha,\beta) = -28\alpha^2 + 12\beta^2 - 36\alpha\beta$$

$$y(\alpha,\beta) = 42\alpha^2 - 18\beta^2 - 56\alpha\beta$$

$$z(\alpha,\beta) = -7\alpha^2 - 3\beta^2$$

PROPERTIES:

$$1.\ x(\alpha,1) + y(\alpha,1) - 106t_{4,\alpha} + 92p_{r\alpha} + 6 = 0$$

2. $x(\alpha,1) + z(\alpha,1) - t_{4,\alpha} + 36 p_{r\alpha} \equiv 0 (\mathrm{mod}\, 9)$

3. $y(\alpha,1) + z(\alpha,1) - 91 t_{4,\alpha} + 56 p_{r\alpha} + 21 = 0$

Case: 4

(11) can be written in the form of the ratio as

$$\frac{X+z}{3(z+T)} = \frac{7(z-T)}{X-z} = \frac{\alpha}{\beta} \tag{21}$$

which is equivalent to the system of double equations is

$$\left.\begin{array}{l} \beta x - 3\alpha T + (-3\alpha + \beta)z = 0 \\ -\alpha X - 7\beta T + (\alpha + 7\beta)z = 0 \end{array}\right\} \tag{22}$$

solving (22) by method of cross multiplication, we get

$$\left.\begin{array}{l} X = 3\alpha^2 - 7\beta^2 + 42\alpha\beta \\ u = -3\alpha^2 + 7\beta^2 + 2\alpha\beta \\ T = 3\alpha^2 + 7\beta^2 \end{array}\right\} \tag{23}$$

Substituting (23) in (2), the non-zero distinct integral solution of (1) is given by

$$x(\alpha,\beta) = 12\alpha^2 - 28\beta^2 + 36\alpha\beta$$

$$y(\alpha,\beta) = -18\alpha^2 + 42\beta^2 + 56\alpha\beta$$

$$z(\alpha,\beta) = 3\alpha^2 + 7\beta^2$$

PROPERTIES:

1. $x(\alpha,1) + y(\alpha,1) + 98 t_{4,\alpha} - 92 p_{r\alpha} \equiv 0 (\mathrm{mod}\, 7)$

2. $x(\alpha,1) + z(\alpha,1) + 21 t_{4,\alpha} - 36 p_{r\alpha} + 21 = 0$

3. $y(\alpha,1) + z(\alpha,1) + 71 t_{4,\alpha} - 56 p_{r,\alpha} = 49$

Case: 5

(11) can be written in the form of the ratio as

$$\frac{X-z}{7(z-T)} = \frac{3(z+T)}{X+T} = \frac{\alpha}{\beta} \qquad (24)$$

which is equivalent to the system of double equations as

$$\left.\begin{array}{l} \beta X + 7\alpha T - (7\alpha + \beta) = 0 \\ -\alpha X + 3\beta u + (-\alpha + 3\beta) = 0 \end{array}\right\} \qquad (25)$$

Solving (25) by method of cross multiplication, we get

$$\left.\begin{array}{l} X = -7\alpha^2 + 3\beta^2 + 42\alpha\beta \\ T = 7\alpha^2 - 3\beta^2 + 2\alpha\beta \\ z = 7\alpha^2 + 3\beta^2 \end{array}\right\} \qquad (26)$$

Substituting (26) in (2), the non-zero distinct integral solutions of (1) are given by

$$x(\alpha, \beta) = -28\alpha^2 + 12\beta^2 + 36\alpha\beta$$

$$y(\alpha, \beta) = 42\alpha^2 - 18\beta^2 + 56\alpha\beta$$

$$z(\alpha, \beta) = 7\alpha^2 + 3\beta^2$$

PROPERTIES:

1. $x(\alpha,1) + y(\alpha,1) + 78t_{4,\alpha} - 92p_{r\alpha} + 6 = 0$

2. $x(\alpha,1) + z(\alpha,1) + 57t_{4,\alpha} - 36p_{r\alpha} \equiv 0(\mathrm{mod}\,5)$

3. $y(\alpha,1) + z(\alpha,1) + 7t_{4,\alpha} - 56p_{r\alpha} + 15 = 0$

CONCLUSION

In this paper, we have made an attempt to obtain infinitely many non-zero distinct integer solutions to special ternary quadratic Diophantine equation $7x^2 + 3y^2 = 220z^2$. In each case, a few interesting relations among the solution are presented. As the Diophantine equations are

rich in variety, one may search for integer solutions to higher degree Diophantine equations with multiple variables along with suitable properties.

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INCREASE IN THE INTERNATIONAL RATINGS AND INDEXS OF THE REPUBLIC OF UZBEKISTAN

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ANNOTATION
This article deals with the large-scale reforms carried out in Uzbekistan during the years of independence, international rankings and indices, the state policy to increase and enhance the position of our country in these rankings and indices.
KEYWORDS: *international rankings, indices, investment, reforms, corruption, action strategy, economic freedom*

INTRODUCTION

Since gaining independence, the Republic of Uzbekistan has been achieving high results in all areas. Especially in recent years, the guarantee of human rights and the rule of law, the liberalization of tax policy and economic reforms have been recognized by foreign countries. Also, the role of large-scale reforms in our country in international rankings and indices is growing. Reforms in this area and the results achieved are being presented to the general public.

OBJECTIVES

The Decree of the President of the Republic of Uzbekistan on improving the position of the Republic of Uzbekistan in international rankings and indices and the introduction of a new mechanism of systematic work with government agencies and organizations was adopted. Reforms aimed at ensuring the protection of human rights, improving the living standards of the population, ensuring freedom of economic activity, improving the material and procedural norms in the field of justice have led to an increase in the country's international rankings and indices.

The tasks set in the Action Strategy for strengthening the country's investment attractiveness and image in the international arena, the introduction of new mechanisms for working with international ratings and indices in government agencies and organizations, as well as five priority areas of development of the Republic of Uzbekistan in 2017-2021.

Therefore, the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021 provides for "strengthening the international prestige of the Republic of Uzbekistan, objective information to the world community about the ongoing reforms in the country." The resolution "On measures to improve the position of the Republic of Uzbekistan in international rankings and indices" signed by President Sh. Mirziyoyev marked a new stage of reforms in this area.

In particular, over the past four years, the country has risen by 52 points in the "Economic Freedom" index of the Heritage Fund, by 19 points in the "Logistics Efficiency" index of the World Bank, and by 18 points in the "Doing Business" index. Uzbekistan has risen from Group 6 to Group 5 in the Organization for Economic Co-operation and Development's Country Risk Classification system. At the same time, due to the fact that some leaders do not pay enough attention to working with ratings and most of the reforms are not reflected in surveys conducted by international organizations, the Republic of Uzbekistan is not included in the priority international rankings and indices.

According to the Happiness Index, in 2019 Uzbekistan ranked 47th out of 155 countries. Uzbekistan is also included in the latest ranking of Freedom House in the latest ranking of political and religious freedoms, as well as freedom of the press and the rule of law. However, Uzbekistan has risen five places in the World Press Freedom Index compared to 2019. In this ranking, it was ranked 169th in 2017, 165th in 2018 and 160th in 2019.

Despite the signing of a presidential decree aimed at improving Uzbekistan's position in international rankings on freedom of speech, Uzbekistan's position in international rankings is not commendable. Reporters Without Borders, an international non-governmental organization, publishes its annual World Press Freedom Index. The ranking is based on the "level of freedom of local journalists" and selects 180 countries. It is based on the responses of journalists, lawyers and sociologists from different countries to a special survey. The survey covers aspects such as legislation, self-censorship, freedom of the media, diversity of opinion, and willingness of various institutions and agencies to work with journalists. In this ranking, Uzbekistan has grown significantly in recent years. By 2020, Reporters Without Borders has positively assessed freedom of speech in our country and noted the best results.

The stability of the country's economy, its ability to compete with developed countries in all areas, in turn, depends on the labor market. Personnel who develop the country's economy are educated in educational institutions. This means that a quality education system builds quality personnel, and quality personnel builds a developed, rich society. In this regard, today, when our country has entered a new stage of development, investing in human capital, reforming education has become one of the priorities. In particular, over the past two years, teachers' salaries have increased 1.5 times. A number of measures have been taken to increase the prestige of teachers in society. Presidential schools, creative schools, specialized schools have been established in all regions of the country, and the most qualified specialists have been attracted to these educational institutions. Also, the material and technical base of existing schools is being strengthened, modern schools are being built in all regions.

Of course, it is important to study, analyze and monitor international experience before implementing reforms in all areas. The effectiveness of education policies in countries is reflected in international rankings. Ratings in various areas are determined and published through international evaluation programs such as ICILS, ICCS, TEDS, TIMSS, PIRLS, PISA, TALIS. The most prestigious of these programs is the PISA assessment program, which has 85 member states. According to the Decree of President Sh. Mirziyoyev, the priority of our country to become one of the top 30 countries in the world by 2030 in the ranking of the international assessment program PISA (The Program for International Student Assessment) is a sign of high government attention. [4].

The attractiveness of the university for applicants and the reliability of the diploma for employers are largely determined by the rating of this institution. On the one hand, the ranking helps talented young people who want to get high quality information and allows them to realize their full potential. On the other hand, the higher the position of the university in the ranking, the greater the number of those who want to study. The first ranking was published in 1983 by USNews & WorldReport in response to the globalization of higher education.

Reforms in the international rating system have not bypassed the education sector. In particular, in the concept of development of the higher education system of the country until 2030, at least 10 higher education institutions in the country are included in the list of top 1000 higher education institutions in the ranking of internationally recognized agencies (Quacquarelli Symonds World University Rankings, Times Nigher Education or Academic Ranking of World Universities). , The National University of Uzbekistan and Samarkand State University will be included in the list of the top 500 higher education institutions. Over the past period, the Education Inspectorate has studied in depth the experience of developed countries. An international team of experts was involved and the current national rating system was re-analyzed. Experts from reputable rating agencies such as QS (Quacquarelli Symonds) and THE (Times Higher Education World University Rankings) reviewed the national rating system and made relevant recommendations. Today, cooperation is underway to further improve the methodology of rating.

Over the past year, the number of full-time professors in national universities has increased by 10.6%, the number of students by 25.4%, the number of professors with the degree of Doctor of Science (DSc) or the title of Professor by 11.0%, PhD professors with academic degrees or associate professions increased by 10.1%, dissertation defenses (including awarded professor or associate professor titles) increased by 41.1%. 84.5% of the level of knowledge and practical skills of graduates, 80.2% of the level of cooperation of higher education institutions with employers, 85.3% of the potential for future growth of graduates, the quality of training of higher education institutions 82 , 5% responded positively [6].

The indicator of the level of research activity is one of the main indicators of scientific and technological development of the country and is calculated as the total number of research materials published in edited scientific journals and publications included in the index of scientific sources. The index of research activity of the countries of the world is published annually in a special report of the National Science Foundation of the United States called "Science and Engineering Indicators". In 2017, Uzbekistan ranked 82nd out of 195 countries.

The Center for Economic Research and Reform ranked 10th among the top 63 research think tanks in Central Asia in the Global Go To Think Tank Index Report 2019, compiled by the University of Pennsylvania. There are several other think tanks in Uzbekistan in the 2020 ranking: the Institute for

Strategic and Interregional Studies and the Center for Social Research "Analysis".

The value of the Human Development Index of Uzbekistan for 2017 was 0.710, which puts the country in the highest category of human development, ranking 105th out of 189 countries and regions. Between 2000 and 2007, the Human Development Index of Uzbekistan increased by 19.3% from 0.595 to 0.710. The Corruption Perceptions Index has also been compiled annually since 1996 using the methodology of the international non-governmental organization Transparency International. It consists of a combination of public statistics and global survey results. The countries surveyed are ranked from 0 (highest corruption rate) to 100 (lowest corruption rate) based on their attitude to the level of corruption in the public sector. According to the results of 2019, the indicators have improved slightly, ranking 153rd in the ranking of 180 countries. Despite the fact that Uzbekistan's score on the Corruption Perceptions Index increased from 22 to 23 points, the country's position in the index fell by one point. The main reason for this is that the results of the index of Tajikistan and Eritrea increased from 21 points to 25 points and from 20 points to 24 points, respectively, rising from 161st to 152nd place and from 165th to 157th place. The Economist Intelligence Unit and Freedom House gave Uzbekistan a score of 0 on the anti-corruption sub-indicator. The main reasons for this are: the destruction of citizens' housing; violations of citizens' rights by officials go unpunished; the presence of domestic corruption on the ground; the deterioration of the legal situation in the judiciary was taken into account.
The Environmental Performance Index is an environmental policy and law mark at Yale University.

The index is based on 11 indicators used in 2007 by the International Telecommunication Union to assess the development of ICT. The index combines these indicators into a single criterion, and is aimed at comparing the achievements of countries around the world in the development of ICT, which can also be used as a tool for comparative analysis at the global, regional and national levels. In 2017, Uzbekistan ranked 95th on this index.
In the biennial World Bank Logistics Performance Index, Uzbekistan rose 19 places in 2018 from 118th place in 2016. The main criteria for the performance of logistics activities include customs, infrastructure, international transportation, logistics skills, mobility, tracking and periodicity.
To date, such ratings and indices have been used not only by experts, but also at the state level as criteria for the success of reforms and economic policy. The results of the UN Human Development Index, the Global Competitiveness Index of the World Economic Forum, the World Bank's Doing Business rating and a number of other factors are targeted at

the development of programs at various levels in countries, including Uzbekistan. serves as a route.

Among the international socio-economic rankings in the world, first of all, it is necessary to note the World Bank's Doing Business rating. The Doing Business report is the result of the World Bank's annual survey, which assesses the ease of doing business in 10 countries in 190 countries. The report focuses on the assessment of regulatory documents governing the life of small and medium-sized businesses, the order of their application in practice. This report has been prepared by the World Bank since 2003 and is published annually in the fall. It is gratifying that over the past 5 years, Uzbekistan has risen from 166th place in 2012 to 74th place in 2017 among 190 countries in the ranking of "Doing Business" and is among the top ten reformers in terms of creating the most favorable business environment for doing business. Uzbekistan is striving to create the most favorable conditions by 2022 for the World Bank and the International Finance Corporation's Doing Business report, which is in line with the top twenty countries in the world. This goal is reflected in the Resolution of the President of the Republic of Uzbekistan dated July 13, 2018 "On measures to further improve the rating of the Republic of Uzbekistan in the annual report of the World Bank and the International Finance Corporation" Doing Business ".

Uzbekistan's economic freedom is 53.3 points, ranking 140th in 2019. Freedom of business, freedom of labor and freedom of investment increased, and economic freedom of Uzbekistan increased by a total of 1.8 points. Uzbekistan ranks 36th out of 43 countries in the Asia-Pacific region and its overall rating is lower than the regional and global averages. According to the Doing Business report, Uzbekistan is among the top 20 countries that have made great strides in improving the business environment. Frankly, in recent years, entrepreneurs have been provided with more opportunities and benefits than ever before. In this practice, the improvement of the business environment, ultimately contributes to the expansion of the ranks of business entities. A good example of this is the fact that it is among the TOP-10 countries in terms of business registration indicators [9].
Although Uzbekistan ranks low in international investment rankings such as Bloomberg, Fitch Ratings and S&P Global Ratings, the International Monetary Fund estimates that Uzbekistan will be one of the few countries to end 2020 with economic growth.

Uzbekistan first entered the international bond market in February 2019. At that time, the republic issued 10-year bonds with a yield of 5%. In 2020, the international rating agencies Fitch Ratings and S&P Global Ratings rated the People's Bank as a steadily growing financial institution. Fitch Ratings has maintained the People's Bank's rating at VV-

Stable. This will further expand the bank's cooperation with international financial institutions and increase customer confidence. S&P Global Ratings upgraded the People's Bank's credit rating from V + to VV. This means that Uzbekistan is rated the same as the sovereign rating.

CONCLUSION

In conclusion, it should be noted that last year alone, more than a dozen important international initiatives of the head of our state have been fully implemented. For example, the US State Department removed Uzbekistan from the list of countries involved in "systematic, persistent and serious violations of religious freedom." Or the adoption of a special resolution entitled "Enlightenment and Religious Tolerance" at the plenary session of the UN General Assembly in late 2018 is a clear evidence of the international community's support for the international initiative put forward by our President. Indeed, it is important to further enhance the image of Uzbekistan in the international arena by developing models for the development of trade, economic, investment and social spheres in our country, strengthening ties with the world's leading international analysis and research and production institutions.

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ON THE HOMOGENEOUS QUADRATIC DIOPHANTINE EQUATION WITH THREE UNKNOWNS

$$4x^2 - 12xy + 21y^2 = 13z^2$$

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ABSTRACT

The ternary quadratic equation given by $4x^2 - 12xy + 21y^2 = 13z^2$ *is considered and searched for its many different integer solution . Five different choices of integer solution of the above equations are presented .A few interesting relations between the solutions and special polygonal numbers are presented.*
KEY WORDS: *ternary quadratic, integer solutions*
MSC subject classification :11D09

1. INTRODUCTION

The Diophantine equation offer an unlimited field for research due to their variety [1-3].In particular ,one may refer [4-15] for quadratic equations with three unknowns . This communication concerns with yet another interesting equation $4x^2 - 12xy + 21y^2 = 13z^2$ representing homogeneous equation with three for determining its infinitely Many non -zero integral points. Also , few interesting relations among the solutions are presented.

2. NOTATIONS

- $t_{m,n} = n^{th}$ term of a regular polygon with m sides.

$$= n\left(1 + \frac{(n-1)(m-2)}{2}\right)$$

- $\Pr_n =$ pronic number of rank n

$$= n(n+1)$$

3. METHOD OF ANALYSIS

The Quadratic Diophantine equation with three unknowns to be solved is given by,

$$4x^2 - 12xy + 21y^2 = 13z^2 \tag{1}$$

substituting

$$2x - 3y = U \tag{2}$$

in (1) we get,

$$U^2 + 12y^2 = 13z^2 \tag{3}$$

(3) is solved through different approaches and the different patterns of solutions (1) obtained are presented below.

PATTERN:1

Assume

$$Z = \left(a^2 + 12b^2\right)$$

(3) can also be written as,

$$U^2 + 12Y^2 = 13Z^2$$

write '13' as,

$$13 = (1 + i\sqrt{12})(1 - i\sqrt{12})$$

in equation (3),we get,

$$\left(U + i\sqrt{12}\,y\right)\left(U - i\sqrt{12}\,y\right) = \left(1 + i\sqrt{12}\,y\right)\left(1 - i\sqrt{12}\,y\right)\left(a + i\sqrt{12}\,b\right)^2\left(a + i\sqrt{12}\,b\right)^2$$

Equating positive terms

$$\left(U + i\sqrt{12}\,y\right) = \left(1 + i\sqrt{12}\right)\!\left(a^2 - 12b^2 + i\sqrt{12}\,ab\right)$$
$$= \left(a^2 - b^2 - 24ab\right) + i\sqrt{12}\left(a^2 - 12b^2 + 2ab\right)$$

Equating real and imaginary parts

$$\left.\begin{array}{l} U = a^2 - b^2 - 24ab \\ y = a^2 - b^2 + 2ab \end{array}\right\} \tag{4}$$

From (2)

$$2x - 3y = U$$

we obtain the non-zerodistinct integral solution of (1) as

$$x(a,b) = 2a^2 - 24b^2 - 9ab$$

$$y(a,b) = a^2 - 12b^2 + 2ab$$

$$z(a,b) = a^2 + 12b^2$$

PROPERTIES:

[1] $y(a,1) + z(a,1) - t_{6,a} = 3a$

[2] $y(a,a+1) + z(a,a+1) - 2pr_a + 2t_{4,a} = (2a)^2$ is perfect square

[3] $x(1,b) + y(1,b) + 29t_{4,b} + 7pr_b = 3$

PATTERN:2

'13' can also be written as

$$13 = \frac{(14 + i\sqrt{12})(14 - i\sqrt{12})}{2} \tag{5}$$

Substituting (5) in (3) and employing the method of factorization,

we get,

$$(U + i\sqrt{12}\,y)(U - i\sqrt{12}\,y) = \frac{(14 + i\sqrt{12}\,y)(14 - i\sqrt{12}\,y)}{4^2}(a + i\sqrt{12}b)^2(a + i\sqrt{12}b)^2$$

Consider the positive factor,

$$
\begin{aligned}
(U + i\sqrt{12}\,y) &= \frac{(14 + i\sqrt{12})}{4}(a + i\sqrt{12}b)^2 \\
&= \left(\frac{14 + i\sqrt{12}}{4}\right)(a^2 - 12b^2 + i2ab\sqrt{12}) \\
&= \frac{1}{4}\left[14(a^2 - 12b^2 - 24ab) + i\sqrt{12}(a^2 - 12b^2 + 28ab)\right]
\end{aligned}
$$

Equating real and imaginary parts of the above equation, we get

$$U = \frac{14a^2 - 168b^2 - 24ab}{4}$$

$$y = \frac{a^2 - 12b^2 + 28ab}{4}$$

From (2)

$$2x - 3y = U$$

$$x = \frac{17a^2 - 204b^2 + 60ab}{2}$$

$$y = \frac{a^2 - 12b^2 + 28ab}{4}$$

$$z = a^2 + 12b^2$$

Assume $a = 4A$, $b = 4B$ in the above equations, we obtain the non-zero distinct integral solution of (2.1) as

$$x(A,B) = 34A^2 - 408B^2 + 120AB$$
$$y(A,B) = 4A^2 - 48B^2 + 112AB$$
$$Z(A,B) = 16(A^2 + 12B^2)$$

PROPERTIES:

➤ $x(A,1) + y(A,1) + 230t_{4,A} - 232pr_A + 448 = 36A^2$ is a perfect square.

➤ $3[y(1,B) + 2(1,B) - 112pr_B - 20]$ is a nasty number.

➤ $x(A,1) + y(A,1) + z(A,1) + 54pr_a \equiv 0 (\bmod 2)$

PATTERN:3

1 can be written as,

$$1 = \frac{(1 + 2i\sqrt{12})(1 - i\sqrt{12})}{7^2} \tag{6}$$

substituting (6) in (3) we get,

$$\left(U+i\sqrt{12}\,y\right)\left(U-i\sqrt{12}\,y\right)=\left(1+i\sqrt{12}\right)\left(1-i\sqrt{12}\right)\left(a+i\sqrt{12}b\right)^2\left(a-i\sqrt{12}b\right)^2\frac{\left(1+2i\sqrt{12}\right)\left(1-2i\sqrt{12}\right)}{7^2}$$

Equating positive terms we get,

$$\left(U+i\sqrt{12}\,y\right)=\left(1+i\sqrt{12}\right)\left(a+i\sqrt{12}b\right)^2\frac{\left(1+2i\sqrt{12}\right)}{7}$$

$$\frac{1}{7}\left[\left(-23\,a^2+276b^2-72ab\right)+i\sqrt{12}\left(3a^2-36b^2-46ab\right)\right]$$

Equating real and imaginary parts we get,

$$\left.\begin{array}{l}U=\dfrac{1}{7}\left(-23a^2+276b^2-72ab\right)\\[2mm]y=\dfrac{1}{7}\left(3a^2-36b^2-46ab\right)\end{array}\right\}$$

From (2)   (7)

$$U=2x-3y$$

$$2x=\frac{1}{7}\left(14a^2+168b^2-210ab\right)$$

$$\Rightarrow x=\frac{1}{7}\left(-7a^2+84b^2-105ab\right)$$

$$y=\frac{1}{7}\left(3a^2-36b^2-46ab\right)$$

$$z=a^2+12b^2$$

Assume $a = 7A, b = 7B$ in the above equation , we obtain the non-zero distinct integral solution of (2.1) as,

$$x(A, B) = 49\left(- A^2 + 12B^2 - 15AB\right)$$

$$y(A, B) = 7\left(3A^2 - 36B^2 - 46AB\right)$$

$$Z(A, B) = 49\left(A^2 + 12B^2\right)$$

PROPERTIES:

[1] $\ y(A,1) + z(A,1) - 392t_{4,A} + 322\,\mathrm{Pr}_A = 336$

[2] $\ x(A,1) + y(A,1) - 1029t_{4,A} + 1057\,\mathrm{Pr}_A \equiv 0(\mathrm{mod}\,3)$

[3] $\ x(A,1) + z(A,1) + 735\,\mathrm{Pr}_A - 735t_{4,A} \equiv 0(\mathrm{mod}\,5)$

PATTERN 4

13 can also be written as,

$$13 = \frac{\left(14 + i\sqrt{12}\right)\left(14 - i\sqrt{12}\right)}{4^2}$$

Write 1 as,

$$1 = \frac{\left(1 + 2i\sqrt{12}\right)\left(1 - 2i\sqrt{12}\right)}{7^2}$$

Equating positive terms we get,

$$\left(U + i\sqrt{12}\,y\right) = \frac{\left(14 + i\sqrt{12}\right)}{4}\left(\frac{1 + 2i\sqrt{12}}{7}\right)\left(a + i\sqrt{12}\,b\right)^2$$

$$= \frac{1}{28}\left[\left(-10a^2 + 120b^2 - 696ab\right) + i\sqrt{12}\left(29a^2 - 348b^2 - 20ab\right)\right]$$

Equating real and imaginary parts,

$$U = \frac{1}{28}\left(-10a^2 + 120b^2 - 696ab\right)$$

(8)

$$y = \frac{1}{28}\left(29a^2 - 348b^2 - 20ab\right)$$

From (2)

$$U = 2x - 3y$$

$$x = \frac{1}{56}\left(77a^2 - 924b^2 - 756ab\right)$$

$$y = \frac{1}{28}\left(29a^2 - 348b^2 - 20ab\right)$$

$$z = a^2 + 12b^2$$

Assume $a = 56A$, $b = 56B$ in the above equation , we obtain the non-zero distinct integer solution of(1) are given by,

$$x(A, B) = 56\left(77A^2 - 924B^2 - 756AB\right)$$

$$y(A, B) = 112\left(29A^2 - 348B^2 - 20AB\right)$$

$$z(A, B) = 3136\left(A^2 + 12B^2\right)$$

PROPERTIES

[1] $x(A,1) + y(A,1) - 52136t_{4,A} + 44576pr_A \equiv 0 \pmod{2}$

[2] $x(A,1) - y(A,1) - 41160t_{4,A} + 40096pr_A = -12768$

[3] $x(A,1) + z(A,1) - 49784t_{4,A} + 42336pr_A = -14112$

PATTERN 5

Equation (3) can be written as,

$$U^2 + 12y^2 = 12z^2 + z^2$$

$$U^2 - z^2 = 12(z^2 - y^2)$$

$$(U + z)(U - z) = 12(z + y)(z - y) \qquad (9)$$

Case1

Equation (9) can also be written as,

$$\left(\frac{U + z}{U - z}\right) = 12\frac{(z - y)}{(U - z)} = \frac{\alpha}{\beta}$$

Which is equivalent to the system of double equation as,

$$\left.\begin{array}{l} \beta U + z(\beta - \alpha) - \alpha y = 0 \\ \\ -\alpha U + z(12\beta + \alpha) - 12\beta y = 0 \end{array}\right\} \qquad (10)$$

Solving (10) by the method of cross multiplication, we get

$$U = -\alpha^2 - 12\beta^2 + 24\alpha\beta$$

$$y = -\alpha^2 + 12\beta^2 + 2\alpha\beta$$

$$z = \alpha^2 + 12\beta^2$$

$$(11)$$

Substituting (11) in (2), the non-zero distinct integer solution of(1) are given by,

$$x(\alpha, \beta) = -\alpha^2 + 12\beta^2 + 15\alpha\beta$$

$$y(\alpha, \beta) = -\alpha^2 + 12\beta^2 + 2\alpha\beta$$

$$z(\alpha, \beta) = \alpha^2 + 12\beta^2$$

PROPERTIES

[1] $x(\alpha,1) + y(\alpha,1) + 19t_{4,\alpha} - 17\text{Pr}_\alpha \equiv 0 (\text{mod } 2)$

[2] $x(\alpha,1) - y(\alpha,1) + 13t_{4,\alpha} - 13\text{Pr}_\alpha = 0$

[3] $x(\alpha,1) + z(\alpha,1) + 15t_{4,\alpha} - 15\text{Pr}_\alpha \equiv 0 (\text{mod } 3)$

Case 2

Equation (9) can also be written as ,

$$\frac{(U+z)}{3(z+y)} = 4\frac{(z-y)}{(U-z)} = \frac{\alpha}{\beta}$$

Which is equivalent to the system of double equation as,

$$\left.\begin{array}{c} -\alpha U + z(\alpha + 4\beta) - 4\beta y = 0 \\[2mm] \beta U + z(\beta - 3\alpha) - 3\alpha y = 0 \end{array}\right\} \tag{12}$$

Solving (12) by method of cross multiplication, we get

$$\left.\begin{array}{c} U = 3\alpha^2 - 4\beta^2 + 24\alpha\beta \\[3mm] y = -3\alpha^2 + 4\beta^2 + 2\alpha\beta \\[3mm] z = 3\alpha^2 + 4\beta^2 \end{array}\right\} \tag{13}$$

Substituting (13) in (3) ,the non-zero distinct   integer solution of (1) are

$$x(\alpha,\beta) = -3\alpha^2 + 4\beta^2 + 15\alpha\beta$$

given by, $$y(\alpha,\beta) = -3\alpha^2 + 4\beta^2 + 2\alpha\beta$$

$$z(\alpha,\beta) = 3\alpha^2 + 4\beta^2$$

PROPERTIES

[1] $x(\alpha,1) + y(\alpha,1) + 23t_{4,\alpha} - 17\mathrm{Pr}_\alpha \equiv 0(\mathrm{mod}\,2)$

[2] $x(\alpha,1) - y(\alpha,1) + 13t_{4,\alpha} - 13\mathrm{Pr}_\alpha = 0$

[3] $x(\alpha,1) + z(\alpha,1) + 15t_{4,\alpha} - 15\mathrm{Pr}_\alpha = 8$

Case: 3

(9) can be written in the form of ratio as,

$$6\frac{(U+z)}{(z+y)} = 2\frac{(z-y)}{(U-z)} = \frac{\alpha}{\beta}$$

which is equivalent to the system of double equation is,

$$\left.\begin{aligned}
\beta U + z(\beta - 6\alpha) - 6\alpha y &= 0 \\
-\alpha U + z(2\beta + \alpha) - 2\beta y &= 0
\end{aligned}\right\}$$
(14)

Solving (14) by method of cross multiplication, we get

$$U = 6\alpha^2 - 2\beta^2 + 24\alpha\beta$$

$$y = -6\alpha^2 + 2\beta^2 + 2\alpha\beta$$
(15)

$$z = 6\alpha^2 + 2\beta^2$$

substituting (15) in (2), the non-zero distinct integer solution of (1) are given by,

$$x(\alpha,\beta) = -6\alpha^2 + 2\beta^2 + 15\alpha\beta$$

$$y(\alpha,\beta) = 6\alpha^2 + 2\beta^2 + 2\alpha\beta$$

$$z(\alpha,\beta) = 6\alpha^2 + 2\beta^2$$

PROPERTIES

[1] $x(\alpha,1) + y(\alpha,1) + 29t_{4,\alpha} - 17\mathrm{Pr}_\alpha \equiv 0(\mathrm{mod}\,2)$

[2] $x(\alpha,1) - y(\alpha,1) + 13t_{4,\alpha} - 13\mathrm{Pr}_\alpha = 0$

[3] $x(\alpha,1) + z(\alpha,1) + 15t_{4,\alpha} - 15\mathrm{Pr}_\alpha = 4$

Case: 4

Equation (9) can also be written as

$$2\frac{(U+z)}{(z+y)} = 6\frac{(z-y)}{(U-z)}$$

Which is equivalent to the system of double equations as,

$$\beta U + z(\beta - 2\alpha) - 2\alpha y = 0$$

$$-\alpha U + z(6\beta + \alpha) - 6\beta y = 0$$

Solving above equation by method of cross multiplication, we get

$$U = 2\alpha^2 - 6\beta^2 + 24\alpha\beta \qquad (16)$$

$$y = -2\alpha^2 + 6\beta^2 - 2\alpha\beta$$

$$z = 2\alpha^2 + 6\beta^2$$

Substituting (16) in (2), the non-zero distinct integer solution of (1) are given by,

$$x(\alpha, \beta) = -2\alpha^2 + 6\beta^2 + 15\alpha\beta$$

$$y(\alpha, \beta) = -2\alpha^2 + 6\beta^2 + 2\alpha\beta$$

$$z(\alpha, \beta) = 2\alpha^2 + 6\beta^2$$

PROPERTIES

[1] $x(\alpha,1) + y(\alpha,1) + 21t_{4,\alpha} - 17\mathrm{Pr}_\alpha \equiv 0(\mathrm{mod}\,3)$

[2] $x(\alpha,1) - y(\alpha,1) + 13t_{4,\alpha} - 13\mathrm{Pr}_\alpha = 0$

[3] $x(\alpha,1) + z(\alpha,1) + 15t_{4,\alpha} - 15\mathrm{Pr}_\alpha = 12$

Case: 5

Equation (9) can be written as,

$$4\frac{(U+z)}{(z+y)} = 3\frac{(z-y)}{(u-z)} = \frac{\alpha}{\beta}$$

which is equivalent to the to double equations as,

$$\beta U + z(\beta - 4\alpha) - 4\alpha\beta = 0$$

$$\hspace{6cm}(17)$$

$$-\alpha U + z(\alpha + 3\beta) - 3\beta y = 0$$

Solving (17) by method of cross multiplication, we get

$$U = 4\alpha^2 - 3\beta^2 + 24\alpha\beta$$

$$y = -4\alpha^2 + 3\beta^2 + 2\alpha\beta$$

$$z = 4\alpha^2 + 3\beta^2$$

(18)

Substituting (18) in (2), the non-zero distinct integer solution of (1) are given by,

$$x(\alpha, \beta) = -4\alpha^2 + 3\beta^2 + 15\alpha\beta$$

$$y(\alpha, \beta) = -4\alpha^2 + 3\beta^2 + 2\alpha\beta$$

$$z(\alpha, \beta) = 4\alpha^2 + 3\beta^2$$

PROPERTIES

[1] $x(\alpha,1) + y(\alpha,1) + 25t_{4,\alpha} - 17\mathrm{P}r_\alpha \equiv 0(\mathrm{mod}\,3)$

[2] $x(\alpha,1) - y(\alpha,1) + 13t_{4,\alpha} - 13\mathrm{P}r_\alpha = 0$

[3] $x(\alpha,1) + z(\alpha,1) + 15t_{4,\alpha} - 15\mathrm{P}r_\alpha = 6$

CONCLUSION
In this paper ,we have presented infinitely many non-zero distinct integer solution to the ternary quadratic equation $4x^2 - 12xy + 21y^2 = 13z^2$ representing a homogeneous cone . As diophantine equation are rich in variety , to conclude, one may search for other forms of three dimentional surfaces , namely , non-homogeneous cone , paraboloid , ellipsoid ,hyperbolic paraboloid and so on for finding integral points on them and corresponding properties

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PARALLEL THEMES AND RESEMBLANCE IN THE MODUS OPERANDI:
ULYSSES AND KOLAMBASACHE GARVAGEET

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ABSTRACT

Marathi is one of the most prosperous languages in India in terms of literature. Marathi poetry dates back to the 13th century and owes a lot to the saint poets like Dnyandev, Tukaram, Ramdas, etc. Their poetry was mostly didactic considering the challenges of the time. In the early 19th century, with the advent of the British Raj, Marathi literature was bound to come under the purview of English influence. The time period under consideration is the Romantic and Victorian period. Many Marathi poets like T.B. Thombare (Baalkavi) , Ram Ganesh Gadkari (Govindagraj), Keshavsut, N.V. Tilak, Dattatray Kondo Ghate, Kashinath Hari Modak, V.D. Karandikar, were primarily romantic. As a descendant of these mighty poets, Vishnu Vaman Shirwadkar assumed the pen name 'Kusumagraj' and surfaced in the first half of the 20th century with his collection of poems, "Vishakha", a literary milestone in Maharashtra. All the poems in 'Vishakha' are full of romantic imagery and many cultural and historical references can be seen in the poems; a trait shared by Lord Tennyson.

This paper aims at analyzing Tennyson's "Ulysses" and Kusumagraj's "Kolambasache Garvageet" in order to address the similarity between the themes, attitude, and execution of the subject matter in the poems.

While it is evident that Kusumagraj (Vishnu Vaman Shirwakar) drew heavily on William Shakespeare as far his dramas are concerned, little has been accounted about Tennyson being one of his influences. Thus, the paper eyes the poems and their similarities as mere "resemblances" and not "inspirations". It is however a contribution to hypothesize Tennyson's influence on Kusumagraj, the poet.

DISCUSSION
Similarities in the background of the poems

Ulysses is a depiction of the Trojan war-hero and Greek king of Ithaca, Odysseus (Ulysses). Homer introduced Ulysses in his epic Iliad in which he was a key character. Following the events of Iliad, Ulysses, along with his companions, undergo a ten year long adventurous voyage in order to reach home and establish himself as the rightful king of Ithaca. These adventures have been penned by Homer in his Odyssey, another Grecian epic. Tennyson has tried to envisage Ulysses' thoughts after he made it back to his home safely. The old voyager has been portrayed as a man who yearns for his past sea adventures as he is quite dissatisfied with his uneventful life in Ithaca.

Kusumagraj handles the much explored theme of Christopher Columbus's voyages to the Americas in 'Kolambasache Garvageet' (The song of Columbus's Pride). Although, Columbus wasn't the first European sailor to have discovered the Americas, his explorations were crucial as far as European settlements and the eventual colonization of the continent is concerned. Columbus undertook four different expeditions, where the first two led him to the island of Cuba and the latter two to the main continents. It wasn't "smooth sailing" for Columbus and

company. The crew had to face a lot of physical challenges due to starvation, dehydration, scurvy, malnutrition etc. The vast Atlantic Ocean made the crew witness adverse weather conditions like rough tides and stormy winds; causing the vessels to drift and lose their intended trajectories on multiple occasions. It was a leadership challenge for the captain as he had to talk the crew out of their diffidence and at times, mutinies.

The poems
Ulysses

It little profits that an idle king,
By this still hearth, among these barren crags,
Match'd with an aged wife, I mete and dole
Unequal laws unto a savage race,
That hoard, and sleep, and feed, and know not me.
I cannot rest from travel: I will drink
Life to the lees: All times I have enjoy'd
Greatly, have suffer'd greatly, both with those
That loved me, and alone, on shore, and when
Thro' scudding drifts the rainy Hyades
Vext the dim sea: I am become a name;
For always roaming with a hungry heart
Much have I seen and known; cities of men
And manners, climates, councils, governments,
Myself not least, but honour'd of them all;
And drunk delight of battle with my peers,
Far on the ringing plains of windy Troy.
I am a part of all that I have met;
Yet all experience is an arch wherethro'
Gleams that untravell'd world whose margin fades
For ever and forever when I move.
How dull it is to pause, to make an end,
To rust unburnish'd, not to shine in use!
As tho' to breathe were life! Life piled on life
Were all too little, and of one to me
Little remains: but every hour is saved
From that eternal silence, something more,
A bringer of new things; and vile it were
For some three suns to store and hoard myself,
And this gray spirit yearning in desire
To follow knowledge like a sinking star,
Beyond the utmost bound of human thought.

 This is my son, mine own Telemachus,
To whom I leave the sceptre and the isle,—
Well-loved of me, discerning to fulfil
This labour, by slow prudence to make mild
A rugged people, and thro' soft degrees
Subdue them to the useful and the good.
Most blameless is he, centred in the sphere
Of common duties, decent not to fail
In offices of tenderness, and pay
Meet adoration to my household gods,
When I am gone. He works his work, I mine.

There lies the port; the vessel puffs her sail:
There gloom the dark, broad seas. My mariners,
Souls that have toil'd, and wrought, and thought with me—

That ever with a frolic welcome took
The thunder and the sunshine, and opposed
Free hearts, free foreheads—you and I are old;
Old age hath yet his honour and his toil;
Death closes all: but something ere the end,
Some work of noble note, may yet be done,
Not unbecoming men that strove with Gods.
The lights begin to twinkle from the rocks:
The long day wanes: the slow moon climbs: the deep
Moans round with many voices. Come, my friends,
'T is not too late to seek a newer world.
Push off, and sitting well in order smite
The sounding furrows; for my purpose holds
To sail beyond the sunset, and the baths
Of all the western stars, until I die.
It may be that the gulfs will wash us down:
It may be we shall touch the Happy Isles,
And see the great Achilles, whom we knew.
Tho' much is taken, much abides; and tho'
We are not now that strength which in old days
Moved earth and heaven, that which we are, we are;
One equal temper of heroic hearts,
Made weak by time and fate, but strong in will
To strive, to seek, to find, and not to yield.

कोलंबसाचे गर्वगीत

हजार जिव्हा तुझ्या गर्जु दे प्रतिध्वनीने त्या
   समुद्रा, डळमळुदे तारे!
विराट वादळ हेलकावुदे पर्वत पाण्याचे
   ढळुदे दिशाकोन सारे!

ताम्रसुरा प्राशून मातुदे दैत्य नभामधले
   दडुद्या पाताळी सविता
आणि तयांची ही अधिराणी दुभंग धरणीला
   कराया पाजळुदे पळिता!

की स्वर्गातून कोसळलेला, सूड समाधान
   मिळाया प्रमत्त सैतान
जमवुनि मेळा वेताळांचा या दर्यावरती
   करी हे तांडव थैमान!

पदच्युता, तव भीषण नर्तन असेच चालू दे
   फुटुदे नभ माथ्यावरती
आणि तुटुदे अखंड उल्का वर्षावत अग्नी
   नाविका ना कुठली भीती!

सहकाऱ्यांनो, का ही खंत जन्म खलाशांचा
   झुंजण्या अखंड संग्राम
नक्षत्रापरि असीम नीलांमधे संचरावे
   दिशांचे आम्हाला धाम!

काय सागरी तारू लोटले परताया मागे
   असे का हा अपुला बाणा
त्याहुन घेऊ जळी समाधी सुखे, कशासाठी
   जपावे पराभूत प्राणा!

कोट्यवधी जगतात जीवाणू जगती अन् मरती
   जशी ती गवताची पाती
नाविक आम्ही परंतु फिरतो सात नभांखाली
   निर्मितो नव क्षितिजे पुढती!

मार्ग ना आमुचा रोधू शकती ना धन, ना दारा
   घराची वा वितभर कारा
मानवतेचे निशाण मिरवू महासागरात
   जिंकुनी खंड खंड सारा!

चला उभारा शुभ्र शिडे ती गर्वाने वरती
   कथा या खुल्या सागराला
"अनंत अमुची ध्येयासक्ती अनंत अन् आशा
   किनारा तुला पामराला!"

Similarities

The two poems under consideration here do not share many similarities as far as the phrasing and background is concerned (which was quite the case in the earlier poems). However, the poems share a lot of thematic commonalities. For starters, the theme of voyages is common in both the poems.

Apart from the part where Ulysses ruminates about his old age, idleness in life, and his son Telemachus, rest of the poem is similar in theme with 'Kolambasache Garvageet'. Both the poems have their protagonists as the narrators. There are patches where both these protagonists. i.e. Christopher Columbus and Ulysses are encouraging their companions to follow them in their respective adventures. Both are trying to convince their followers by emphasizing on the futility of the common life. They are also trying to trigger the ambitiousness of their followers.

The followers are being made aware of the possible adversities by the protagonists. But while doing so, they are also trying to imbibe a positive outlook and confidence, so much so that at times Kusumagraj's Kolumbus goes on to challenge the mighty ocean to unleash its extreme fury upon them.
Here are some lines from the poems that echo each other:
a)   How dull it is to pause, to make an end,
To rust unburnish'd, not to shine in use!
As tho' to breathe were life! Life piled on life

काय सागरी तारू लोटले परताया मागे

असे का हा अपुला बाणा

त्याहुन घेऊ जळी समाधी सुखे, कशासाठी

जपावे पराभूत प्राणा!

कोट्यवधी जगतात जीवाणू जगती अन् मरती

जशी ती गवताची पाती

नाविक आम्ही परंतु फिरतो सात नभांखाली

निर्मितो नव क्षितिजे पुढती!

(We should happily let the mighty ocean consume us than to give up and fall back. Millions of beings live and die in the world as if they're blades of grass. But we are sailors, we roam under the seven heavens, we create new horizons.)

b)   Come, my friends,
 'T is not too late to seek a newer world.
 Push off, and sitting well in order smite
 The sounding furrows; for my purpose holds
 To sail beyond the sunset, and the baths
   Of all the western stars, until I die.

नक्षत्रापरि असीम नीलांमधे संचरावे

दिशांचे आम्हाला धाम!

(We are keen on exploring all directions, we wish to roam the endless blue ocean like stars in the sky.)

नाविक आम्ही परंतु फिरतो सात नभांखाली

निर्मितो नव क्षितिजे पुढती!

(But we are sailors, we roam under the seven heavens, we create new horizons.)

CONCLUDING REMARKS AND FUTURE STUDY

'Kolambasache Garvageet' is based on events which do not have anything in common with Kusumagraj's cultural heritage. So, it can be stated that the poet might have gone out of the way to emulate 'Ulysses'. However, the treatment of the topic is quite different than 'Ulysses' in the case of 'Kolambasache Garvageet'. Where both the protagonists are brimming with the urge of embarking on adventures, Kusumagraj's 'Kolumbus' comes of as an over the top daredevil who's charming audacity is in contrast with Ulysses' ambitious yet wise demeanor.

While attempting to hypothesize that Kusumagraj was inspired by Tennyson, the paper does not intend to demean Kusumagraj's innovation or penmanship. Despite being inspired by Tennyson, in the hands of the great Marathi poet, the themes look fresh even to someone who follows both English and Marathi poetry.

There are many Marathi poets who found their inspiration in English poetry, especially in the romantic period. Further studies can be conducted in order to acknowledge the possible parallel between English and Marathi literature.

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THE MAIN DIRECTIONS OF PENSION SYSTEMS DEVELOPMENT IN THE WORLD AND IN UZBEKISTAN

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ABSTRACT

This article highlights the world experience of the pension system and social protection of citizens, social policy in the transition period to a market economy, in addition, having pension systems and the main directions for their development, the main demographic factors affecting the pension system. It also describes the reforms carried out in recent years in the Republic of Uzbekistan, benefits provided to pensioners, and current problems of the pension system, as well as substantiated proposals for improving pension legislation.

 KEY WORDS: *old-age pension, pension system, pension, social protection, benefits, social assistance, pension fund.*

INTRODUCTION

The strong social protection policy pursued in the Republic of Uzbekistan requires ensuring reliable legal aspects in all respects. This requires further improvement of social protection systems, including pension systems, the adoption of the necessary legislative acts and documents in this area. As the President of the Republic of Uzbekistan Sh. Mirziyoyev noted, "Support for disabled people, those who have lost their breadwinners, lonely elderly people, in general, those who need support, of course, remains a priority task of the Republic of Uzbekistan. In the future, a lot of work has to be done to create more favorable conditions for entrepreneurship, doing business, creating new jobs, increasing incomes of the population, improving pension provision "[1].

METHODS

All this requires the creation of a legal concept for the effective implementation of reforms in the pension system of Uzbekistan, the definition of its main directions. The adoption of the Law of the Republic of Uzbekistan "On state pension provision of citizens" was of great importance in the formation of the pension system in Uzbekistan. The purpose of the law is to ensure the position of pensioners in society, their legal protection in a market economy, determine the size of the pension, which directly depends on the length of service and the amount of wages.

The transition to a market economy has both positive and negative aspects, including the fact that the stratification of the country's population by income level leads to social instability. To mitigate these social problems, each country has its own social policy. The essence of such a policy is that the state clearly develops and tries to cover those strata of the population that, for some reason, are not able to earn a living. The existence of an effective social security system in the country will help overcome those social problems that may arise.

RESULTS AND DISCUSSIONS

It is known that in the Republic of Uzbekistan, pension payments are mainly based on the principle of "solidarity of generations", that is, pensions are paid out of the contributions of those who work. Therefore, there must be a certain balance between the number of pensioners and the number of working citizens. If there is a change in the demographic situation in Uzbekistan, as well as an increase in the number of self-employed and

unemployed in the informal sector, then this balance may be upset in the future.

The implementation of a strong social policy in Uzbekistan at the stage of economic liberalization and in the context of deepening reforms requires the use of new practical and effective forms. World experience shows that the creation and effective use of the system of state trust funds plays an important role.

The development of a market economy designed to meet the needs of every member of society is at the heart of government fiscal policy. Because the social interests of each person or any social group, as well as the nation, are always reflected in the relations of the social system and the expenditures of the state budget, which meet its social needs. At the stage of economic liberalization, the implementation of an active social policy in countries requires the use of new practical and effective forms.

Now one of the most important social problems of states is to improve the living standards of the population. And one of the main ways to solve this problem will be pension provision, which will allow pensioners to live well. The purpose of creating a pension system is not to make the state charitable, to protect older citizens from poverty, but to come up with a way to finance the pension system that will allow a person to live fully when he is old, to ensure social justice.

According to the UN conclusions, in pension systems based on "solidarity of generations" - if there are four employees per pensioner, then this pension fund is considered stable. To ensure the stability of social policy, the country determines the main directions for improving reforms. In different states, the ways to achieve this goal differ from each other. The study of changes in the age structure of the world's population showed that the retirement age is more burdensome for the working-age population, which can be explained by objective demographic changes, and this can be observed in many countries and regions. Currently in developed countries there is a significant increase in the proportion of the adult population to the middle-aged population.

In almost all countries, after the second half of the last century, life expectancy has increased by an average of 20 years, while in the 21st century it is expected to increase by another 10 years by 2050. In European countries alone, the average age of the population in 1995 was 36, today it is [2] 42, and by 2050 it is 57. For reference, the average age of the population in our republic at the moment is 29 years.

The issue of pension provision, especially in the 80s of the XX century, was difficult, since it was at this time that the reforms of the pension system were launched in developed and developing countries of the world. As the gap between working citizens (those who pay) and those who do not work

(those who receive a pension) increased, many problems arose in the distribution system, and this problem forced the reform of the pension system. The difference in pension coverage was mainly covered by government spending, which led to changes in the pension system.

The study of world experience in the field of pension provision shows that the pension system in different countries is different and it depends on the economic level of the state, its size, habits, experience of social security, employee discipline and pension security.

For example, the main directions of the pension reform in the Czech Republic are the abolition of benefits for unhealthy work, the introduction of additional contributions to the insurance premiums of employers, the establishment of a link between the contributions paid and the received pensions, the development of a diversified insurance system, the expansion of the possibilities of individual pension plans, an increase in the retirement age for men and women.

Currently, more than 200 models of methods of payment of funded and distributed pensions are used in the world. At the end of the last century, Chile, Bolivia, El Salvador, Mexico and Kazakhstan abandoned this method of distribution and switched only to the method of accumulating pensions [3].

The method of accumulating pensions is more stable and does not affect demographic changes, the method of distribution is more suitable for economic and demographic needs, but these characteristics do not fully achieve the main goal of pension policy. As a result of combining these methods, the distribution method is used - collection, in which, at the expense of the working population, the society pays a pension to those who do not work, and an additional pension is issued from the income received from investing in financial markets.

Most developed countries currently use a three-tier pension system:

Stage 1 - compulsory state support, distributed over certain age groups;

Stage 2 is a compulsory accumulation method, in which the amount of the pension is collected in the individual accounts of the pensioner and depends on the amount to be invested;

Stage 3 - voluntary pension insurance.

In the current demographic situation, we believe that the main tasks of the pension system should be the following:

a) lack of opinion that the pensioner's income is sufficient, that is, a person's life will deteriorate as a result of retirement;

b) people of retirement age must be protected from social, economic hardships, human and physical aspects must be taken into account.

In conclusion, I would like to note that it is necessary to strengthen the ongoing work to increase the stability of the pension system, in particular, the income base of the population.

Today, a reliable pension system has been formed in Uzbekistan, which has a solid legal basis in all respects.

Especially over the past 3-4 years, large-scale reforms have been carried out to increase the size of pensions and further improve the social protection system. According to the Decree of the President of the Republic of Uzbekistan "On the State Program for the Implementation of the Strategy of Action in Five Priority Areas of Development of the Republic of Uzbekistan in 2017-2021 in the Year of Supporting Youth and Strengthening the Health of the Population" in order to create the most favorable conditions for citizens when assigning pensions and benefits, it is established the procedure according to which from June 1, 2021:

- when assigning a pension, seniority for the period up to 2005, when an electronic database on wages and seniority was not maintained, is calculated on the basis of the records of the person's seniority in the work book without requesting supporting documents;

- the verification and collection of excessive payments on assigned, recalculated pensions and benefits for a period of three or more years is canceled;

- working citizens are given the right to make, on a voluntary basis, a monthly payment of social tax from their own income in order to receive future retirement benefits for their non-working spouses;

- pensions and benefits are assigned and paid at the request of the citizen at the place of permanent registration or place of temporary stay;

- applications for pensions and benefits in non-cash form are drawn up by citizens in the process of opening bank plastic cards in branches of commercial banks or in electronic form through mobile applications without contacting the appropriate branch of the off-budget Pension Fund under the Ministry of Finance;

- the obligation of persons receiving pensions in a non-cash form to visit the Pension Fund every six months, as well as responsible employees, is canceled - to conduct on-site monitoring to determine whether citizens have lost their right to a pension on the basis of electronic information provided by the relevant ministries and departments.

Despite all this, we must also recognize that there are issues that have not yet been resolved, there are many problems that need to be addressed. In this regard, it is necessary, first of all, further improvement of the regulatory and legal framework for pension provision, a clear definition of norms in accordance with modern requirements, a revision of the existing legal framework and the introduction of appropriate additions and changes to the existing regulatory and legal documents, it is necessary to put on the agenda of increasing the efficiency of pension provision.

The legal framework that will be developed and adopted in the country should take into account the new, changing socio-economic and demographic conditions of the republic, create convenience for providing additional social protection in old age, the formation of pension funds, and it is necessary to clearly define the directions of spending funds, take into account the gradual equalization, or although would be the approximation of the conditions for determining pensions for men and women, the abolition, or a significant reduction in preferential pensions.

Taking into account the above, along with the ongoing social reforms and based on the experience of developed countries, it is desirable to create additional corporate, collective, private funds and off-budget social funds aimed at the national pension system, as well as introduce preferential pensions through corporate, collective private pension funds.

CONCLUSION

Based on the above proposals, it is necessary to start a phased introduction of corporate and private pension systems while maintaining the state pension system. Currently, the creation of their legal base is an urgent task. Non-state pension funds play an important role and significance in advancing the pension system of Uzbekistan to a new level.

It is also possible to develop measures to attract entrepreneurs to the system of accumulative pension funds, which will allow them to receive income for additional pensions in the future. In this regard, it is necessary to study in more detail the reforms of the pension system in foreign countries and apply the relevant aspects of cost control in Uzbekistan.

In the future, deepening and increasing the effectiveness of socio-economic reforms will lead to a constant increase in the quantity and quality of social assistance provided to citizens of the Republic of Uzbekistan and society, while pension coverage will begin to receive wide coverage not only at the expense of public funds, but also at the expense of the resources of members of society.

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A STUDY OF TEACHING APTITUDE AMONG B.ED STUDENTS

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ABSTRACT

An aptitude indicates the competency of an individual to learn and acquire new skills those necessary for the success of individual in particular field. Teaching aptitude indictes the acquired capacity in teaching profession of individual in the field of teaching after providing absolute training and different type of opportunities etc. In this study, investigator explored the teaching aptitude among B.Ed student teachers because they are the future teachers and most of times they become the role model for their pupils. A representative sample of 60 (32 boys and 28 girls) student teachers was taken and self prepared questionnaire (in google form) used to collect data in virtual way. It usually signifies the mainly three domains like cognitive, affective and psycho-motor domains in teaching. Investigator mainly instructed to tick the all questions within 20 minutes to complete the test. At last, after the collection or analysis of the data investigator found there is no significant difference in teaching aptitude among B.Ed student teachers gender basis.

KEYWORDS: *Aptitude, Teaching aptitude, B.Ed student teachers*

INTRODUCTION

"Animals are trained but teachers are educated." W.H.Kilpatrik

In development of educational system mainly contribute of policy-maker, administrators, educationist and most essentionaly teachers. Teachers are like Karamyogi those source of great ideas and knowledge, justice, courage, wisdom, and nobility those do not only teach the students but also transfer their values, knowledge, experience, and inspire to learn. Performance of teachers depend upon effectively in order to come out desire outcome those related to thinking skill of students, understand how to learn, ability to learn, and develop the habits of work collaboratively in groups and positive change in modification of behaviour because pupil behaviour is mainly contemplation of action of teacher because they have ability to see each learner strength and weakness. According to their need they can assist and guide the student's so that build a positive and inspired future generation a good life in the society.

Teaching is a creative and highly complex activity and its effectiveness is closely linked to content knowledge, instructional planning, inspire the pupil's, evaluate their competencies, establish the good growing learning environment, use efficient methods and classroom management skills. Most primarily quality of success of learning will not be only measured in forms of percentage of academic score, quantity knowledge contribution etc., but it has also include quality of life, self-restraint, and loyalist.

So its very essentionaly for teachers may organize thyself with certain traits like aptitude and attitude with regard to the profession of teaching. No student teacher can be perfectly successful if they do not have positive attitude and aptitude with regard to the teaching profession.

TEACHING APTITUDE

The word **'aptitude'** is originated from Latin aptus ("apt., fit"). The term aptitude is defined by the psychologist in many different cases do happen like as 'role of training', 'readiness or quickness in learning', 'acquired capacity for something', 'quality of being apt.', 'talent', 'interest in activity' and so on.

An aptitude also indicates to the competency of an individual to learn and acquire new skill those can be improved with practice and effective training. An aptitude is the combination of certain pattern of traits of individual potentialities (unusual and unique potential) those indictes his inborn capacities, skills and developed abilities those increase the chance of success of individual life. Traxler described 'aptitude' is present condition of individual potential to perform a specific task in the future. The aptitude measure mainly indicates that what an individual able to learn which areas they use their specific ability or specific capacity apart from general intellectual ability those helps an individual to success and failure of individual which type of profession choose by them.**Teaching** indicates the interaction between teachers and students which mainly involves the

process of tutor-taught-environment, methods/skills, curriculum, evalution, discipline, multi-level/grade activities and effective communication etc. Lal R. and Shergil S.S (2012), described the teachers are main pullers in education, so we can say that success of students depend up a good aptitude and right attitude of teaching profession.

Teaching aptitude indictes the acquired capacity in teaching profession of individual in the field of teaching after providing absolute training and different type of opportunities etc. to the according to individual capacity, ability or academic potentional for acquisition of certain characteristics those helpful in identifying learner need and outcomes and help him to achieve their objectives and its also represents the creativity of the tutor those able to teach, guide, management the classroom activities and motivate his student's, arrange new or innovative method of teaching or implement the new ideas in different way etc. Dave N. and Raval D.,(2015) described the teaching aptitude as a set of conditions and characteristics occupied by individual and his ability or skills not only include the subject matter but also include his aims and schooling.

Teaching attitude, aptitude and effectiveness is all the quality of good teacher those play the important role of student's life like as leadership, ability, patience, discipline, creativity etc. those helpful in anticipate the future success of an individual. Jan.f.et al., (2015) described a right aptitude is mainly source of create the competitive advantageousness for educational institutions or organizations, hence we should mainly focus on right policies and strategies those helpful for evaluate, develop a right aptitude among teachers or employees.

Some specific factors play the important role in teaching aptitude to shape it up. Like as

- Value, beliefs and attitude
- Acceptance
- Honesty related teaching profession
- Intelligence and creativity
- Flexibility
- Equitable behaviour
- Positive attitude towards children
- Adoptability about environment etc.

A good student teacher must be awareness about specific factors/essentials of teaching those represent a good teacher aptitude qualities such as: lesson plan, updated curriculum related knowledge, learning material, knowledge of new method, learning strategies, use the knowledge of evalution method, quality of organise the multi-level or multi-grade activities, good communication skills or specific quality of intervention (when or how) to help the students in particular things. All of these qualities are possible when tutor have adjustment quality with themselves as well as their students.

OPERATION DEFINATION

Teaching aptitude: - By this term the investigator means to assess the teaching aptitude among B.Ed student teachers on the basis of marks obtained in virtual test those made in google form. It usually signifies the mainly three domains like cognitive, affective and psychomotor domains in teaching.

EMERGENCE OF THE STUDY

In the process of education educators and teachers play a very important role in education policy which mainly include quality teachers, school infrastructure, curriculum development according to demand of society. Teachers aptitude, attitude, skills, understanding, faith on teaching profession, democratic behaviour or personal adjustment with pupil is very helpful for ability to construct or develop a new or knowledgeable environment, organise or manage school related activities etc. those play overall development of students. These all qualities is fulfill if they have good positive aptitude about their teaching profession because teachers role is not only verbally transfer of idea or knowledge but also relate create or construct their own knowledge in the students.

This study mainly focus on key points of teaching aptitude among B.Ed student teachers like as if the student teachers have good positive attitude they can easily manage the pupil, understand child psychology or organise the classroom activities according to interest or need etc. An aptitude is inborn in nature like as specific ability, potential, skills of individual etc. those decide the success of human personality, just like that teaching aptitude of student teachers is not only relate their intelligence, class performance, gender (boys and girls) basis etc. but it represents the overall personality of student teachers like as cognitive, affective or pscho-motor skills.

STATEMENT OF THE PROBLEM

A study of teaching aptitude among B.Ed student teachers

OBJECTIVES OF THE STUDY

1. In this study, to compare the teaching aptitude among B.Ed student teachers on gender basis (boys and girls).
2. To determine the quality of teaching aptitude among B.Ed student teachers gender basis (boys and girls).

HYPOTHESIS OF THE STUDY

In this study null hypothesis applied like as there is no relationship between teaching aptitude among B.Ed student teachers on gender basis (boys and girls).

METHODOLOGY

The investigator applied the purposive sampling method of research for the data collection, but the way to conduct the data is online medium considering that is helpful to draw a valid general conclusion.

SAMPLE

In this study, an investigator took 60 samples of B.Ed student teachers (boys or girls) or used purposive sampling method to collect the sample.

TOOL USED

Self prepared questionnaire by the investigator.

DESCRIPTION OF THE TOOL

In this study, an investigator used self prepared questionnaire. It consists of 20 items having mainly three dominion, cognitive domain, affective domain and psychomotor domain.

Description of item

Cognitive domain	Affective domain	Psychomotor domain
1,2,7,14,15,17,19,20	3,8,9,11,16,18	4,5,6,10,13,12
=8	=6	=6

Teaching Domain
(Cognitive domain 40%, Affective domain 30%, Psychomotor domain 30%)
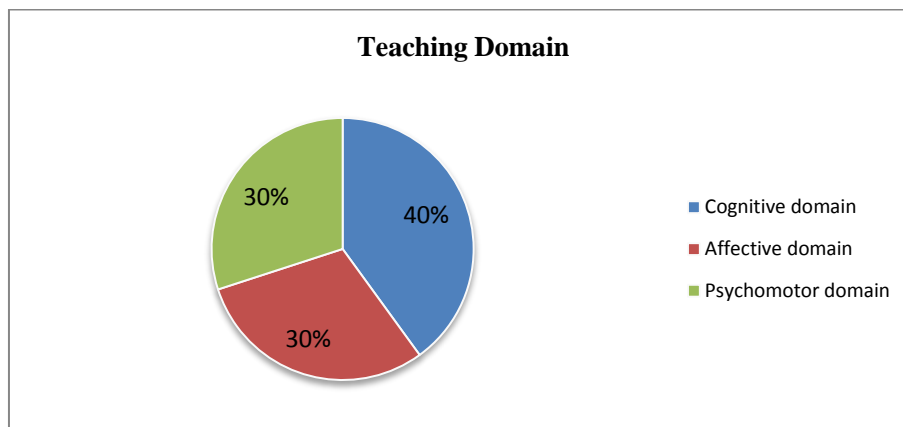
ADMINISTRATION AND SCORING

The test was administered to use purposive sampling method, use self prepared questionnaire (in google form) to collect data virtual way, which both include boys and girls B.Ed students. They were assured that no information disclosed to anyone consequently they give their response without any fear. They were instructed to tick all the 20 questions and essentially given 20 minutes to complete the test virtual way and also one mark assigned with one question.

STATISTICAL TECHNIQUES USED

The data was analyzed statistically by using mean, median, mode, standard deviation and t-test to access the teaching aptitude among B.Ed student teacher on gender basis (boys and girls).

ANALYSIS AND INTERPRETATION OF THE DATA

In educational research, this step is heart of research to analysis the collection of data and interpretation of the collected data. It deals with nature of score of data collected in numerical way like mean, median, mode, standard deviation and t-test.

Section-1: Teaching aptitude among B.Ed students teachers (both boys and girls).

Table-1

Sr. No.	Scores	frequency	Level of teaching aptitude
1.	18-20	9	High
2.	14-17	5	Above average
3.	7-13	28	Average
4.	4-6	17	Below average
5.	0-3	1	Low

Fig. 1
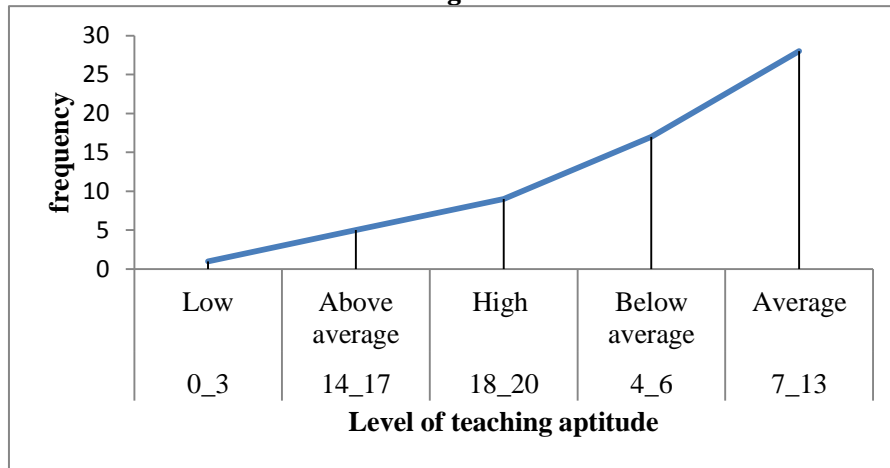
The result of this table and figure show that if the student teachers have scored between 18 to 20 they have high teaching aptitude. 5 students have scored between 14 to 17 that means above average teaching aptitude. 28 student teachers have scored between 7 to 13 which mean average teaching aptitude. 17 student teachers have scored between 4 to 6 that represent the below teaching aptitude. 1 student teacher scored between 0 to 3 that means 1 student has low level teaching aptitude. We can say it shows that there is average teaching aptitude among student teachers.

Section-2: Teaching aptitude among boys of B.Ed student teachers.

Table-2

Sr. No	Scores	frequency	Level of teaching aptitude
1.	18-20	7	High
2.	14-17	2	Above average
3.	7-13	13	Average
4.	4-6	10	Below average
5.	0-3	0	Low

Fig. 2
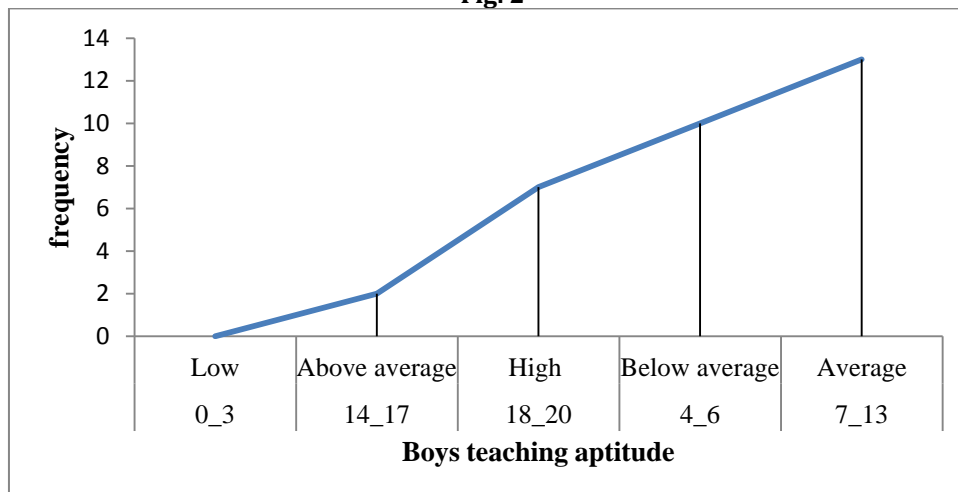
Table-2.1 Mean, Median, Mode and Standard deviation (boys of B.Ed student Teacher).

Variable	N	Mean	Median	Mode	Standard deviation
Teaching aptitude	32	10.75	10.26	12	5.18

The results of table-2, figure-2 or table-2.1 shows that overall performance there is average teaching aptitude.

Section-3: Teaching aptitude among girls of B.Ed student teachers.
Table-3

Sr. No	Scores	frequency	Level of teaching aptitude
1.	18-20	1	High
2.	14-17	3	Above average
3.	7-13	16	Average
4.	4-6	7	Below average
5.	0-3	1	Low

Fig.-3
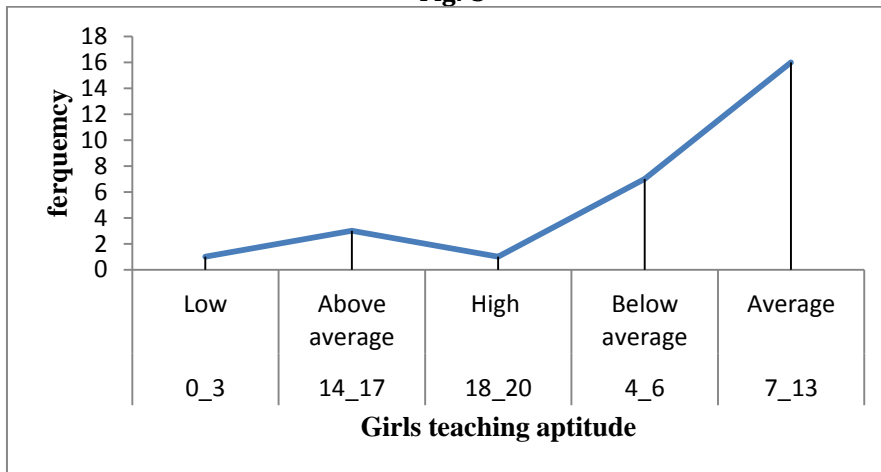
Table-3.1 Mean, Median, Mode and Standard deviation (girls of B.Ed student Teacher).

Variable	N	Mean	Median	Mode	Standard deviation
Teaching aptitude	28	9.35	10.87	10.63	3.18

The results of table-3, figure-3 or table-3.1 shows that overall performance there is average teaching aptitude.

Table-4 Comparison of teaching aptitude among boys and girls.

Groups	N	Mean	Standard deviation	t-test	Remarks
Boys student teachers	32	10.75	5.18	1.17	Not significant
Girls student teachers	28	9.35	3.18		

*degree of freedom is 58.

Comparison of B.Ed student teachers
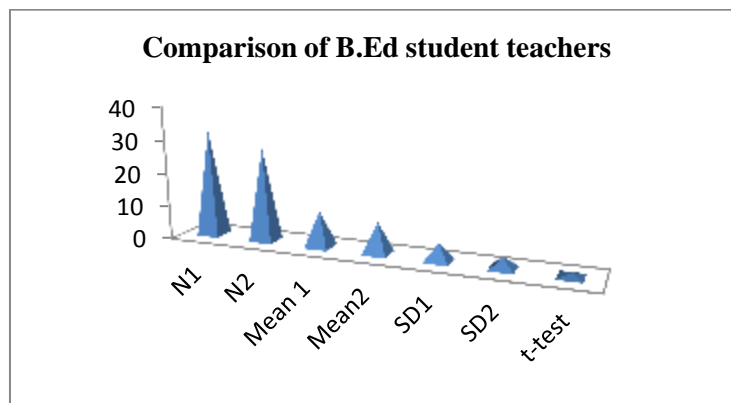
We can say that there is no significant difference in teaching aptitude among (boys and girls) student teachers.

RESULTS AND DISCUSSION

In the study overall result shows there is no significant difference between the teaching aptitude among (boys and girls) B.Ed student teachers. In the teaching profession one of the most essential method of guiding the student teachers with appropriate selected methods or methodologies (technique) those helpful for overall development of pupil's. Investigator mainly realize that for the student teachers, teaching aptitude is not just maintain at the moment in professional development or at the time of training, but its very important to maintain the same aptitude or attitude there after, hence the quality of teachers mainly depend upon that what type of training received by them like as teaching competency, skills, abilities, art of guiding the students, learning activities etc. In simple terms, teaching aptitude entrance test is play an important role in teaching education programme to improve effficency or quality of program. It has also include measure of results/scores of individual but not based on caste, creed and gender basis infact, individual should be selected on the basis of teaching aptitude in teaching profession.

DELIMITATIONS OF THE STUDY

1. In this study only 60 sample were collected from B.Ed student teachers nearby ludhiana.
2. Sample was collected by online method. Due to COVID-19 pandemic, it was not possible to visit the college personally.

REFERANCE

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Google form
https://forms.gle/vyZRSvT5YDb1rwMe6

INTELLIGENCE QUOTIENT (IQ) AND SEX: PREDICTORS OF ACADEMIC PERFORMANCE, EMOTIONAL STATE, SOCIAL ADAPTABILITY AND WORK ATTITUDE

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ABSTRACT

This study focused on determining the association of IQ and sex to academic performance, emotional state, social adaptability, and work attitude of the students taking education in NEUST-Gabaldon Campus. Questionnaires are administered to find out the association of IQ and sex to academic performance, emotional state, social adaptability, and work attitude. A descriptive – correlational design was employed in this study. The study showed that there is a significant association of sex to academic performance, emotional state, social adaptability and work attitude. It implied that sex can be use as a predictor of academic performance, emotional state, social adaptability and work attitude. Data also implied that in this population the male group are more academically equipped than the female counterpart. Data also showed that the female group are more emotional than the male counterpart. Furthermore, the male group are more socially active and work directed. There is a correlation of IQ to academic performance, emotional state, social adaptability and work attitude. It implies that IQ is a predictor of academic performance, emotional state, social adaptability and work attitude, but there is no significant association between sex and IQ.

KEYWORDS: *Intelligence Quotient (IQ), sex, Academic Performance, Emotional State, Social Adaptability, Work Attitude.*

INTRODUCTION

Throughout history, education is one of the most important aspects of life. We cannot afford to deal with the drastic change in society if we are not educated properly. Indeed, education is our way of life. Hence, it is substantial for every educator to determine the factors that determine student academic performance. It gives directions on how teachers provide learning activities to achieve a specific goal.

On the other hand, some researches provide data about the determinants of academic performance. Some of these researches focus on students' profile, motivation, attitude, sex, cognitive engagement, behavioural engagement, and other student-related factors. These students' related factors may have or may not have direct influenced students' academic performance. Hence, these factors may or may not provide an idea on the part of teachers on how to develop and impose a specific learning task. Also, these student-related factors are subjective since it does not provide a direct numerical relationship on students' academic performance.

Every learner is unique in their way, so educators provide varied activities to cater to those differences. Nonetheless, some students can learn either way. They can learn, even in their way, and that's have

something to do with their intelligence. Intelligence is a very important key factor to determine the student's academic performance in school. Intelligence is a cognitive potentiality that helps to increase the learning abilities of the students. Every Curriculum aim is to test the intelligence level in this way both intelligence and academic achievements interrelated object (Dandagal, and Yarriswami, 2017).

Intelligence is defined as general cognitive problem-solving skills. A mental ability involved in reasoning, perceiving relationships and analogies, calculating, learning quickly… etc. Some psychologists have divided intelligence into subcategories. For example, Howard Gardner maintained that it is comprised of seven components: musical, bodily-kinesthetic, logical-mathematical, linguistic, spatial, and interpersonal. Other definitions are: "Intelligence is what you do when you don't know what to do." "Intelligence is a hypothetical idea which we have defined as being reflected by certain types of behaviour (Dandagal, and Yarriswami, 2017).

Furthermore, the Culture Fair Intelligence Test, which has been validated and standardized for use in Nigeria, describes intelligence as the general mental capacity to quickly learn, solve novel problems, educe relationships, quickly process information correctly, think rationally, behave deliberately, and most effectively adjust to one's environment (Kpolovie, 2015)

Literature indicates that verbal skills have a greater connection with academic achievement than nonverbal abilities, according to Kaya, Juntune, and Stough (2015). Nonverbal abilities are linked to the ability to learn, while verbal abilities are linked to the readiness to learn. Both verbal (readiness) and nonverbal (potential) abilities should be assessed if intelligence scores are used to predict future academic performance. Besides, to recognize gifted and talented students, evaluation of verbal abilities should complement the assessment of nonverbal abilities so that they will be able to survive in advanced academic programs.

Besides, Kpolovie (2016) has shown that there is a statistically significant relationship between IQ and Mathematics achievement (0.499 and 0.495) when the English language is partially out of the range; and between IQ and English Language achievement (0.411 and 0.346) when Mathematics is partially out of the range, respectively, at junior and senior secondary school levels. The findings also showed overwhelming proof of intelligence stability (0.702) over four years in super corroboration of the fluid and crystalized theory of intelligence. The coefficient of partial determination unveiled that IQ accounts for 24.90 per cent to 24.50

per cent of the variance in Mathematics achievement, and16.89 per cent to 11.97 per cent of the variance in English Language achievement.

Singh (2010) investigated senior secondary students' mental health in terms of spiritual intelligence, altruism, school environment, and academic achievement and discovered that male students had significantly higher academic achievement than female students; students living in urban areas had significantly higher academic achievement than students living in rural areas; and students living in urban areas had significantly higher academic achievement than students living in rural areas; academic achievement of students studying in aided schools was significantly higher than that of students studying in government schools; academic achievement of students studying in unaided schools was significantly higher than that of students studying in government schools; academic achievement of students studying in aided schools was significantly higher than that of students studying in government schools; academic achievement of students studying in aided schools was significantly higher than that of students studying in unaided schools.

Gurubasappa (2009) studied intelligence and self-concept as correlates of secondary school students' academic achievement to determine the relationship between academic achievement and intelligence and self-concept using a sample of 400 students and discovered that there was a highly significant correlation between academic achievement and intelligence and self-concept; there was a significant inverse relationship between academic achievement and intelligence and self-concept.

Skourdi and Rahim (2010) looked at the relationship between emotional intelligence and linguistic intelligence in the acquisition of vocabulary in 66 EFL junior students from Shiraz Azad and Shiraz Universities. The results showed that emotional intelligence and linguistic intelligence, emotional intelligence and vocabulary awareness, and linguistic intelligence and vocabulary knowledge all have a positive relationship. Emotional intelligence has been discovered to be an indicator of linguistic intelligence and vice versa. Furthermore, several regressions found that linguistic intelligence outperformed emotional intelligence in predicting receptive vocabulary awareness.

M. Kiss, A. Kotsis, and A. István Kun (2014) conclude that sex, intellectual intelligence, introvert or extrovert orientation, thinking or feeling personality preference, and, in some sections of the study, emotional intelligence and perceiving or assessing personality preference of the student all have a major

effect on academic performance. But then, Capinding, A. (2021), showed in his study that there is no association between sex and academic performance. Also, Z. Ghabanchi and R. Rastegar (2014) found that the correlation between IQ and reading comprehension is greater than the link between total emotional intelligence and reading comprehension. Reading comprehension scores were found to have a significant relationship with certain emotional intelligence subscales, such as interpersonal skills, intrapersonal abilities, and stress management. It meant that IQ matters more than emotional intelligence when it comes to reading comprehension.

M. Mohzan, N. Hassan, and N. Halil (2012) look into the effect of emotional intelligence on academic achievement among students at Universiti Teknologi Mara's Education Faculty (UiTM). The information for their analysis was collected using a questionnaire that elicited information on the students' Emotional Intelligence level as well as their academic performance. According to the findings of their research, the respondents have a high degree of Emotional Intelligence. Two domains of Emotional Intelligence (Self-Emotion Assessment and Perception of Emotion) were found to be strongly and positively correlated with respondents' academic achievement. The study's findings have significant implications for the importance of Emotional Intelligence and its ties to academic performance in students, especially among pre-service teachers.

S. Nath, S. Ghosh, and S. Das (2015), on the other hand, found that EQ and IQ are negatively correlated and that there is no important association between EQ and academic success. According to them, based on the current results, larger samples can be included in future studies. The study's drawback is the study's limited sample size.

According to S.O. AlZboon (2013), social adaptation is one of the most significant issues directly relevant to human conduct, which is a reaction of a person attempting to harmonize his motives and desires on the one side, and the requirements of the world and different circumstances on the other; therefore, he is concerned with positive acts that bring satisfaction.

An adaptive person, on the other hand, enters the phases where his attitudes and acts correlate with the social environment in which he lives, finding a positive balance in his social ties with the social milieu around him, positively influencing all of his different life aspects, according to Anani (2000). As a consequence, social adaptation refers to an individual's integration of his reality, emotions, and internal culture with his environmental socio-cultural values, which may emerge from ideological and intellectual differences between him and his society, and then he attempts to adjust to achieve some kind of equilibrium between him and his surrounding environment, in which he can fulfil his needs (Abdullah, 2001).

An individual's social adaptation leads to a balance in his relationships with his environment, friends, and education, which will, of course, improve his achievement motivation and allow him to fully utilize his energies and abilities. According to Mayahi (2010), the achievement motive is the most important and is directly influenced by proper social environment adaptation. The researcher wants to see if there is a correlation between and among the students' intelligence quotient (IQ), sex, academic performance, emotional status, social adaptability, and work attitude using these data.

Generally, the research study aimed to determine the impact of Intelligence Quotient (IQ), and sex on the Academic performance, Emotional Status, Social Adaptability, and Work Attitude of Second Year BEED and BSED Students of Nueva Ecija University of Science and Technology – Gabaldon Campus, during the first semester, the school year 2020-2021.

Specifically, this study aims to answer the following question: How may the respondents be described in terms of Sex, Academic Performance, Intelligence Quotient, Emotional Status, Social Adaptability and Work Attitude. Is there a significant association between sex and the following: Intelligence Quotient (IQ); Academic Performance; Emotional Status; Social Adaptability; and Work attitude? Is there a significant relationship between and among the student's intelligence quotient, academic performance, emotional status, social adaptability, and work attitude?

Hypotheses

There is no significant relationship between sex and the following variables: Intelligence Quotient; Academic Performance; Emotional Status; Social Adaptability; and Work attitude.

There is no significant relationship between and among the student's intelligence quotient, academic performance, emotional status, social adaptability, and work attitude.

METHODS
Research Design

The study utilized a descriptive - correlational design. Descriptive correlational design is a research design where it describes the relationship between variables without making causation. Descriptive correlational studies describe the variables and the relationships that occur naturally between and among them (SousaI, V., et. al., 2007).

Participants of the Study : The participants of the study were the Second year BEED and BSE students of NEUST-Gabaldon Campus, A.Y. 2019-2020.

Table 1 shows the distribution of the participants of the study.

Table 1 The Participants of the Study

2nd Year	MALE	FEMALE	TOTAL
BSED	4	19	23
BEED	4	19	23
Total	8	38	46

Materials and Instrument

The study provides a check-list and IQ test. The Intelligence Quotient is done through IQTest.com. Questionnaire on Emotional status was adapted from the study of Aluoja, Shlik, Vasar, Luuk, and Leinsalu (Development and psychometric properties of the Emotional State Questionnaire, a self-report questionnaire for depression and anxiety). Questionnaire on Social Adaptability was adapted from the study of Saleem Odeh AlZboon (2013), Social Adaptation and Its Relationship to Achievement Motivation among High School Students in Jordan. Questionnaire on Work attitude was retrieved from Shodganga.inflib.net.ac.in. Student's grades were taken from last academic year (2019-2020).

Reliability of Instruments

The test-retest method was utilized in establishing the reliability of the questionnaire. It was administered twice to the 15 third year BEED students of the NEUST-Gabaldon campus who were not involved in the study. The scores of the respondents were correlated using Spearman's rho, with a reliability quotient of 0.89.

Data Collection

Due to the restriction of face-to-face classes, data from the students were collected using google forms.

DATA ANALYSIS
Using SPSS

Table 2 Statistical Tools

	Intelligence Quotient	Sex	Academic performance	Social Adaptability	Work Attitude
Academic performance	*Pearson r*	*Point bi-serial*		*Pearson r*	*Pearson r*
Emotional Status	*Ordinal by Interval*	*Chi-square*	*Pearson r*	*Spearman's rho*	*Spearman's rho*
Social Adaptability	*Ordinal by Interval*	*Chi-square*			
Work Attitude	*Ordinal by Interval*	*Chi-square*			*Spearman's rho*
Sex	*Point bi-serial*				

All hypotheses were tested at .05 level of significance.
The Scale and verbal interpretation of Academic Performance and Intelligent Quotient are given below:

Table 3: Descriptors and Grading Scale

Descriptor	Grading Scale
Outstanding	90-100
Very Satisfactory	85-89
Satisfactory	80-84
Fairly Satisfactory	75-79
Did not meet the expectation	Below 75

Table 4: IQ Classification and Range

Classification	Ranges
Very Gifted or Highly Advanced	145-160
Gifted or Very Advanced	130-144
Superior	120-129
High Average	110-119
Average	90-109
Low Average	80-89
Borderline	70-79
Mildly Impaired	55-69
Moderately Impaired	40-54

The weighted mean and verbal interpretation were utilized in computing the responses of the students on their Emotional Status, Social Adaptability, and Work Attitude. The arbitrary scale used:

Table 5

Scale	Emotional State and Social Adaptability	Work Attitude
1.00 – 1.79	not at all	very low
1.80 – 2.59	seldom	low
2.60 – 3.39	sometimes	medium
3.40 – 4.19	often	high
4.20 – 5.00	all the time	very high

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA
Profile of the respondents in terms of Sex, Academic Performance, Intelligence Quotient, Emotional Status, Social Adaptability, and Work Attitude.
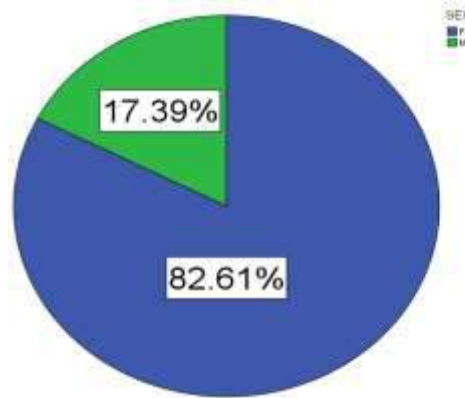
Figure 1. Distribution of the Respondents According to sex.

Figure 1 showed that 82.61 per cent of the respondents are female, and 17.39 per cent are male.

It also implied that a great number of female students are taking education in NEUST-Gabaldon Campus.

Figure 2. Distribution of the Respondents According to Academic Performance.

IQ Distribution
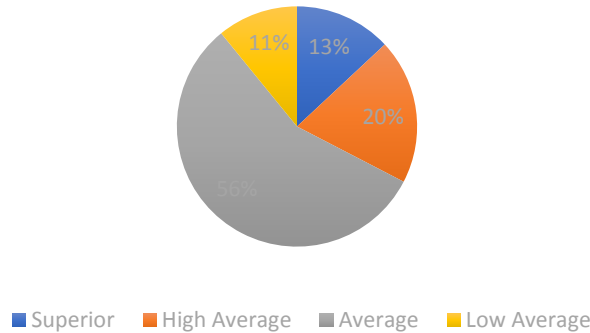
Figure 2 showed that most of the respondents have fairly satisfactory grades (39%), followed by very satisfactory (39%), outstanding (15%), and the least satisfactory (11%).

It implied that most of the students taking education have a fairly and very satisfactory grade. Furthermore, there is a need for uplifting the performance of the students taking education.

Figure 3. Distribution of Respondent According to "IQ"

Academic Performance
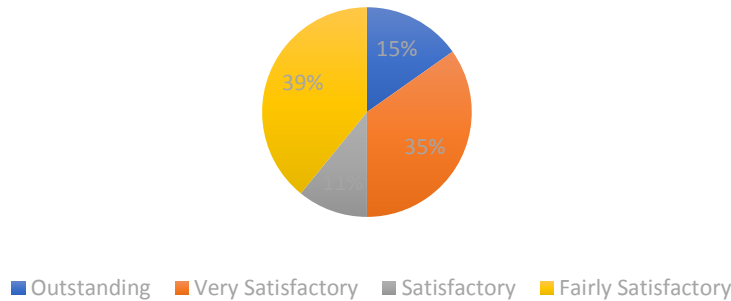
The chart showed that most of the respondent (56%) have average IQ, followed by high average IQ (20%), superior (13%) and the least low average (11%).

It also showed that most of the students taking education in Gabaldon Campus have an average IQ level.

Table 6. Weighted Mean and Verbal Description of Respondent's Emotional State.

Emotional State	WM	Verbal Description
Feelings of sadness	3.141	Sometimes
Feeling no interest or pleasure in things	2.845	Sometimes
Fear of being outside the home alone	2.704	Sometimes
Feeling afraid of travelling by bus, train, or car	2.732	Sometimes
Feeling easily irritated or annoyed	3.127	Sometimes
Tension or inability to relax	2.901	Sometimes
Fatigue or loss of energy	3.127	Sometimes
Being easily fatigued	2.901	Sometimes
Difficulty falling asleep	3.282	Sometimes
Restless or disturbed sleep	3.197	Sometimes
Total Weighted Mean	**2.996**	**Sometimes**

Table 6 showed that the respondent's emotional state are verbally interpreted as sometimes: "feelings of sadness" (wm=3.141); "feeling no interest or pleasure in things" (wm=2.845); "fear of being outside home alone" (wm=2.704); "feeling afraid of travelling by bus, train, or car" (wm=2.732); "feeling easily irritated or annoyed" (wm=3.127); "tension or inability to relax" (wm=2.901); "fatigue or loss of energy" (wm=3.127); "being easily fatigued" (wm=2.901); "difficulty falling asleep" (wm=3.282);

and "restless or disturbed sleep" (wm=3.197). The respondents sometimes felt those negative emotions with a total average of 2.996.

It implied that the respondents sometimes felt negative emotions and it is natural for them to have these feelings. During this time of the pandemic, we cannot eliminate the fact that sometimes we felt negative emotions. Furthermore, it is necessary to conduct stress debriefing for the students and help them to cope with the new normal of the education system.

Table 7. Weighted Mean and Verbal Description of Respondent's Social Adaptability.

Social Adaptability	Wm	Verbal Description
I feel comfortable when I'm with my family	4.38	all the time
I join my family in all social activities	3.394	Sometimes
I enjoy it with my friends in their rituals	3.38	Sometimes
Being within a funny group of students takes me away from my fears	3.7	Sometimes
I accept constantly communicating with new friends	3.732	Sometimes
Better to sit by myself at social events	3.028	Sometimes
I am happy to create new social relationships	3.676	Often
Participate in social events	2.972	Sometimes
Be sure to participate in school activities	3.197	Sometimes
I miss the familiarity with my colleagues in the school	3.986	Often
Total Weighted Mean	**3.545**	**Often**

Table 7 shows the item-statements on Social Adaptability of the students, "they felt comfortable when they are in their family", (wm=4.38) which can be interpreted as "all the time". They sometimes "join

their family in all social activities" (wm=3.394), "enjoy their companies with their friends in their rituals" (wm=3.38), "being within a funny group of students takes them away from their fears" (wm=3.7), "they

accept the constantly communicating with new friends" (wm=3.732), "better to sit by their self in social events" (wm=3.028), "they participate in social events" (wm=2.972), and "they are sure to participate in school activities" (wm=3.197). The respondents are often socially adaptive (wm=3.545).

The data showed that the respondents are often socially adaptive. They often participate and collaborate with social activities. It also showed that the students in this group can adapt to societal change that takes place drastically.

Table 8. Weighted Mean and Verbal Description of Respondent's Work Attitude.

Work Attitude	WM	Verbal Description
Opportunity for developing a sense of security in your life.	3.267606	medium
Assuming greater personal responsibility.	3.408451	High
Opportunity for independent thought and action.	3.394366	medium
Opportunity for growth and self-fulfilment by using your unique abilities and realizing your potential.	3.267606	medium
The opportunity for the feeling of greater personal achievement given by work.	3.140845	medium
The opportunity for growth and self-fulfilment by using unique abilities and realizing potentials, given by work.	3.197183	medium
The opportunity for independent thought and action given by work.	3.309859	medium
The opportunity for maintaining a comfortable standard of living given by work.	3.126761	medium
The opportunity to assume greater personal responsibility allowed by the family.	3.507042	High
The opportunity to assume greater personal responsibility allowed by work.	3.352113	medium
Total Weighted Mean	**3.297183**	**medium**

Table 8 shows the respondents work attitude, they have medium recognition on the item statements: "opportunity for developing a sense of security in your life" (wm=3.26); "opportunity for independent thought and action" (wm=3.39); "opportunity for growth and self-fulfilment by using your unique abilities and realizing your potential" (wm=3.27); "the opportunity for the feeling of greater personal achievement given by work" (wm=3.14); "the opportunity for growth and self-fulfilment by using unique abilities and realizing potentials, given by work" (wm=3.20); "the opportunity for independent thought and action given by work" (wm=3.31); "the opportunity for maintaining a comfortable standard of living given by work"

(wm=3.13); and "the opportunity to assume greater personal responsibility allowed by work" (wm=3.35). On the other hand, they have high recognition on the following item-statements: "assuming greater personal responsibility" (wm=3.41); and "the opportunity to assume greater personal responsibility allowed by the family" (wm=3.51). The total weighted mean is 3.30, which can be interpreted as "medium".

The data showed that the respondents have a medium recognition or though on their work attitude. It also shows that the students have a positive attitude towards accepting responsibilities. In addition, students showing a positive attitude towards work or job also showed a positive attitude towards learning.

Table 9. Weighted Mean of Male and Female Academic Performances.
Group Statistics

	SEX	N	Mean	Std. Deviation	Std. Error Mean
ACAD.PERFORMANCE	F	3964	83.4929	6.22990	.09895
	M	851	84.0047	4.13393	.14171

Table 9 showed the female and male have an average grade of 83.4929 and 84.0047 respectively.

It showed that the male group and female group shows a slight difference in their academic performance.

Table 10. Weighted Mean of Male and Female Intelligence Quotient.

Group Statistics

	SEX	N	Mean	Std. Deviation	Std. Error Mean
IQ	F	3964	106.2619	14.28289	.22686
	M	851	107.1152	8.90371	.30522

Table 10 showed the Female and Male have an average IQ of 106.2619 and 107.1152 respectively.

It shows that there is a slight difference between the IQ of male and female students.

Table 11. Correlation of Sex to the following: Academic Performance and Intelligence Quotient.

Correlations

		SEX
SEX	Pearson Correlation	1
	Sig. (2-tailed)	
	N	4815
ACADPERFORMANCE	Pearson Correlation	.033*
	Sig. (2-tailed)	.022
	N	4815
IQ	Pearson Correlation	.024
	Sig. (2-tailed)	.094
	N	4815

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Table 11 showed that there is a significant association between sex and academic performance with a p-value of 0.024 ($p < 0.5$), but there is no significant association between sex and IQ with a p-value of 0.094 ($p > 0.05$).

It implied that the male group excel over the female group in terms of academic performance. It also showed that male students are academically equipped than their female counterpart.

Table 12. Summary of Weighted Means of Students Emotional State, Social Adaptability, and Work Attitude.

Report

SEX		emotional	socialadap	WORKAttitude
F	Mean	2.9768	3.6075	3.3233
	N	3964	3964	3964
	Std. Deviation	.67400	.42877	.53568
	Skewness	-.401	-.923	.729
M	Mean	2.8712	3.4839	3.1215
	N	851	851	851
	Std. Deviation	.71218	.52028	.40841
	Skewness	.244	-.688	-1.345

Table 12 shows the means of the Female and Male group on their Emotional State, Social Adaptability and Work Attitude. On their emotional state, the female and male group have an average rating of 2.97 and 2.87 respectively. On their Social Adaptability rating, the female and female group have 3.6 and 3.48 respectively. On their Work Attitude, the female and male group have an average rating of 3.32 and 3.12 respectively.

The mean of the female group on an emotional state is greater than the male group. However, in social adaptability and work attitude, the means of the male group is much greater than the female group. By this, we can say that most of the female students are emotional than the male counterpart. On the other hand, male students are more work directed and more socially adaptive than the female counterpart.

Table 13. Correlation of Sex to the following: Emotional State, Social Adaptability, and Work Attitude.

Chi-Square Tests (Sex and Emotional State)			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	4161.412[a]	26	.000
Likelihood Ratio	3893.184	26	.000
Linear-by-Linear Association	16.798	1	.000
N of Valid Cases	4815		

Chi-Square Tests (Sex and Social Adaptability)			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	1094.503[a]	14	.000
Likelihood Ratio	1220.232	14	.000
Linear-by-Linear Association	53.150	1	.000
N of Valid Cases	4815		

Chi-Square Tests (Sex and Work Attitude)			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	2120.115[a]	16	.000
Likelihood Ratio	2288.033	16	.000
Linear-by-Linear Association	105.076	1	.000
N of Valid Cases	4815		

a. 0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 16.61.

Table 13 shows that there is a highly significant association between sex and emotional state 0.000 (p<0.01), between sex and social adaptability 0.000 (p<0.01), and between sex and work attitude 0.000 (p<0.01).

The data shows that most of the female group felt negative emotions or become emotional than the male group. Likewise, most of the male group are more socially adaptive and have positive views about work.

Parkins, R. (2012), showed that women are still be more emotionally expressive gender.

Table 14. Correlation Between and Among Academic Performance, Intelligence Quotient, Emotional State, Social Adaptability, and Work Attitude.

Correlations

		AcadPERFORMANCE	IQ	emotional	socialadap	WORKAttitude
AcadPERFORMANCE	Pearson Correlation	1	.710**	-.239**	.116**	.454**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	4815	4815	4815	4815	4815
IQ	Pearson Correlation	.710**	1	-.241**	.257**	.388**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	4815	4815	4815	4815	4815
emotional	Pearson Correlation	-.239**	-.241**	1	-.133**	-.392**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	4815	4815	4815	4815	4815
socialadap	Pearson Correlation	.116**	.257**	-.133**	1	.099**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	4815	4815	4815	4815	4815
WORKAttitude	Pearson Correlation	.454**	.388**	-.392**	.099**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	4815	4815	4815	4815	4815

**. Correlation is significant at the 0.01 level (2-tailed).

Table 14 shows that there is a highly significant relationship between Academic Performance and IQ (x^2=0.71, p0.000<0.01), between Academic Performance and Emotional State (x^2=-0.239, p0.000<0.01), between Academic Performance and Social Adaptability (x^2=0.116, p0.000<0.01), between Academic Performance and Work Attitude (x^2=0.454, p0.000<0.01), between IQ and Emotional State (x^2=-0.241, p0.000<0.01), between IQ and Social Adaptability (x^2=0.257, p0.000<0.01), between IQ and Work Attitude (x^2=0.388, p0.000<0.01), between Emotional State and Social Adaptability (x^2=-0.133, p0.000<0.01), between Emotional State and Work Attitude (x^2=-0.392, p0.000<0.01), and between Social Adaptability and Work Attitude (x^2=0.099, p0.000<0.01).

It implies that the students who have higher IQ, have better academic performance, the better their emotional state, the better they can mingle or adapt to the societal change, and the better they perform in their work.

Intelligence was correlated with higher academic performance among those with high skill, but not among those with low ability, according to Patrick C.L. Heaven and Joseph Ciarrochi (2012), and this impact was consistent across various subjects and parametric and nonparametric studies. When other personality features were controlled, the effect was not removed. We discuss the impact on understanding and improved academic performance of these findings.

Table 13 also shows that students who have negative emotions tend to have a decline in their work attitude and a decline in their interpersonal relationship with others since the correlation of emotional state towards work attitude and social adaptability is negative. It also implied that students who have better

interpersonal relationship with others also tend to have positive thoughts about work.

CONCLUSIONS

The data collected implies that a great number of female students are taking education in Gabaldon Campus. Most of the students taking education in Gabaldon Campus have a fairly and very satisfactory grade. Most of the students taking education in Gabaldon Campus have an average IQ level. The respondents sometimes felt negative emotions and it is natural for them to have these feelings. During this time of the pandemic, we cannot eliminate the fact that sometimes we felt negative emotions. The respondents are often socially adaptive. They often participate and collaborate with social activities. It also showed that the students in this group can adapt to societal change that takes place drastically. The respondents have a medium recognition or though on their work attitude. It also shows that the students have a positive attitude towards accepting responsibilities. The male group have a higher academic grade than the female group. There is a slight difference in their IQ. Furthermore, there is an association between gender and academic performance. It implied that the male group excel over the female group in terms of academic performance. The means of the female group on an emotional state is greater than the male group. However, in social adaptability and work attitude, the means of the male group is much greater than the female group. Most of the female group felt negative emotions or become emotional than the male group. Likewise, most of the male group are more socially adaptive and have positive thought about work. Students who have higher IQ, have better academic performance, the better their emotional state, the better they can mingle or adapt to the societal change, and the better they perform in their work. It also shows that students who have negative emotions tend to have a decline in their work attitude and a decline in their interpersonal relationship with others since the correlation of emotional state towards work attitude and social adaptability is negative. It also implied that students who have better interpersonal relationship with others also tend to have positive thoughts about work.

RECOMMENDATION

The institution should also motivate the incoming male first-year students to take education as their course. Although IQ may consider as determinants of students' academic performance, it is substantial that School officials and faculty should constantly plan activities that will engage students in improving their skills and knowledge. There should be a strategic plan to improve student performance. The institution should give emotion debriefing to their students. Further research should conduct in this study.

DEDICATION

This humble work is dedicated to my wife, MRS. CHARLINE B. CAPINDING; to my mother, MRS. LORIE T. CAPINDING; to my daughter, CAILYN ANNE B. CAPINDING; and to my siblings, ROCHELLE and LAIANNE, for their unwavering support and affection. Most importantly, to our ALL-POWERFUL GOD.

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IMPACT OF DIVIDEND PER SHARE ON SHARE PRICES OF SELECTED CONSUMER GOODS FIRMS LISTED IN THE NIGERIA STOCK EXCHANGE

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ABSTRACT

Prospective investors in the Stock Exchange desire empirical based analysis of firms' performance to guide their investment decisions. This study examined the impact of quantitative factor, dividend per share (DPS) on determination of share prices of the selected consumer goods firms listed in the Nigeria Stock Exchange over the period 2009-2018. One hypothesis anchoring on the impact of independent variable DPS on the share prices was formulated for testing in this study. Judgmental sampling technique was adopted in the study. Annual financial statements of the selected firms were used for the study. Ratio analysis, correlation and linear regression models were used to measure the impact of the independent variable on the Share price (SP), the dependent variable. Paired sample t-test was used to test the hypotheses at 5% level of significance. The empirical findings show that, there is a positive correlation between the independent variable (DPS). DPS is accountable for about 21.7% changes in the share prices of consumer goods firms listed in the Nigeria Stock Exchange. Investors are enjoined to carefully scrutinize the trend in the DPS of the consumer goods company listed in Nigeria Stock Exchange among other variables before investing their funds; doing so will lead them to making good and viable investment decisions. Management of the consumer goods firms should also strive to operate optimal dividend policy that will not be detrimental to the share price of its organization.
KEY WORDS: *Dividend per share, share price, Stock Exchange, consumer goods firms.*

1. BACKGROUND TO THE STUDY

The capital market is a market for securities, where business enterprises and governments can raise long-term funds (Nwude, 2004). The capital markets, which include stock and bond markets, play very important role in nation's economic development by fostering capital formation and economic growth through trading on securities (Nisa and Nishat, 2011). This avenue facilitates coming together of savers and users of capital who through fund pooling and risk sharing grow wealth. Inyiama and Nwoha (2014) stated that firm's financial performance and businesses are influenced by general economic conditions, the performance of the financial markets, inflationary rates, money supply, interest rates, foreign currency exchange rates, changes in laws, regulations and policies of the Central Bank, capital market and other regulators as well as competitive factors on global, federal, state and local government bases. Stock markets promote savings and investments by providing an avenue for portfolio diversification to both individual and corporate investors. Stock markets fuel economic growth through diversification, mobilization and pooling of savings from different parties and availing them to companies for optimal utilization (Kimani and Mutuku, 2013).

Stock Exchange is a place where someone can invest his savings to earn profit. Share price on the other hand, is the price of a single share of a number of saleable stocks of a company; derivative or other

financial asset of the company. The scope of financial reporting logically presents corporate fundamentals pertaining to an accounting period which are usually harnessed in the computation of accounting ratios. The main accounting ratios which are germane to capital market include earnings per share, dividend per share, price earnings ratio, return on assets, book value per share, net assets per share and dividend cover. Other ratios underscored by capital market watchers include the Tobin's Q and market value to book value ratios (Jang & Lee, 2010; Oyerinde, 2011; Stephen & Okoro, 2014; Wula, 2016).

Investments in shares earn investment incomes to the investors and by their nature, they are generally very liquid. The investors can easily trade their ownership of stock and reap capital gains in the process. However, the impact of dividend per share on share prices of consumer goods firms has been of major interest to general public, regulatory authorities, academic communities and investors. Failure of numerous firms had been particularly attributed to the adverse impacts of fluctuations in most of the highlighted accounting ratios/indices given above. Hence, this study analyses a firm's fundamental accounting variable, dividend per share as an integral determinant of the share price of consumer goods firms in the Nigeria Stock Exchange.

Strategically, financial performance analysis involves evaluation of a firm's efficiency and effectiveness in generating revenue by utilizing information contained in the financial statements. Such analysis bares the economic strengths and weaknesses of a firm and helps to establish relationships between various elements of the comprehensive income and financial position of the firm. Share price is an important indicator used by investors to decide whether to invest or not to invest on a particular stock of a given sector. This is because the main objective of investing in the stock market by most investors is to maximize the expected return at low level of risk (Zakaria, Muhammad and Zulkifli, 2012). Earnings information was considered to contain the greatest informational content of all the accounting information because it contains important disclosures concerning the accounting ratios and stock prices (Chang, Chen, Su and Chang 2008). Investors expect to earn a certain rate of return by investing in a firm and any surprises that may cause the realized return to be different from the expected return causes the investors to adjust the stock price so to be able to earn the expected return. Financial managers take corporate finance decisions by considering the price of the firm's stock being traded in the secondary market. This is because investors also incorporate their perception of firm's performance and

expectations about future prospects into the stock price by changing the quantity demanded and supplied at a certain price. To adjust these share prices, investors need very sound knowledge of the determinants of share price movements.

Consumer goods sector is a very important sector of any economy. It often contributes up to 60% in the Gross Domestic Product (GDP) and exports of a nation. This remarkable portion of capital market is indicative of the significance of the sector. Investors are very much interested to purchase the shares from this sector and will seek the opportunity to beat the market as well to earn high return. Nevertheless, share price movement is not easy to predict as there are numerous factors affecting it. Some of the factors are macroeconomic while others are consumer goods-specific factors. Macroeconomic factors include: interest rate, inflation rate, money supply and exchange rate. Net Asset Value (NAV) per share, Dividend Payout Ratio, Ownership Pattern, Capital Adequacy Ratio (CAR) among others are the firm specific factors which as well influence movements in the price of firms' stock.

Traditionally, dividend represents a portion of profit after tax that is distributed to shareholders for investing and bearing risk in a firm. It is the return that investors (shareholders) receive on their shareholdings and serves as a regular source of income. Investors who prefer current income (in the form of dividend) to capital appreciation, therefore, go for stock that pay out higher dividends. This preference logically causes clamour for such stock and the attendant soaring of their prices. In relative fundamental terms, dividend per share, the ratio of annual dividend amount paid to equity shareholders to number of equity shares outstanding is operationally apt for analysis, hence its adoption in this study. In recent times, capital market dynamics in Nigeria has profoundly induced stock prices swings; visibly featuring random movements that culminate in return slides (Abosede & Oseni, 2011).

In developed countries many studies have been undertaken to ascertain the determinants of the share price movements, but not much has been done in Nigeria. The present study attempts to investigate the impact of DPS as a determinant of the movements of consumer goods firms' share prices in the Nigeria Stock Exchange.

1.2 STATEMENT OF THE PROBLEM

The impact of dividend per share on the returns on stock of consumer goods firms have been of major interest to general public, regulatory authorities, academic communities and investors. Fluctuations in

this factor impact adversely on stock of firms and can even cause ultimate failure of the firms. It becomes imperative therefore to investigate the sensitivity of the prices of stocks of consumer goods firms in response to variations in dividend per share.

Several studies have been carried out in both developing and developed economies to investigate the relationship between share price and firm performance. The results of the studies are however contradictory. Some found that better firm performance was related to good share price (Srinivasan, 2012; Alumumani, 2014) while some others found a negative relationship between board characteristics and firm's performance (Malhotra and Tandon, 2013). Besides, some other studies could not find any significant relationship between share price and firm performance (Khan & Amanullah, 2012). These therefore create a gap for studies. The need for this investigation is particularly more in Nigeria where there is paucity of studies that investigated the relationship between share prices and firms' performance.

1.3 Aim and Objective of the study
This study aims at examining the impact of dividend per share as a determinant of share prices of selected consumer goods firms listed on the Nigeria Stock Exchange. Specifically, the objective of the study is:
   i. To determine the effect of dividend per share on share prices of selected consumer goods firms in Nigeria.

1.4 Research Question
In pursuance of the sole objective of this study the following research question was posed:
   i. To what extent does dividend per share affect share prices of selected consumer goods firms in Nigeria?

1.5 Research Hypothesis
The study formulated and tested the following hypothesis:
   H_{01}: Dividend per share does not significantly affect share prices of selected consumer goods firms in Nigeria.

1.6 Scope of the Study
This study focused on the impact of dividend per share as a determinant of share prices of selected consumer goods firms listed in the Nigeria Stock Exchange Market. The Nigeria Stock Exchange has 28 listed consumer goods firms. Purposive sampling technique was used to obtain 10 consumer goods firms which cut across the major subsectors of the consumer goods sector of the stock exchange market. The firms selected are listed in Table A1 presented as Appendix I at the bottom of this article. The study covered a period of ten years spanning 2009 to 2018. This study used

dividend per share as independent variable while share price is considered as the dependent variable.

2.0 REVIEW OF RELATED LITERATURE
This section presents the conceptual framework which provides the relationship that exists between the variables as found in the reviewed literature. Additionally, both theoretical framework and previous empirical studies in related areas were reviewed and presented here as well. Two theories namely: Fundamental theory and Random theory of share price were considered relevant in the context of this study and were therefore reviewed. Furthermore, two schools of thought namely: the behavioural and the macroeconomist schools of thought perceptions on share pricing were reviewed.

2.1 Conceptual Review
2.1.1 Overview of Share Price
Share price is the price of a single share out of a number of saleable stocks of a company, derivative or other financial asset. In an ordinary man's reckoning the stock price is the highest amount someone is willing to pay for the stock, or the lowest amount that it can be bought for. The strength and health of any organization culminate in its share price which is considered to be of paramount importance to the organization. Share price of a company's stocks is the biggest concern for the board of directors and the management; if the share price of the company is high or increasing, stakeholders are particularly happy; it shows that the company and its management are doing their jobs excellently. Management of a company with high share price is likely to see a raise and there is very thin probability that they would be fired. On the other hand, if management is unable to create returns for investors, then there is a higher risk that they would be replaced. When share price of a company is low, there is more likelihood of takeover. With takeover old management and board would be sacked. Managers therefore, usually aspire to protect their own interest by working hard to ensure rise or high share prices of their organizations as no one wants to be fired from his job.

In the context of stock markets, financial economists have developed a number of concepts which are known to be essential prerequisites for fulfilling their roles. Among such concepts is dividend per share.

2.1.2 Dividend Per Share (DPS)
Dividend is the return that shareholders receive on their shareholdings and is a source of regular income to the investors. A portion of firm's profit is distributed to the shareholders as dividend. Dividend seeking investors who prefer current income in the

form of dividend to capital appreciation would favour stocks that pay out higher dividends. Their preference for higher dividends paying stocks results in greater demand for such stocks, thereby enhancing their market price. Therefore, dividend is expected to be positively correlated to share price (Nirmala, Sanju and Ramachandran, 2011) As surrogate for dividend, dividend per share is computed as:

$$DSP = \frac{\text{Annual Dividend Amount Paid to equity Shareholders}}{\text{Number of Equity or Outstanding Ordinary Shares issued}}$$

The dividend policy is an important part of corporate financial management policies. This is the policy in which a company takes decision about two things; namely:

(i) How much of the cash should be retained in the business? For example, for expansion of the business or to repurchase shares; and

(ii) How much of the cash should be given to the shareholders as dividend?

For a long time, the issue of the dividend policy of the company has captured the interest of many researchers and as a result many theoretical explanations adduced for dividend policy. However, investors prefer companies whose dividend policy is stable; hence companies try to maintain stable dividend payments as they give indications to investors about their strength and stability of their businesses. In developed countries lot of works have been done on dividend policy and its implication on the stock price. However, in developing economies like Nigeria very few studies have been made in this respect. Available studies are mainly in the financial sector. Uddin et al. (2013) used random sampling method to collect data from 62 companies listed on Dhaka Stock Exchange (DSE) and found a significant linear relationship between market price of stock, net asset value per share, dividend percentage and earnings per share. Stephen and Okoro (2014) found that the earnings per share, book value per share and dividend cover are statistically significant in explaining the movement in stock prices. There is therefore need to study the impact of dividend policy and DPS on stock prices of consumer goods sector in Nigeria. Changes occur every day in the business world; hence stock market should be analyzed in line with the changes to provide updated information to investors.

2.1.3 Consumer Good Firms and Firms' Performance

Consumer good are goods that are bought and used in satisfaction of human wants such as clothing, food or appliances. Such goods are not utilized in any further production unlike capital goods. On the other hand, performance refers to the accomplishment of a given task as measured against preset standards of accuracy, completeness, cost and speed. In other words, performance is the degree to which an achievement is being or has been accomplished. Financial performance refers to the act of performing financial activity; it is the degree to which financial objective is being or has been accomplished. With regard to firms, financial performance reflects accomplishments of a firm's policies and operations in monetary terms. It is used as indicator of firm's overall financial health over a given period of time. It can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. These manifest in the firm's return on investment, return on assets, value added, among others (Mclaughlin, 2019).

2.2 Theoretical Framework
2.2.1 Arbitrage Pricing Theory (APT)

APT is a model for pricing securities for investors. It comprises common macroeconomic factors that affect share prices. The factors include unexpected changes in inflation, GDP and changes in the yield curve. APT model is flexible as investors can as well select other factors depending on the market; like for oil exporting and importing counties, oil price can be an important factor affecting security prices.

2.2.2 Fundamental Theory

According to this theory, share price are determined by certain fundamental factors which factors can be grouped as:

i. Company-specific factors
ii. Industry-relevant information and
iii. Macro-economic influences.

At any particular time, any one factor or any combination of the factors may affect the share price of a company. The fundamentalist view the value of a corporation's stock as being determined by expectations regarding future earnings and by the rate at which those earnings are discounted over time. The fundamentalists used the application of present value principles in the valuation of corporate stock, using dividends, earnings, assets and interest rate to establish the price of stock (Lucky, Akani & Chukwuemeka, 2014).

Based on these fundamental factors, each share has an intrinsic value. At any time in the market, shares may be over-priced or underpriced in relation to its intrinsic value. Generally, the over-priced shares should

be sold at the earliest opportunity as their prices will fall when their true values are known to the market; conversely, the underpriced shares should be purchased immediately as their prices will go up soon. Constant monitoring and evaluation of shares, in the light of changes in fundamental factors, helps in finding out the over-priced and underpriced shares.

Thus, fundamental analysis helps in finding out the mispriced shares. This kind of analysis comprises:

  i. Company analysis
  ii. Industry analysis and
  iii. Economic analysis.

Profit and loss accounts of companies, balance sheets, annual reports, policy statements by the governments, macro-economic reports and such other relevant information are used for fundamental analysis. The main advantage of fundamental analysis is that it involves no assumptions and only the relevant factors are taken into account for analysis. Its main disadvantage is the inaccuracy of information available for analysis. Companies conceal quite a lot of information, making the whole analysis meaningless. Besides, the fundamental analysis cannot predict the random nature of events that affect the share markets.

2.2.3 Random Walk Theory

According to random walk theory, share price behave in an independent manner, there is no relationship between the past prices of share and its future price. Hence, the behaviour of prices is largely unpredictable based on their past history. Fama (1970) says the theory of random walks implies that a series of stock price changes has no memory - the past history of the series cannot be used to predict the future in any meaningful way. The future path of the price level of a security is no more predictable than the path of a series of accumulated random numbers. The main thrust of the random walk theory is that the successive price changes of an individual security are independent over time. The prices fluctuate randomly around the intrinsic values of the securities.

The random walk theory is based on the assumption that:

  i. The share markets are efficient
  ii. There are a large number of active participants competing with each other to predict future prices; and
  iii. Information is freely available to all.

In such a market, the price of security at any point in time reflects the effect of information based on all events - past, present as well as future. So the price of a security is considered to be a good estimate of its intrinsic worth. The actions of competing participants in the market cause the actual prices to wander randomly about the intrinsic worth. The intrinsic values

themselves can change as a result of new information coming to the market. However, competition will cause the full effect of new information on intrinsic values to be reflected instantaneously in actual prices. The price changes in individual shares are independent and unrelated to the past prices.

2.2.4 The Behavioural School of Thought

The behavioural school of finance holds different view from the other schools of thought and opined that market might fail to reflect economic fundamentals under three conditions, which are:

  i. *The first behavioural condition is irrational behaviour.*
      This holds that investors behave irrationally when they do not correctly process all the available information while forming their expectations of a company's future performance.
  ii. *The second is systematic patterns of behaviour*
      The systematic patterns behavior holds that even if individual investors decided to buy or sell without consulting economic fundamentals, the impact on share prices would be limited.
  iii. *The third is limits to arbitrage in financial markets*
      This obtains when investors assume that a company's recent strong performance alone is an indication of future performance; they may start bidding for shares and drive up the price. Some investors might expect a company that surprises the market in one quarter to go on exceeding expectations (Inegbedion, 2009).

2.2.5 The Macroeconomist School of Thought

The macroeconomic view adopts the usual method of using factor analysis approach to determine the factors affecting asset returns. Some scholars have used macroeconomic factors to explain stock return and found that changes in interest rate are associated with risk. They interpreted the observation to be a reflection of changes in the rate of inflation; given the finding of Fama (1970) that changes in the rate of inflation are fully reflected in interest rates. The macroeconomic approach attempts to examine the sensitivity of stock prices to changes in macroeconomic variables. The approach posits that stock prices are influenced by changes in money supply, interest rate, inflation and other macroeconomic indicators. It employs a general equilibrium approach, stressing the interrelations between sectors as central to the understanding of the persistence and co-movement of macroeconomic time

series, based on the economic logic, which suggests that everything does depend on everything else (Iqbal and Mallikarjunappa, 2007).

2.3 Empirical Review

Alumumani (2014), used data of listed banks in Amman Stock Exchange over the period of 2005-2011 and showed that there was a positive association between dividend per share, earning per share, size, price earnings ratio and book value and market price of share. Further regression results showed that earning per share, book value, price earnings ratio have significant and positive relationship with market price of share.

Akani and Lucky (2014) examined the relationship between money supply and aggregate stock prices in Nigeria using time series data from 1980 – 2012, Dickey Fuller Unit Root Test, Engle-granger and Johansen-Joselinus method of co-integration in a Vector Error Correction Model setting. Empirical results demonstrated that there exists a long-run relationship between Currency in Circulation (CC) and Demand Deposit (DD); and the Aggregate Stock Price (ASP), Time Deposit (TD), Savings Deposit (SD) and Net Foreign Assets (NFA) have negative relationship with aggregate stock prices.

Akani (2013) examined the analysis of macroeconomic aggregates on stock prices in Nigeria: application of co-integration and causality tests - 1985-2011. Dickey Fuller Unit Root Test, Engle-granger and Johansen-Joselius method of co-integration in a Vector Error Correction Model setting were employed. The results show that there exists a long-run equilibrium negative relationship between macroeconomic variables and aggregate stock prices.

Akani and Uzobor (2015) studied empirically the effects of inflation on aggregate stock prices in Nigeria using time series data from 1980 – 2012, Dickey Fuller Unit Root Test, Engle-granger and Johansen-Joselius method of co-integration in a Vector Error Correction Model setting. The result shows that there exists a long-run equilibrium negative relationship between inflation rate and Aggregate Stock Prices. Broad money supply (M2) has a negative and significant effects on aggregates stock prices, Narrow money supply (M1) shows a positive and significant effects on aggregates stock prices while average inflation rate shows a positive and significant relationship between aggregate stock prices.

Sharma (2011) examined the empirical relationship between equity share prices and explanatory variables such as: book value per share, dividend per share, earning per share, price earnings ratio, dividend yield, dividend payout, firm size in

terms of sale, and net worth for the period 1993-94 to 2008-09. The results revealed that earning per share, dividend per share, and book value per share have significant impact on the market price of share. Furthermore, results of the study indicated that dividend per share and earnings per share are the strongest determinants of market price, so the results of the study support liberal dividend policy and suggests companies to pay regular dividends.

Uddin, Rahman and Hossain (2013), studied what determines share prices of stock market focusing exclusively on financial sector of Bangladesh. Data were collected from companies like Bank, Insurance and Leasing Companies associated with financial sector ranging from 2005 to 2011 from Dhaka Stock Exchange (DSE). Some pertinent variables like dividend payout (DP), Price earnings ratio (P/E), Net asset value (NAV), Earnings per share (EPS) were selected from previous literature as share price (SP) determinants. A regression model along with some descriptive statistical tools was applied using E-view. Findings show that Earnings per share (EPS), and Price earnings ratio (P/E) have strong relationship with share prices.

Al- Shubiri (2010) investigated the relationship of microeconomic factors with the stock price by using Simple and Multiple regression analysis. Fourteen commercial banks on Amman Stock Exchange (ASE), for the period of 2005 - 2008, were selected for the study. The study found highly positive significant relationship between market price of stock and net asset value per share; market price of stock dividend percentage, gross domestic product. It also found negative significant relationship with inflation and lending interest rate.

AL- Shubiri (2011) investigated the determinants of the dividend policies of the 60 industrial firms listed on ASE for the period of 2005-2009 and to explain their dividend payments behavior. He used Tobit regression analysis and Logit regression analysis and found that there was a significant effect of Leverage, Institutional Ownership, Profitability, Business Risk, Asset Structure, Growth Opportunities and Firm Size on the dividend payout for the listed firms on Amman Stock Exchange as the determinants of dividends policy as suggested by developed markets.

Khan and Amanullah (2012), investigated the different determinants of share prices and the relationship of these determinants with the share prices of Karachi Stock Exchange (KSE) 100 Index of Pakistan. Five quantitative determinants, namely: Book to Market (B/M) ratio, Price Earning (P/E) ratio, Dividend, Gross Domestic Product (GDP), and Interest Rate were selected to find out the direction and strength

of their relationship. A sample of 34 companies was randomly selected from 34 sectors of KSE. Ten years' (2000-2009) data were collected for the sampled companies. The tools used for analysis are Linear Multiple Regression and Correlation Model. It concluded that all the factors selected have positive and significant relationship with share prices except Interest Rate and B/M ratio. The rise in GDP, dividend and P/E ratio leads to rise in share prices. B/M ratio and interest rate are negatively related to share prices.

Uwuigbe, Olowe, Olusegun, and Godswill (2012), examined the determinants of share prices in the Nigeria Stock Exchange market. A total of 30 firms listed on the Nigeria Stock Exchange market were selected using the judgmental sampling technique. Complementary information for the study were obtained from the Nigerian Stock Exchange fact book and the corporate annual reports of the companies for the period 2006- 2010. The paper basically modeled the effects of financial performance, dividend payout, and financial leverage on the share price of listed firms operating in the Nigerian Stock Exchange Market using the regression analysis method. It was found that there exists a significant positive relationship between firms' financial performance and the market value of share prices of the listed firms. Consequently, they concluded that firms' financial performance, dividend payouts and financial leverage are strong determinants of the market value of share prices in Nigeria.

Srinivasan (2012), examined the fundamental determinants of share price in India. The study employed panel data consisting of annual time series data over the period 2006-2011 and cross-section data pertaining to six (6) major sectors of the Indian economy, namely, Heavy and Light Manufacturing, Pharmaceutical, Energy, IT and ITES, Infrastructure, and Banking. The panel data techniques, viz: Fixed Effects model and Random Effects model were employed to investigate the objective. The empirical results revealed that the dividend per share has a negative and significant impact on the share price of manufacturing, pharmaceutical, energy and infrastructure sectors. Earnings per share and price-earnings ratio were found as the crucial determinants of share prices of manufacturing, pharmaceutical, energy, infrastructure, and commercial banking sectors. Size was revealed as a significant factor in determining the share prices of all sectors under consideration except manufacturing. Moreover, the book value per share positively influences the share prices of pharmaceutical, energy, IT and ITES, and Infrastructure.

Malhotra and Tandon (2013) attempted to determine the factors that influence stock prices in the

context of National Stock Exchange (NSE) of 100 companies. A sample of 95 companies was selected for the period 2007 - 2012 and linear regression model was used. The results indicated that firms' book value, earning per share, and price-earnings ratio are having a significant positive relationship with firm's stock price while dividend yield is having a significant inverse association with the market price of the firms' stock.

3.0 RESEARCH METHODOLOGY
3.1 Research Design
The study employed the *ex-post facto* research design. An *ex-post facto* research determines the cause-effect relationship among variables. It seeks to find out the factors that are associated with certain occurrence, conditions, events or behaviours by analyzing past events or already existing data for possible casual factors.

3.2 Population of the Study
The population of this study comprises all 26 consumer goods firms on the Daily Official List as at 31st December, 2018. Panel data, representing a combination of time series with cross-sectional submissions over a ten-year period (2009-2018), were harnessed for the study.

3.3 Sample Size and Sampling Method
This research adopted a profit – dividend payment filter. Firms that did not make profit or those that made profit but did not declare dividends in the period were excluded. This gave a sample size of ten (10) firms, representing 59% of the population. This was well accommodated within the framework of Krejcie and Morgan (1970), which stipulates a minimum sample size of 50% of a defined population to be adopted for the purpose of generalization. By this, every firm in the sample had the same number of observations, giving 100 observations (derived as product of 10 sample firms and ten years).

3.4 Source of Data
This study basically made use of secondary data. The data set were sourced from publications of the Nigeria Stock Exchange (NSE) and the annual reports and accounts of the quoted consumer goods firms as well as their respective notes to the accounts.

3.5 Measurement of Variables
Variables used in this study include:
  i.   dependent variable (share price); and
  ii.   independent variable (dividend per share).
The ratios to be computed would be sourced from individual financial statements of the sampled firms for the study period. Concepts and measurements of the variables are summarized in Table 1:

Table 1: Concepts and Measurements of Variables in the Study

Variables	Definition	Measurements
Dependent Variables		
SHP	Share Price	Closing share price at the end of the financial year
Explanatory Variables		
DPS	Dividend Per Share	Declared Dividend divided by Outstanding Ordinary Shares

3.6 Method of Data Analysis

Inferential statistics of the hypotheses was carried out with the aid of E-Views 9.0 Statistical Software. In analyzing the data, the statistical proceedings involve: descriptive statistics, which provide simple summaries about the variables; using coefficient of correlation which determines the degree and direction of association between the variables and also tells us about the strength of relationship and the direction of relationship as well; simple regression analysis, which reveals predictive potential of the variable and makes for functional modelling. The statistical treatment of the research hypothesis involves t-test, which is justified by a sample size less than 30 (Nsude, 2005; Gujarati and Porter, 2009).

3.7 Model Specification

An over-arching framework in this regard recognizes the potency of the fundamental variable, dividend per share. Share price is associated, $SP_t = f(Divps_t\, e_t)$

The model specification for this study would take the following form:

$$SHP_{it} = \beta_0 + \beta_1 DPS_{it} + \mu_{it} \quad - \quad - \quad (1)$$

Where:

β_0 = Constant term (intercept)

β_{it} = Coefficients to be estimated for consumer goods firm í in period t

μ_{it} = Error term/Stochastic term for consumer goods firm í in period t

SHP_{it} = Share Price for consumer good firms í in period t

DPS_{it} = Dividend Per Share for consumer good firm í in period t

3.8 Decision Rule

Reject H_0 if the P-value of the test is less than α-value (level of significance) which here is at 5%, otherwise accept H_1.

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

The panel data obtained from the publications of the Nigerian Stock Exchange (NSE), fact books, annual reports and accounts of the study consumer goods firms are presented in Table 2:

Table 2   Operational Variables of data

CON. GD	YEAR	SP	DPS
7-Up	2009	0.14	1.42
7-Up	2010	0.21	1.22
7-Up	2011	0.23	1.34
7-Up	2012	0.23	0.45
7-Up	2013	0.11	0.49
7-Up	2014	0.11	0.53
7-Up	2015	0.08	0.46
7-Up	2016	0.08	0.98
7-Up	2017	0.06	0.34
7-Up	2018	0.13	0.46
Nig. Brew	2009	0.11	0.43

Nig. Brew	2010	0.1	0.52
Nig. Brew	2011	0.11	0.73
Nig. Brew	2012	0.11	0.75
Nig. Brew	2013	0.11	0.81
Nig. Brew	2014	0.16	0.17
Nig. Brew	2015	0.13	0.34
Nig. Brew	2016	0.06	0.37
Nig. Brew	2017	0.08	0.53
Nig. Brew	2018	0.1	0.56
Gui. Plc	2009	0.12	0.74
Gui. Plc	2010	0.1	0.62
Gui. Plc	2011	0.12	0.71
Gui. Plc	2012	0.09	0.48
Gui. Plc	2013	0.16	0.87
Gui. Plc	2014	0.16	0.73
Gui. Plc	2015	0.12	0.97
Gui. Plc	2016	0.12	1.22
Gui. Plc	2017	0.12	1.21
Gui. Plc	2018	0.11	0.93
Nig. Flour	2009	0.08	0.31
Nig. Flour	2010	0.1	0.37
Nig. Flour	2011	0.13	0.58
Nig. Flour	2012	0.22	0.05
Nig. Flour	2013	0.86	0.13
Nig. Flour	2014	1.39	0.08
Nig. Flour	2015	0.1	0.41
Nig. Flour	2016	0.09	0.8
Nig. Flour	2017	0.11	0.38
Nig. Flour	2018	0.14	0.56
Dangote Sugar	2009	0.11	0.43
Dangote Sugar	2010	0.13	0.63
Dangote Sugar	2011	0.13	0.1
Dangote Sugar	2012	0.81	0.81
Dangote Sugar	2013	0.05	0.05
Dangote Sugar	2014	0.13	4.73
Dangote Sugar	2015	0.12	5.62
Dangote Sugar	2016	0.1	0.41
Dangote Sugar	2017	0.11	0.89
Dangote Sugar	2018	0.1	0.47
Dangote Flour	2009	0.11	0.79
Dangote Flour	2010	0.1	0.45

Dangote Flour	2011	0.11	0.79
Dangote Flour	2012	0.13	0.7
Dangote Flour	2013	0.12	0.79
Dangote Flour	2014	0.11	0.81
Dangote Flour	2015	0.11	0.14
Dangote Flour	2016	0.13	0.74
Dangote Flour	2017	0.12	0.78
Dangote Flour	2018	0.11	0.76
Honeywell Flour	2009	0.11	0.61
Honeywell Flour	2010	0.11	0.74
Honeywell Flour	2011	0.12	0.86
Honeywell Flour	2012	0.13	0.94
Honeywell Flour	2013	0.13	0.98
Honeywell Flour	2014	0.22	1.69
Honeywell Flour	2015	0.17	1.74
Honeywell Flour	2016	0.18	1.37
Honeywell Flour	2017	0.19	1.66
Honeywell Flour	2018	0.15	1.55
Nestle Nig. Plc	2009	0.1	0.19
Nestle Nig. Plc	2010	0.1	0.99
Nestle Nig. Plc	2011	0.1	0.46
Nestle Nig. Plc	2012	0.15	0.8
Nestle Nig. Plc	2013	0.12	0.67
Nestle Nig. Plc	2014	0.11	0.73
Nestle Nig. Plc	2015	0.1	0.58
Nestle Nig. Plc	2016	0.09	0.52
Nestle Nig. Plc	2017	0.12	0.67
Nestle Nig. Plc	2018	0.15	2.76
UTC Nig. Plc	2009	0.1	2.27
UTC Nig. Plc	2010	0.11	2.08
UTC Nig. Plc	2011	0.12	1.72
UTC Nig. Plc	2012	0.11	1.23
UTC Nig. Plc	2013	0.1	1.31
UTC Nig. Plc	2014	0.1	1.81
UTC Nig. Plc	2015	0.01	0.06
UTC Nig. Plc	2016	0.11	1.01
UTC Nig. Plc	2017	0.16	1.17
UTC Nig. Plc	2018	0.11	0.84
Unilever Nig. Plc	2009	0.21	0.79
Unilever Nig. Plc	2010	0.13	0.03
Unilever Nig. Plc	2011	0.12	0.22

Unilever Nig. Plc	2012	0.11	0.96
Unilever Nig. Plc	2013	0.1	0.62
Unilever Nig. Plc	2014	0.09	0.8
Unilever Nig. Plc	2015	0.14	1.7
Unilever Nig. Plc	2016	0.12	0.71
Unilever Nig. Plc	2017	0.1	0.84
Unilever Nig. Plc	2018	0.11	0.92

Source: Annual reports and accounts (various issues)

The correlation coefficients of the study variables are given in Table 3 below.

Table 3: Correlation Matrix of the Variables

	SHP	DPS
SHP	1.000	0.466
DPS	0.466	1.000

Source: E-Views 9.0 Correlation Output

The correlation result in Table 3 indicates existence of a positive relationship between DPS (0.466) and SHP.

4.2 Test of Hypothesis

H_{01}: Dividend per share does not significantly affect share price of selected consumer goods firms in Nigeria.

H_{11}: Dividend per share significantly affects share prices of selected consumer goods firms in Nigeria.

Pursuant to testing the hypothesis, simple regression analysis of the share prices on the dividend per share of the study consumer goods firms and t-test of the statistics were run and the results are presented in Table 4 below.

Table 4: Simple Regression Analysis between SP and DPS of consumer good firms in Nigeria

Dependent Variable: SP
Method: Least Squares
Date: 09/23/20   Time: 18:41
Sample: 2009 - 2018
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.083971	0.040889	2.053637	0.0741
DPS	0.070258	0.047142	2.490350	0.0345

R-squared	0.217309	Mean dependent var	0.138000
Adjusted R-squared	0.119472	S.D. dependent var	0.063736
S.E. of regression	0.059807	Akaike info criterion	-2.618525
Sum squared resid	0.028615	Schwarz criterion	-2.558008
Log likelihood	15.09263	Hannan-Quinn criter.	-2.684913
F-statistic	4.221143	Durbin-Watson stat	1.138439
Prob(F-statistic)	0.034466		

Source: E-Views 9.0 Regression Output, 2020

4.2.1 Interpretation of Simple Regression Result

In Table 4, a simple regression analysis was conducted to test the influence of the predictor variable. Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in Table 4 above, the value of R squared was 0.217, an indication that there was variation of 21.7% on the performance measure (SHP) due to changes in DPS. This shows that dividend per share of consumer goods firms accounted for 21.7% changes in the share prices of the firms. The probability of the slope coefficient indicate that; $P(x_1 = 0.0345 < 0.05)$. This implies that DPS is positively related to SHP, however, significant at 5%. The Durbin-Watson Statistic of 1.138439 suggests that the model does not contain serial correlation problem.

The F-statistic of the DPS regression is equal to 4.221143 and the associated F-statistic probability is equal to 0.034466, so the null hypothesis was rejected and the alternative hypothesis was accepted. As a result, there is linear relationship between PS to the independent variable (DPS).

4.2.2 Decision

The result of the Prob(F-statistic) of 0.034466 is less than the critical value of 5% (i.e. 0.05) significance level leads to the conclusion that dividend per share of consumer goods firms has a significant positive impact on share price at 5% level of significance.

4.3 Discussion of Findings

The empirical finding show that there is a positive correlation between the independent variable DPS and the dependent variable market price of the share of consumer goods firms in listed on the Nigeria Stock Exchange. Dividend per share is an invariable indicator of the operational profitability of a firm. This result is consistent with the results of previous similar studies in other sectors of the economy. For example, Lucky and Nwosi (2015) in investigation of the relationship between commercial banks' asset quality and their stock prices in Nigeria found that a significant positive relationship exists between them. This means that asset quality (via profitability) can positively affect stock price. Consequent upon this revelation management of consumer goods firms in Nigeria must be very cautious with the firm the dividend policy they operate as this can either enhance the company's stock price in the stock exchange market or cause their share to lose value in the stock market.

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

Based on the analysis of the data obtained for this study, the following finding was made:

i. Dividend per share has a significant positive impact on market value of shares of quoted consumer goods firms in Nigeria Stock Exchange at 5% level of significance.

5.2 Conclusion

This study assessed the impact of dividend per share as a determinant of share prices of consumer goods firms using data obtained from annual reports and accounts and publications from Nigeria Stock Exchange for the period spanning from 2009-2018. Based on the results of the empirical analysis, the variable, dividend per share is a significant determinant of share prices for all the consumer good firms under consideration. Hence, the present study confirms that the study of financial factors proved to be beneficial for the investors in Nigeria, as these factors possess strong explanatory power and can therefore be used to make accurate future forecasts of stock prices. Investors should critically analyze the accounting variable, dividend per share, of company before investing in the company.

5.3 Recommendations

Following the revelations in this study, the under recommendations were made with the belief that their incorporation in the management strategy will go a long way to ensure high performance of the stock prices in the market.

i. There is need for a large scale study incorporating more microeconomic (internal) and macroeconomic (external) variables for various sectors of the stock market in Nigeria. Such investigations can be extended to cover longer time periods using other multivariate statistical models in the analysis.

ii. There is need for the management of the consumer goods firms to strengthen its efforts in effective management of dividend policy and other micro and the macro prudential variables to avoid their occasioning negative effect on the share prices.

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APPENDIX I
Table A1: Listed Firms Selected for the Study

S/NO	NAME OF FIRM	SUB-SECTOR
1.	7-Up Bottling Company Plc	Beverages Non-Alcoholic
2.	Guinness Nigeria Plc	Beverages Brewers/Distillers
3.	Nigerian Breweries Plc	Beverages Brewers/Distillers
4.	Dangote Sugar Refinery Plc	Food Products
5.	Flour Mills of Nigeria Plc	Food Products
6.	Dangote Flour Mills	Food Products
7.	Nestle Nigeria Plc	Food Products
8.	UTC Nigeria Plc	Food Products
9.	Honeywell Flour Mills Plc	Food Products
10.	Unilever Nigeria Plc	Personal Household Products

IMPROVEMENTS OF THEORY AND METHODS OF LEGAL EDUCATION IN NON-LEGAL EDUCATION INSTITUTIONS

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ABSTRACT

The present article analyzes the scientific and pedagogical questions associated with the improvement of theory and methodology of legal education in non-legal education institutions. The model of legal education at the undergraduate level has been developed and a teaching and methodical support is created. The improvement of legal training process based on the innovative technologies and development of legal competence of professionals have been revealed. In addition, the model of legal education at the undergraduate level of non-legal institutions has been worked out and a teaching and methodical support is created. As a result, the theory of legal education and methodology for bachelor students of non –legal higher institutions has been improved.

KEYWORDS: *legal knowledge, educational technologies, interactive learning, legal education system, theory of legal education, "Street Law" project, legal awareness, legal culture.*

INTRODUCTION

Today, higher education remains one of the factors that promote economic growth and social stabilization in the world. The development of legal and pedagogical knowledge enables students to apply their skills and abilities in their future professional activities.

Currently, special attention is paid to the improvement of legal education theory and methods in countries, such as the USA, France, Finland and the Russian Federation. The project "Street Law" implemented in more than forty countries of the world should be widely introduced to the Republic of Uzbekistan. The project aims to teach young people practical mechanisms to protect their rights, therefore in accordance with Conception which serves to develop legal culture in the society the educational institutions have been tasked with developing methodology for the implementation of the "Street Law" project.[1]

How more the society develops, the social relations become more complicated. Within this process there is surely a need to develop legal knowledge and to improve the teaching methodology. The importance of improving methodology and the theory of legal education is enhancing the professional training of non-legal students of the direction "National idea, the Basics of Spirituality and Law education".

New adopted laws and other regulatory documents require the modernization of legal education. It is desirable to improve the content of teaching and the methodology of teaching directly related to practice.

Legal democratic state and righteous civil society are being established in the Republic of Uzbekistan. In the conditions of globalization the rule of the law requires a special attention to the legal education. The development of the legal education promotes improvement of legal awareness and the level of legal knowledge. Legal education is of particular importance in the context of reforms carried out in Uzbekistan. The reformation of the legal education in the Republic of Uzbekistan has been raised to the level of the state policy. Within this

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[1] The concept of raising the legal culture in society. Collection of legislation of the Republic of Uzbekistan. Issue 1-2 (865-866), January 14, 2019 - P.72

process it is very important to remember in the current context there a need for an increased legal literacy of the individual, which   should continue from pre-school education to higher education.

In the decree of the president of the Republic of Uzbekistan dated January 9, 2019 PF-№ 5618, "On radical improvements of the system of raising legal awareness and legal culture   in the society", it is said:"… there are still a number of problems and shortcomings that prevent the formation of relations respecting human rights and freedom, developing people`s legal awareness and legal culture, growing the level of citizens` legal literacy.

In particular, in the development of the legal culture, the work related to legal training and education are not carried out systematically and organically   linked"[2]   and this poses some challenges for legal education. Legal knowledge should be provided in stages, systematically.

President of Uzbekistan Shavkat Mirziyoev in his report in an official ceremony dedicated to the 26th anniversary of the adoption of the Constitution of the Republic of Uzbekistan stated:" Unless we create the legal culture at the proper level and   stop the legal violations, the violation of law will continue in our society. Respect for the law is formed on the basis of the legal awareness and culture of our people"[3].

Reforms in legal education are a requirement of our time. The normative and legal acts adopted in the Republic of Uzbekistan indicate that the improvement of legal education has reached to the level of state policy. The analyses of legal documents and scientific pedagogical literature show that the fight against crime is more important than ever. This puts a number of tasks before law education.

METHODS

During   the research process there have been used comparative   critical study and analysis of the political, legal, and pedagogical literature on the problem being studied; study   advanced pedagogical experience of foreign and local higher education institutions; to solve the problems scientifically; sociometric methods (application form, interviewing, conversation), pedagogical experiment, and methods analyze the results mathematically and statistically.

During the experiment, a system of tasks was developed based on the level of complexity. Each task is more complex than the next and involves the previous task.

The purpose of the pilot study was to determine the quality of legal education in non- legal higher education institutions in the direction of "National idea: fundamentals of spirituality and law education" to the degree of formation of legal knowledge, skills and motivation for teaching.

It is well-known the importance of the current role of the investigation done in the study of the "National Idea: Fundamentals of Spirituality and Law" in non-law-based higher education institutions. The investigation involves studying the current state of the subject matter in practice, to analyze the evidence in the ashes and to arrive at a well-grounded conclusion.

The results of the students` questionnaire indicate that there is a need to expand the legal framework and that there is a high interest in the situation during the training. The level of knowledge (upper, middle, low) of the students studying in the theory and methodology of legal education was determined.

The diagram charts show that the sampling modal values of the experimental and control groups are Mt=5 and Mn=3, respectively, and that there is a sharp difference (mathematically equivalent to Mt>Mn). This means that the mean values for the selected sample are satisfied with the X>Y condition. Statistical analysis is performed using the Student-Fischer method based on the indicators in Table 1:

$$\overline{X} = \frac{1}{n}\sum_{i=1}^{n=3} n_i x_i = \frac{1}{220}(52 \times 5 + 89 \times 4 + 101 \times 3) = \frac{1}{220}(260 + 356 + 303) = \frac{919}{220} = 4,1$$

$$\overline{Y} = \frac{1}{n}\sum_{i=1}^{n=3} n_i y_i = \frac{1}{222}(29 \times 5 + 72 \times 4 + 142 \times 3) = \frac{1}{222}(145 + 288 + 426) = \frac{859}{222} = 3,8$$

[2] Decree of the President of the Republic of Uzbekistan dated January 9, 2019 No PF-5618 "On radical improvement of the system of raising legal awareness and legal culture in society." Collection of legislation of the Republic of Uzbekistan. Issue 1-2 (865-866), January 14, 2019 - B.C. 62.   .

[3]Mirziyoev Sh. An educated generation is a guarantee of a great future, an entrepreneurial nation is a guarantee of a prosperous life, and friendly cooperation is a guarantee of development. Speech at the solemn ceremony dedicated to the 26th anniversary of the adoption of the Constitution of the Republic of Uzbekistan. December 7, 2018. - Tashkent: NMIU "Uzbekistan", 2018. - 29 B. (64 pages)

The results of the calculations in the course of the experiment confirmed that the students belonging to the experimental groups were greater than those in control groups. This is mathematically equivalent to X>Y.

Depending on the content of the Student-Fisher method, an important factor for the result is the scattering coefficients. In order to substantiate the results, it is necessary to identify the sample dispersions at the next stage based on the indicators recorded in the experimental and control groups. Find the variance of the sample with the following formula:

$$D_m = \sum_{i=1}^{n=3} n_i(x_i - x)^2/(n-1) = \frac{52(5-4,1)^2 + 89(4-4,1)^2 + 101(3-4,1)^2}{220} =$$

$$= \frac{52 \times 0,81 + 89 \times 0,01 + 101 \times 1,21}{220} = \frac{42,12 + 0,89 + 122,21}{220} = \frac{165,22}{220} \approx 0,75$$

$$D_{\text{н}} = \sum_{i=1}^{n=3} n_i(y_i - y)^2/(n-1) = 2\frac{29(5-3,8)^2 + 72(4-3,8)^2 + 142(3-3,8)^2}{222} =$$

$$= \frac{29 \times 1,44 + 72 \div 0,04 + 142 \times 0,64}{222} = \frac{41,76 + 1,8 + 90,88}{222} = \frac{134,44}{222} \approx 0,60$$

The sample deviation values allow for the determination of the mean square deviations. That is:

$$\tau_m = \sqrt{0,75} \approx 0,86 \quad \tau_{\text{н}} = \sqrt{0,60} \approx 0,77$$

The variance values for the experimental and control groups are calculated using the following formula:

$$\delta_m = \frac{\tau_m}{X} = \frac{0,86}{4,1} \approx 0,20 \quad \delta_{\text{н}} = \frac{\tau_{\text{н}}}{Y} = \frac{0,77}{3,8} \approx 0,20$$

The Student-Fisher method was considered as $\alpha = 0,05$ as the value of the symptom, which allows determining the critical point (tkr) for statistical analysis on the Laplace function table. A critical point according to the statistical approach is:

$$\Phi(t_{\text{кр}}) = \frac{1-2\alpha}{2} = \frac{1-2 \cdot 0,05}{2} = \frac{0,9}{2} = 0,45$$

So, (tkr) is equal to 1.67. The critical point indicator helps to find reliable deviations from the estimates. In this case the following formula is used:

$$\Delta_m = t_\gamma \cdot \frac{D_m}{\sqrt{n}} = 1,67 \cdot \frac{0,75}{\sqrt{220}} = 1,67 \cdot \frac{0,75}{14,8} = \frac{1,2525}{14,8} \approx 0,08$$

$$\Delta_{\text{к}} = t_\gamma \cdot \frac{D_{\text{к}}}{\sqrt{n}} = 1,67 \cdot \frac{0,60}{\sqrt{222}} = 1,67 \cdot \frac{0,60}{14,8} = \frac{1,002}{14,8} \approx 0,06$$

The results show that the deviations of the estimates are 0.08 in the experimental group and 0.06 in the control groups.

The values generated by the mathematical and statistical method confirm the successful conduct of pilot studies in the field of law education in higher education institutions. This allowed the research hypothesis to be substantiated.

There is now a growing need for graduate students who are able to handle various legal situations and social issues independently. This requires the development of legal knowledge of the requirements.

The students' high interests in legal education was demonstrated during the research process. The study revealed that the role of advanced education technologies in the development of legal knowledge and professional skills is invaluable.

The experimental results of the research, as well as the content and methodological refinement of their essence, the goals and objectives of the research and experimental works, and the validity of the methodology that contributed to the achievement of these goals and objectives were defined.

RESULTS AND DISCUSSIONS

The analysis of the normative legal documents, scientific and pedagogical literature shows that fight against offenses is more important than ever. This puts a number of tasks before law education.

Introduction of the pedagogical technologies in the sphere of law education at the undergraduate level of higher education institutions and implementation of the legislative reforms in the educational system are among the most important issues of the day. Because the entire legal knowledge is conducted in all educational systems, but the mechanism which connects them with legislative process and teaching methodology are still inadequate. In addition, due to an update in information technology and deepening legal reforms in our country, improving the theory of legal education is one of the important tasks facing educators.

The adoption of the Law of the Republic of Uzbekistan "On the State Policy related to the Youth" [4], of September 14, 2016; the Decree of the president of the Republic of Uzbekistan PF-№ 4947 " On the Strategy Action for the Further Development of the Republic of Uzbekistan"[5], dated February 7, 2017; the Decree of the president of the Republic of Uzbekistan PF-№ 5618, " On Radical Improvements of the System Enhancing the Legal Awareness and Legal Culture", dated January 9, 2019; the Resolution " About measures on further development of a higher education system", PR- № 2909, April 20, 2017, the Resolution of the president of the Republic of Uzbekistan PQ- № 4296, "On additional measures to further strengthen the guarantees of the rights of the child" [6], April 22, 2019 and other le-gal documents are of importance in the period when there is need and requirements in legal education and upbringing. Therefore the given article is intended to reveal the ways of realization of the measures mentioned above.

The process of education being one of the integral and important parts of the pedagogical process deals with the issues of teaching, acquisition of knowledge, skills and qualifications. The theory of education can be represented by the concept "Didactics". The object of study of Didactics is the educational process, the regularities of the educational process, the principles, methods and forms of teaching. The main essence of educational process is to transfer historically accumulated social knowledge and experience to the younger generation; to realize interconnection between the generations through a particular system.

In the learning process, the specific relationships between trainees and educators are taught, and this process takes place as a result of the joint activities from both sides. Therefore, the educational process is considered to be bilateral in nature. The activity level of teachers and students determines the effectiveness of the educational process. Undoubtedly, during the process the teacher will act as a guide teacher. The teacher builds knowledge, skills and abilities on the basis of the plans and programs for a specific purpose. And the students need to be actively assimilated. While within the teaching process the teacher`s task is teaching, forming knowledge and skills, the students will have to transfer the educational process through themselves. This, as a complex mental process involves senses, feelings, perceptions, imaginations, and thoughts. Learning is the process of acquiring students` mastering, cognitive abilities, learning abilities, thinking operations and generating actions. This is not a passive viewing process, but an active, creative activity that reveals facts unknown to the students.

The article 5 of the Law "Education Act" approved at the IX Session of the Oliy Majlis of the Republic of August 29, 1997, provides "The right to be engaged in pedagogical activity"; according to which people with appropriate education, professional training, and high moral qualities are entitled to engage in pedagogical activities. Recruitment of teaching staff in higher education institutions is carried out on a competitive basis in accordance with the Regulations by the Cabinet of Ministers of the Republic of Uzbekistan. Persons prohibited from carrying out pedagogical activity by the court are not allowed to engage in educational activities.

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[4] Collection of Legislation of the Republic of Uzbekistan, 2016. www.lex.uz

[5] Decree of the President of the Republic of Uzbekistan. On the Action Strategy for the further development of the Republic of Uzbekistan. / Official publication / Ministry of Justice of the Republic of Uzbekistan. - Tashkent: Adolat, 2017. - P.27.

[6] Resolution of the President of the Republic of Uzbekistan dated April 22, 2019 No PP-4296 "On additional measures to further strengthen the guarantees of the rights of the child". Collection of Legislation of the Republic of Uzbekistan./17 (881), April 29, 2019 - B. 5-10.

The task of the teachers of the higher educaion institutions is to bring modern legal education to a new level. One of the requirements of the present time is organizing educational process providing needs to use methods of innovative educational technologies and modern information technologies by the teaching staff of the institutions.

When speaking about educational technologies it is important to understand the structure of the didactic process. As shown in the pedagogical, psychological and methodical literature the didactic process involves a number of interconnected parts: purpose and content of the education meeting the state requirements, a student, an educator, the methodical features, a student`s educational–motivate situation, a student`s learning activity and its management by a teacher.

'Street Law" practice, which is still practiced in many countries today, has its own unique origin. The development of this program is connected with Lee Arbetman.

Lee Arbetman is an executive director of Street Law Inc. Company, a nongovernmental commercial organization situated outside Washington. He finished Li Grinnell college (a teacher of social studies, Massachusetts State), and Law faculty of George Washington University. He studied at primary, secondary schools, college, and Law faculty. He is the author of the program "Street Law". Lee Arbetman provided training and technical assistance in street law in the countries, such as México, the Ukraine, Turkey and Georgia.

In 1972 the students of the law faculty of Georgetown University together with students of the high school in Washington developed a number of legal guidelines on practical legal trainings for their use. These volunteers were not normal lawyers, they had assumed civil responsibility. The courses were popular with high school and law students. In response to its practical nature high school students called these lessons them as "Street Law". In 1972-73 two local schools developed the pilot program first in the USA, later he launched an effort to educate the public about the law and the society around the world. There were developed interactive teaching methods for teachers. Nowadays the practice "Street Law" is used in all state of the USA and in more than forty countries of the world. As a result of the program of the street law there is Headquarters at the Law Centre of Georgetown University, Washington D.C., to develop justice through hand-on education on human rights and democracy promoting this global movement. This project has become a sample program of full-time, experimental educational program for law schools in Georgetown, in other schools of the country and in more than 120 law schools of the world. The Students of Georgetown participated in almost 1000 programs since the organization of the higher division. Most firm partners, corporate counselors, government officials of the USA and outside it, even members of federal court instances . They have taken a commitment for public education school to educate people to law and democracy.

Law Centre of Georgetown University, Washington D.C., developed different street law programs presented by young teachers of public schools, lawyers, judges, justice system staff (as probation clerks), young workers and police officers. The throughout world program has reached the students of primary schools, public colleges, justice system, and public organizations.

All street law programs have three main features:

1. Teaching practical content: legal rights and duties, rule of law, internationally accepted human rights and activity of democratic management system.

2. Using interactive educational strategies to develop necessary skiils: civil engagement, promotion, solving problems, critical analyses and communication

3. Community involvement in the learning process: legal experts attend classes and join students their teams to monitor and influence the legislation.

Appearing the "Street Law" in early 1970s was not a historical event, but it was a historical necessity. Social stagnation in the United States in the 1060s led to laws that affected broad segments of the society[7].

The, main purpose of the education is to create spiritually rich individuals with modern scientific knowledge, able to think independently and being able to solve problems. As the society develops, so does the demand of living. Therefore, as the volume of scientific knowledge grows and the scientific level becomes deeper, the need for logical thinking and rapid solution to problems gets stronger. From the point of view, we conclude that the education system should work not only for the requirements of today, but also it should determine and consider the requirements of future. For today`s demands will become the main root of the society in the future. This means, the system of education must prepare students not for the present life, but for the future life as well. This is one of the specific characteristics of the education.

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[7] Remy, Richard C., Donald A. Ritchie, Lee Arbetman, Megan L. Hanson, and Lena Morreale Scott. *United States Government: Our Democracy.* Columbus, OH: McGraw Hill Education, 2016.

Legal nihilism is an element of social consciousness, being in the condition of inattentive and not respecting legal subject(s), existing legal norms, being in rude relations to them.

Legal nihilism is an element of the social consciousness that is manifested by citizens in the neglect, mistrust or neglect of the law, state and its system.

Legal nihilism can be seen in the following forms: theoretical form (the right is rejected in the issues by scientists, statesmen and politics; practical form (active and passive).

Active legal nihilism is a demonstratively rejecting the right in public relations.

Passive legal nihilism is a neglect of the norms of law practiced by people in the society.

In order to prevent the society from legal nihilism it is necessary to educate the young generation in a spirit of adherence to the ideas of rights and justice and legal education should be continuously conducted on a regular basis to them. All textbooks and educational manuals available in our country contain the content of the right and duties of the young generations. However, they do not have contents with threats and legal basics of the struggle against them. In our view, the theme, like "Threats and the legal basis for combating them" should be included in the subjects of continuous education, such as "Constitutional Law", "Jurisprudence". This in turn makes the young generation aware of the negative consequences of any socially dangerous acts. As a result of which, legal nihilism is prevented. And the activity of the young generation in the social the relations increases.

Through the continuous development of legal knowledge it is necessary to achieve positive attitude towards the law and legal phenomena in the young generation. As a guarantee of the development of legal knowledge it is advisable to pay attention not only the improvement of education and educators` skills and experience but also to the legal culture level of the general population.

Up to the present time much attention has been paid to theoretical side of legal education and no mechanism linking practice has been formulated. This is evidenced by the fact modern information technologies and interactive methods are not always used.

It is scientifically of importance that traditional teaching methodology in the legal education should be integrated with active teaching methods and this must be included in the subject "National idea, basics of spirituality and law education". The teacher`s purpose in this process must involve to create a favorable environment for the students to acquire legal knowledge. For this the teacher should use modern teaching methodology to stimulate and motivate students, raise students` interests. Through modern innovative methods students` legal thinking should be achieved quickly and effectively.

Although there are a number of existing methods of training at the present but today`s the main method of the legal education is the method of Socrates. Though occasionally criticized, this method in the education has been used for a long time in legal education. This technique allows students to rely on the legal framework and to act as a lawyer. Within this process students` knowledge is tested very often and through this their learning effectiveness of the educational process is enhanced. When Socrates' method is applied the problems are thoroughly analyzed. Another advantageous aspect of this technique is that it can attract the majority. Applying this technique, the students are given the opportunity to legal reflection.

According to A.A.Pasulov and M.M.Khaydarov`s opinion, the Socrates` method can be used for such large-scale and wide variety purposes as, discovering the true nature of the problem, understanding difficult ideas, turning doubts into trust, analyzing existing data, separating what we know from what we do not know, having the ability to manage discussions or ensuring a sequence of expressed logical feedback. The benefits of using this method are the networking of the questionnaire, the basic aspects of thinking and the basics of problem solving.

The teacher`s main aim of using Socrates` method is to determine the depth of the listener`s knowledge in a particular field of knowledge, to check the ability of his observance and thinking, and to see how well he uses practical methods to overcome conflict situations. In the process of training teachers use the Socrates method mainly for two purposes:

-through questioning to check the student`s knowledge of a particular sphere or the level of comprehending of the information by him;

-to teach the audience to discover the true nature of the problem through questionnaire outside class time, in their daily lives.

The Socrates method illustrates how the interrogation is important and necessary in training. This method clarifies the difference between a consistently forked teaching method and the knowledge not adjusted helping us to think more deeply.

In the process of training teachers can use the following six types of the Socrates method:

1. *Encourage listeners to express themselves*. For example, it may be helpful to fill in and enrich the thought expressed by such questions as "What do you mean by that?" Or "What else can you say in this regard?".

2. *Teaching the audience to guess*. It may move beyond the discussion, such as, "Can this idea always be true?", "Why do you think this assumption is appropriate?" And may motivate the listener to look for other possible solutions to the problem.

3. *Teach the evidence base for the argument*. Questions such as "Why do you say so?" And "Do you have any doubts about this?" Motivate the audience to prove their point.

4. *Consideration of objection points*. It is possible to explore contradictions to the content of the topic by asking questions such as: "Could this be the opposite?", "Who has an opposite opinion?"

5. *Provide consistency in thinking*. The effect of such a concept as "What would happen if ... had happened?", "How can it affect ...?" would completely change its meaning. This kind of questions are most likely to provide consistency in thinking.

6. *Teaching the questioning*. Questions encourage you to ponder such questions, as "Why do you think this is a question?", "Why is the question that I ask is so important?", "Which of the questions are more useful in your opinion?" teach us not only understand the question but also analyze the reasons for it.

The use of Socrates method is the basis of consistent thinking, as it covers all aspects of debating the point being discussed. Since the main purpose of the Socrates method is to find out the truth, learning it in this way is the same as thinking. Both are involved in tracking, developing, processing and redirecting existing data. These are the main objectives of teaching thinking in education[8].

In our view, Socrates training in legal education should be divided into five main stages:

Stage name	What and how to do it	What does a professor of non-legal higher education do
Stage 1	Defining learning objectives and explaining students' Tasks	Explains the purpose of the lesson and prepares students for question-and-answer discussions. Explains the rules of the lesson
Stage 2	Assignment of students to the legal problem or situation and description of the problem	The teacher explains the problem using infor-mation technology or visual aids.
Stage 3	Causing problem	The teacher encourages students to ask more questions and provide arguments in finding solutions to a legal problem or situation.
Stage 4	Discussing hypotheses related to legal problems or situation	Instructors show how to solve a legal problem or situation and encourage students to express their ideas.
Stage 5	Legal issues or situations are analyzed	The teacher allows students to come to a conclusion based on the evidence presented, there is a final solution to a legal problem or situation

With the use of the Socrates method in legal education, students' interest in science increases, and then teaches to find an independent solution to a legal problem (or situation).

The need for innovative teaching methods has emerged as the traditional method had its drawbacks and weaknesses. Through innovative methods it is possible to achieve easier student evaluation and cost reduction.

It is desirable for legal education to focus more on real-life situations. For example, in the course of teaching labor law, it is important to focus not only on theoretical information, but also on the legal and regulatory framework for teaching activities that students may face in the future.

We think that law schools should be established and students of the "National idea, basics of spirituality and law education" program should be trained.

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[8] Rasulev A.A., Khaydarovs M.M. Interactive teaching methods: Textbook. - T .: Academy of the Ministry of Internal Affairs of the Republic of Uzbekistan, 2015. - B. 16-17..

CONCLUSIONS

The introduction of innovations in the legal education process is linked to interactive teaching methods and the possibilities of modern information technology.

The model of methodology of legal education at the undergraduate level of non-legal higher educational institutions has been developed, criteria for increasing the effectiveness of legal education have been identified and educational and methodical support is established.

In the context of innovative education the need for the use of the following active and interactive methods (the Socrates method, Case Study, Discussion, Legal Approach in various situations) was justified within the legal education process of the higher educational institutions.

One of the ways to increase the effectiveness of legal education in non-governmental higher education institutions was the need to develop the legal competence of teachers and to develop appropriate recommendations.

Methodical recommendations on the subject "National Ideas, Spiritual Bases and Methods of Teaching Law", "Labor Law" and "Criminal Law" were developed.

In order to increase the effectiveness of legal education in non-legal higher educational institutions, the opportunities of using information technologies in the legal education process were demonstrated, seminar - trainings were held, an explanatory dictionary of terms on "Lbor law" was created, and a program for electronic computers was created.

Forms, methods and means have been developed to improve the legal knowledge and culture of students of non- legal higher education institutions on the direction "National idea, basics of spirituality and law education".

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ACADEMIC STRESS AND STUDY HABIT AMONG COLLEGE STUDENTS

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ABSTRACT
Academic stress according to Bisht (2005) academic stress reflects subject's perception as Well as the way of coping with academic events; it reflects subjective feelings of distress or Interpersonal perceptual responses. The term Study habits defined as Study Habits implies a sort of more or less permanent mode or method of Studying. In the present study, Study Habits refers to comprehension, concentration, task Orientation, study sets, interaction, drilling, supports, recording, language etc. as the factors of Study Habits as mentioned by Mukhopadhyaya and Sansanwal (2011) in their Study Habit Inventory. Aim: The study was conducted to find out the relationship between academic stress and Study habits among college students. The sample of the present Study was 40 college students out of which 8 were boys and 32 were girls. Bisht Battery of Stress Scales (revised in 2005) by BishtStudy Habit Inventory (2011) by M.Mukhopadhyay and D.N SansanwalWere used as tools for data collection. Result: The results of the Study shows that there is no significant relationship between academic stress and study habits among college students.
KEYWORDS: *Study Habits, Academic Stress*

INTRODUCTION

Stress is the term used to describe the physical, emotional, cognitive and behavioral responses. To events that are appraised as threatening or challenging. There are many different types of Stress that students face in college. Most of these are centered on academic issues. Academic Stress among college students has been a topic of interest for many years. Student's experience high stress due to various stressors. When stress is perceived negatively or becomes excessive, it Can affect both health and academic performance (Jasvir Kaur & Navkiran kaur 2015). Education is a dynamic process. It has continued to evolve, diversify and extend its reach since the dawn of human history.

Every country develops its own system of education to express and promote its unique socio cultural identity as well as to meet the challenges of the times. Human beings are a precious natural resource. In essence, education is to be looked upon as a unique investment in the present and the future (K.Dhanalakshmi& k. V. S. N. Murty 2018).

The behaviours and strategies devised and used for preparing for assessments and learning of academic materials are called study habits. Developing good study habits such as having organised routines for homeworks and revisions, proper note preparation techniques etc, are factors that help students to work efficiently and to reduce stress. Study habits of a student refers to his/her potential to schedule, plan, take notes, review etc. An individual's established way of learning, however systematic or unsystematic it may be, can be called his/her study habit.

Students will have to face multiple academic demands such as examinations, graded assignments, competing with peers, comprehending the material taught by the instructor etc. This can lead to frustration due to exhaustion of resources. The mental distress thus caused is called academic stress. Bisht (1989) has defined academic stress as "a demand related to academics that taxes or exceeds the available resources (internal or external) as cognitively appeared by the student involved". According to her academic stress has 4 components, namely academic frustration, academic conflict, academic anxiety and academic pressure.

DEFINITIONS OF THE KEY TERMS

Academic Stress: According to Bisht (2005) academic stress reflects subject's perception as Well as his way of coping with academic events; it reflects subjective feelings of distress or Interpersonal perceptual responses; at it consists of the components of (a) Frustration (b) Conflicts (c) pressure and (d) anxiety. Scores of the Bisht Battery of stress scale will be taken as Academic stress in the present study.

Study Habits: Study Habits implies a sort of more or less permanent mode or method of Studying. In the present study, Study Habits refers to comprehension, concentration, taskOrientation, studysets,interaction, drilling, supports, recording, language etc. as the factors of Study Habits as mentioned by Mukhopadhyaya and Sansanwal (2011) in their Study Habit Inventory. Here the scores obtained by the student in this inventory are taken as his Study Habits In the present study.

REVIEW OF LITERATURE

- Kaur,J., & Kaur, N. :The study was conducted to investigate the significant difference between academic stress and Study habits among adolescents with respect to gender and locale. The sample of the present Study was 200 adolescents. Out of these, 100 were rural adolescents (50 males and 50 females) And 100 were urban adolescents (50 males and 50 females) from Ludhiana district. Bisht Battery of Stress Scales (revised in 2005) by Bisht and Study Habit Inventory (2011) by M.Mukhopadhyay and D.N Sansanwal were used as tools for data collection. The results of the Study showed that there exists significant mean difference of academic stress of male and Female adolescents in regard to their locale at both the levels of significance. There exists no Significant mean difference in academic stress of male and female adolescents at both levels of Significance. It is further observed that mean scores of study habits among female adolescents are more than the mean scores of male adolescents. Mean scores of study habits of adolescents of rural areas are more than the mean scores of adolescents of urban areas.

- Dhanalakshmi, K., & Murty, K.V.S.N. : study was carried out on 300 B. Ed trainees to find out the effect of study habits and academic Stress of B. Ed trainees. Study Habits inventory developed by Prabhakar and Academic stress scale by Abha Rani Bisht was used to assess the study habits and academic stress of B. Ed trainees. Results revealed that there is a significant impact of study habits and academic stress of B. Ed trainees.

- Rao, K.V.,& Reddy, S.V.:A study was carried out on 400 teacher trainees to find out the effect of study habits, mental health and academic stress on Academic achievement among teacher trainees. Mental Health Status inventory developed by Reddy, Study Habits inventory Developed by Prabhakar and Scale for Assessing Academic Stress developed by Sinha, Sharma and Mahendra was used to Assess the mental health, study habits and academic stress of the teacher trainees. Results revealed that there is a significant Impact of mental health on study habits and academic stress of prospective teachers.

METHOD

Problem
Is there any significant relationship between academic stress and study habits among college students.

Aim
To understand the relationship between academic stress and study habits among college students.

Objective
To study the relationship between academic stress and study habits.

Variables
Dependent variable: academic stress, study habit

Hypothesis
There will be no significant relationship between the academic stress and study habit among college students.

Research Design
The research study was quantitative in nature and correlational study was used to determine if there exists a relationship between academic stress and study habits among college students.

Research Sample
Purposive sampling method was used for this study. The study sample was comprised of 40 college students at age range from 18 to 23 from different parts of Kerala, out of which 8 were males and 32 were females. The sample belongs to different gender religious family type, area of residence.

Sampling Criteria
Inclusion criteria
- Those who have given consent for the participation.
- The samples are around the age of 18 to 23.
- College Students

Exclusion criteria
- Those who haven't given consent for the participation.
- Those who have physical disability and mental retardation.

Tools
The following tools were administered to each participant in order to collect the required information.
1. Bisht Battery of Stress Scales (revised in 2005) by Bisht .
2. Study Habit Inventory (2011) by M.Mukhopadhyay and D.N Sansanwal

Procedure
The purpose of the study has been explained to the participants via online and their willingness to participate in the study ascertained. The first step being that a rapport was established by participants and the researcher through social media, after this each participants were individually educated about the purpose of the study as well as they were informed about the confidentiality of their response. Finally , Bisht Battery of stress scales (Bisht,revised in 2005) of 19 items and study habit Inventory (M.Mukhopadhyay and D.N Sansanwal,2011) of 21 items were given to sample through online with proper instructions one after the other. The scoring of the assessment was done and interpreted according to the manual. The participants were not asked to disclose any of their personal information.

Analysis of data
The collected data were analysed using following statistical test:
1. Spearman Rank correlation

Ethical issues
1. Informed consent of each and every participant was acquired.
2. Confidentiality of the response was maintained.
3. The data collected will be solely used for research purpose

RESULTS
DATA ANALYSIS AND INTERPRETATION:
The aim of the study was to find the relationship between study habit and academic stress among college students. The study consisted of 40 college students out of which 8 were males and 32were females . For the purpose of study the investigator formulated one hypothesis and results are shown below:

Table 1- Spearman's rank correlation between academic stress and study habit among college students.

			Study habit	Academic Stress
Spearman rho Study habit		Correlation coefficient	1.000	-0.31
		Sig. (2 tailed)	-	0.851
		N	40	40
	Academic Stress	Correlation coefficient	-0.31	1.000
		Sig. (2 tailed)	0.851	-
		N	40	40

Table 1. shows that, significant value of correlation between academic stress and study habit among college students is 0.851, which is not significant at 0.05 level of significance. Thus null hypothesis is accepted so there is no significant relationship between academic stress and study habit.

MAJOR FINDINGS
- There will be no significant relationship between academic stress and study habits among college students.

LIMITATIONS
- Sample size was small
- Sample was collected only from Kerala

SCOPE FOR FURTHER STUDY
- Future study can be done in a larger population covering
- More geographical areas and comprising of people related to
- Different categories.

CONCLUSION
The term **'Study habit'** is used to describe a sort of more or less permanent mode or method of studying. In the present study, Study Habits refer to comprehension, concentration, task orientation, study sets, interaction, drilling, supports, recording, language etc. as the factors of Study Habits as mentioned by Mukhopadhyaya and Sansanwal (2011) in their Study Habit Inventory. **'Academic stress'** according to Bisht (2005) reflects the subject's perception as well as his way of coping with academic events; it reflects subjective feelings of distress or interpersonal perceptual responses.

The study conducted revealed the relationship between academic stress and study habits among college students. The result of the study shows that there is no significant relationship between academic stress and study habits among college students.

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ANALYTICAL STUDY OF THE POLITICAL STATUS AND ROLE OF WOMEN DURING THE INDIAN INDEPENDENCE MOVEMENT

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ABSTRACT

Like the freedom movement of the other countries of the world, the history of freedom movement in India is rich with equal participation of men and women. Like other countries of third world, our countrymen also had to struggle long and hard to get freedom. In the glorious story of the struggle against the British rule, the names of many brave sons as well as the names of brave ones are also printed in the golden letters in history. As such, during the freedom movement, the role of intellectuals, farmers, lawyers and social reformers has been very important at every level and at every stage of the movement. But keeping in mind the circumstances of that time, it is also very interesting and important to analyze the role of women in this regard. From the Vedic era to the modern era ,the role of women has been changing according to the time and circumstances in the various segments.Lopamundra,Ghosha and Apala in Vedic era, Gargi and Maître in post Vedic era, Sheela and Attarika in the Gupta age and in the Mogul era Razia gninfluence in politics was important and extra-ordinary. Similarly, the role of Begum Hazrat Mahal and Jhansi Queen Rani Laxmi Bai during the period of independence struggle especially during 1857 Revolution and later in the Gandhi era, Mrs. Annie Besant, Bhagini Nivedita, Madam Cama,Pandita Ramabai ,Sarojini Naidu,Kamla Nehru, Sucheta Kruplani,Prabhadevi,Vijaya Laxmi Pandit ,Mniben Patel and the roles of other such women cannot be ignored.Similarly,the British Education system, increased the means of transport and the social reform movement has increased the political consciousness of women and motivated them to contribute to the National Movement. In spite of all the adverse circumstances such as low educational level and various ban in public life, after tough struggles, women made their unique identity in the history of freedom movement. Gradually, women became involved in social issues, their understanding in this regard increased which changed their thinking. Due to this, women gradually moved forward in the struggle for independence, in the movement of reforms and in the Legislative Councils. Here also the fact cannot be denied that most of the women who led the national movement were highly educated and belonged to the upper middle class.

KEY WORDS-*National movement, Social reform, Political consciousness, Women's Organization, Gandhi Era, Female suffrage.*

REVIEW OF LITERATURE

Before analyzing the role of women in the freedom movement, we need to know about the status of women in the Vedic,Post-Vedic,Mauryan era,Gupta dynasty, Mughal period, only than we will be able to make a meaningful analysis of the role of women in the Indian Independence movement in the Modern era. As far as the Vedic era is concerned, in this era, women were respected in the society ,despite being a patriarchal family,women got enough freedom in their respective fields and their role in the decision process was also very important. "Although the role of women was not equal in politics and administration ,but the place of the women in the society was satisfactory."(1) (Shastri,1952). As far as the post-Vedic era is concerned ,it can be said that Gargi and Maitriyi are considered to be great philosophers of this age. The conversation between Maitriyi and her husband Yajnavalkya towards them is a considerable question of the Upanishads, but in this era, it is known by Manu-Smruti ,that Manu was not an advocate of equal rights for men and women. According to him – "In childhood, the women lives under the patronage of her father, in young age under her husband and in the old age under the tutelage of her son. So, only   Swami-Bhakti can be expected

from them, but Manu also belives that where there is respect for women, there will always be prosperity." (2) (Altekar,1956). According to Megasthenes " the practice of multiple marriages was prevalent in the Mauryan era, Indians used to marry many women, women could remarry like man". (3) (Mc Crindle). As far as the Gupta era is concerned, in this age also, women generally had a respectable place in the society, "usually girls used to be proficient in singing, dancing and household work. Women like Sheela and Attarika were famous in the field of poetry and writing". (4) (Luniya). If we are talking about the Mughal period, the status of women in this era was not generally satisfactory and their reputation was slowly declining. In this era, child marriage and sati had come into existence and the women was considered to be the object of enjoyment. Similarly, under the British rule in the modern era ,some women changed the course of history by influencing politics and governance.

OBJECTIVES OF THE RESEARCH PAPER

This research paper mainly focuses on 2 points-
1) Depicting the social and political status of women in the ancient,middle and modern era.
2) Explaining the role of women in freedom struggle.

RESEARCH METHODOLOGY

This research paper mainly based on secondary sources and historical facts. Historical, descriptive and analytical methods have been used to analyze historical facts and events.

DISCUSSION ON RESEARCH PAPER

History is a witness to the fact that the countries in which women and man have played a strong and meaningful role in the political, social, economic and administrative system, the nation has moved ahead of other countries in the race of progress. Before analyzing the role of women in India's national movement, it is very important to know what the role of women was in the social, political and economic system of ancient times and middle ages. Here we will analyze the status and role of women in different eras with reference to the title of research.

Dignified status of women in Vedic age –

In this era, women had a high status in society. Women and men, participated equally in religious festivals, they also had equal rights related to education and many women were famous as teacher, philosopher, skilled speaker and famous poetess but women did not have succession in property and their role in politics and administration was negligible. "In matters like education, religion

and marriage, women could take self-decisions and they had high social status. (5) Overall, we have to agree here that the condition of women in various areas of life in the Vedic period society was quite satisfactory.

Partial change in conditions in the post-Vedic Era –

Even in this era, the archaic tradition prevalent in respect of women remained unchanged. She used to be completely independent in the field of education. She could study philosophy. Gargi and Maitri were considered great philosophers of the Post-Vedic period. It is written in Manusmriti that women used to get patronage of father, husband and son and he further write that where there is respect for women, there will always be prosperity.

Status of Women in Gupta and Mauryan Era-

The condition of women was not very good in the Mauryan period, according to Megasthenes, Indians used to marry many women, that is, the practice of multiple marriages existed in the Mauryan era, women could remarry like men.

Similarly, in the Gupta era, women had a respectable place in the society in general, participation of women in social and religious work was equal to men. Generally, the girls were proficient in singing, dancing and housework. Women like Sheela and Attarika were famous in the field of poetry and writing.it can be said that women had a lot of freedom in the field of education and music.

The Prestige of Women Declines during the Mughal Period-

The condition of women in this age cannot be considered satisfactory. Due to the influence of Muslim culture, in this era, the child marriage and curtain practice came in to existence and the women was considered as an object of enjoyment. Incidents like multiple marriages, sati and practice of Zohar also the result of this era. Despite all these obstacles, women had established their identity in politics and administration, Among these women Shah Turkan,Raziya Begum,Mahim Begum,Khanjada Begum,Harram Begum had gained fame due to their administrative capability.Similarly,Noorjahan,Jahanaara,Roushanaara and Mumtaz's influence in politics was significant and extra-ordinary.We have to accept that the most of women belonging to the royal family was active in the politics and administration whereas the participation of common women is not mentioned. It is clear from this deliberation that during this period only such women accepted the role in politics and administration, who were not afraid of exploitation of the rulers, although the percentage of such women remained very low.

Struggle and Participation of Women in Modern Age-

In order to destroy the British rule in the Modern era, men as well as women registered active participation. In this era too, many women not only

influenced politics and governance but also changed the stream of verna history.

Revolution of 1857 and Women-

Begum Hazrat Mahal can be named among the women who became the inspiration for the freedom struggle of 1857,against the British rule,who not only made her son Nirjis Kadar on the throne of Avadh but also fight against British rule.In this episode,the name of Rani Laxmibai of Jhansi is also considered to be pioneer because she took the throne of Jhansi after the death of her husband Gangadhar Rao and took revolutionary political decisions and fought against the Britishers till death.Similarly,Teja Bai,wife of king Govind Rao,the rular of Jalaun,also opposed the Britishers because they had fixed their pension.The British had kept her in jail for about 12 years.

19th Century Reform Movement and the Role of Women-

After the revolution of 1857, many changes were seen in the Indian social system. Elements like,westernization ,Modernization,Social reform movements and National awakening brought unprecedented awareness among Indian women in the 19th and 20th centuries.Similarly,the social reform movements tried to improve the misery of the women. These reforms movements also contributed a lot in creating female consciousness.The British Education system and means of transport also reflected positive impact on social and political consciousness. "Maharashtra and Bengal were the largest number of women who participated extensively in the various reform movement organized during the freedom movement. The entry of women into the field of social reform was like breaking away from the past". (6)

Establishment of Congress and women Awakening –

We can say that since the establishment of the congress in 1885, the systematic path of female consciousness got paved. In 1900,for the first time,Mrs.Ganguli gave her address from the congress platform as a female speaker.Similarly,in 1905,the women were strongly opposed to the declaration of dissolution by Lord Curzon.Gradually,women were not limited to the congress session only; they started opposing the policies of the government through agitations on the street.Mrs.Sarojini Bose and Mrs. Annie Besant led the protest against Britishers. "Mrs.Annie Besant wanted to bring home rule to India in the same way as the other colonies of Britain, which is why she also started the Home Rule Movement". (7)

Although, in the last decades of the 19th century, educational reform and social reform related activities gave birth to a new group of intellectual citizens, but initially the number of women in this group was very less. Even through newspapers and magzines, the level of educational and political consciousness gradually improved. Gradually women started separating from male organizations and also started their women's organizations.Saraladevi Chaudhurani created an organization called "Bharat Stree Mahamandal"in 1910 and through this organization he linked Hindu revival with political opposition.Important women organizations that were established during the freedom struggle were known as a " Women's Indian Association(WIA),The National Council for Women in India(NCWI) and The All India Women's Conference(AIWC).All these organizations played a major role in articulating women's issue.WIA was founded in 1917 and is considered a representative organization of women of all clasess,all cultures and all religions.Similarly,NCWI was established in 1925 as a National branch of the International Council of Women and the main objective of this institution was to submit memorandum to the appropriate authorities regarding various issues related to women.The AIWC was founded in 1927 and this organization also presented the socio-economic and political issues related to women with pride. It is also important to mention here the story " Sultanas Dreem"composed by Rukaiya Sakhavat Hussain in 1908 because the reader of this story got the idea of self government system of women through the story.

Political Participation of Women in Various Movements Conducted in Gandhi Era-

Mahatma Gandhi believed that women's participation can prove to be very important for the reconstruction of society, so under his leadership, a lot of efforts was made to create an environment towards establishing political equality. Among the women who played a prominent role in the movements in various activities related to the national independent movement in the Gandhi era were Madame Cama, Bhagini Nivedita, Annie Besant, Pandita Ramabai, Sarojini Naidu, Kamala Nehru, Maniben Patel, Vijay Laxmi Pandit, Sucheta kripalani, Prabhadevi and many much women. These women gave paramount importance to their duties towards the nation, without worrying about their home, family and children. During this period, there were some women who took the help of revolutionary means to build a new India,among such women – Durga Bhabhi,Satyavati devi, Khurshid Bahan, Jadi Rani Jutshi can be named prominently. In the same way,well-known women like Pritilata Vaddedar,Usha Mehta,Durgabai Deshmukh and Ammu Swaminathan were also part of this national movement who worked for the benefit of the country through active social service.Gandhiji used to say that "if women develop a high level of courage,than Indian womens are natural leaders"(8)

Similarly, during the Non-Co-operation Movement under the leadership of Gandhiji in 1920, some independent women's organization like Rashtriya Mahila Sangh were empowered with the district congress committees. As the area of this

movement became wider, the women of this country continued to join this movement. During this movement,there was tremendous unity among Hindu-Muslim women. In Ahmedabad,Amma,the mother of Ali brothers,gave a speech in front of 6000 women and urged women to accompany men in picketing and demonstration organized against British rule. Similarly, in Andhra Pradesh, an example can be given of the stunning Durgabai, who collected more than 1000 Devadasi and performed the important work of connecting Hindu Widows to the national movement. All these women were ideal freedom fighters for Gandhiji. (9)

Similarly,during the Civil Disobedience Movement organized under the leadership of Gandhiji in the 1930s,various programs such as boycott movements,Padyatras and Prabhat fairies etc.were also directed and guided by women.During this movement, a group of patriotic women was being prepared that did not back down from making their arrests. In the same way, some women joined the revolutionary organizations and they supported the revolutionaries even till the killing of the British Officers. Sarojini Naidu,Muthulakshmi Reddy,Margaret Cousin and Kamaladevi Chattopadhyay may be named among some of the prominent women who were arrested in the 1930s.That is to say that,liberal households and conservative families,from cities to villages,virgins and various married women,young and old ladies,played an important role in the struggle against the British rule.(10)

Similarly, women participated actively in the Quit-India movement of 1942 under Gandhiji's leadership. Women not only boycotted foreign goods, they led the Prabhat Pheri and picketing at liquor shops and they made all such efforts that would force the British to leave India. During this movement ,the role of women like Usha Mehta and Aruna Asaf Ali is considered very important in organizing women and motivating them for active participation in every phase of the movement. Sarojini Naidu was also arrested during this movement for organizing active protests against the British rule.

Overall, it is very important to make special mention of Sarojini Naidu and Aruna Asaf Ali among the women who fought against the British Empire in the Gandhi era. Mrs.Sarijini Naidu, by virtue of her talent, had acquired a very important place in that time of Indian politics. She also presided over the annual congress session held in 1925 in Kanpur.Similarly,she also chaired the "East African Indian Congress" held in South Africa in 1929.The British government awarded him a title like "Kesar-e-Hind" to commemorate her co-operation in various levels in combating a severe epidemic like the "Plague". We also need to mention here that her role in the 'Dharsana Salt Satyagraha''of Gujrat in 1930 and in the "Round Table Conference" held in 1931

was very much appreciated.She had to travel to jail with Gandhiji during the "Civil Disobedience Movement" and similarly she was arrested during the "Quit India Movement". She was entrusted with the responsibility of the post of Governor of the United Provinces of Agra and Avadh" from 1947 to 1949 in independent India.

In the same way, Aruna Asaf Ali also had a very respectable position within the Congress and outside of the Congress. In 1932, she was kept in Tihar Jail where she also went on hunger strike to protest against discrimination from political prisoners.During the "Quit India Movement "in 1942, she also hoisted the flag of the Indian National congress at the "Gowalia Tank Ground" in Mumbai. She also got the distinction of being the first Lady Mayor of Delhi in independent India in 1958.She was eventually posthumously awarded India's highest honor, that is, the "Bharat Ratna"in 1997.

Compared to Western countries,Indian women got the franchise without any special struggle.Frist of all, in 1929,women started contesting for the central and provincial administrative institutions.In 1937, under the provincial polity,50 women were also elected to various provincial assemblies.Similarly,6 women were also given ministerial posts in provincial ministry.

In the same way, the role of women can also be considered very important in the formulation of Indian Constitution because women got adequate representation in the constituent Assembly.The role of Leela Ray,Sarojini Naidu,Ammu Swaminathan,Malti Choudhary,Puenima Banerjee,Rajkumari Amrit Kaur,Hansa Mehta,Sucheta Kriplani,Durgabai,Renuka Rai,Kamala Choudhari is considered to be very important among the constitutional women.Finally,the Indian constitution,which came into force from 26th,January1950,accepted full participation of women in Indian politics by giving them equal voting rights to all men and women without any gender distinction.

CONCLUSION

Overall, it can be said that the secret of the success of the Indian National Movement is hidden in the equal contribution of both men and women. After getting cast in the mold of British education system, women not only got involved with social reform movements but also trended the establishment of women's organization. Under the banner of these reform movements and through women's organizations, awareness and political consciousness was created among the masses incliding women. This awareness and consciousness gradually grew, which paved the way for women to occupy political positions and active political participations. Despite the limitations of social and political life, such an

example of active contribution of women at various stages of national movement and at various levels is rarely seen in world history. Although it is true that most of the women associated with the national movement were part of highly educated and elite families. But apart from these women, the contribution of thousands of such women also cannot be forgotten whose names are not recorded in the pages of history, but who dedicated their everything by staying behind the curtain for the freedom movement.The seeds of the participation of women during the freedom movement were the result of the fact that ,today there is hardly any area of public life left in independent India where women have not made their dignified presence.

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DETECTION OF THE PRESENCE OF ANAEROBIC SPORE FORMING BACTERIA (ASFB) IN BOILED MILK VENDED IN THE MARKETS OF EL-OBIED CITY-NORTH KORDOFAN STATE - SUDAN

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ABSTRACT

Background: This study was conducted in the markets of Elobeid City- North Kordofan State-Sudan, to detect the presence of anaerobic spore forming bacteria in boiled milk and to determine the factors that contribute to the presence of anaerobic spore forming bacteria in the milk during the period from October 2012 to October 2015. Methodology: The study covered all the places for the boiled milk sale found in the markets of Elobeid City which are 84 places. Data were collected from all milk handlers who were 87 by observation- check list.

The data were analyzed manually and the results presented in tables and figures showed for the percentages. Eighty four milk samples were collected from the offering containers of boiled milk vended in that places, and examined for the presence of anaerobic spore forming bacteria in boiled milk.

Results: The anaerobic spore forming bacteria were found in 30% of the boiled milk samples. The study detected that the holding of the boiled milk for extended periods of time at room temperatures contributed to the contamination of boiled milk by anaerobic spore forming bacteria by 24%.

Conclusion: This study concluded that the milk in the markets of Elobeid City was handled under unhygienic conditions and there is no assurance to its safety and wholesomeness.This study recommend the health authorities to take immediate measures for correction of violations of milk safety requirements, periodical surveillance, in addition to health education and training of milk handlers about hygienic handling of milk prior to licensing.

INTRODUCTION

Milk is one of the foodstuffs that need good handling to ensure the safety and the wholesomeness. Poor handling and undesirable practices I ntroduce the bacteria or germs that cause the spoilage. Unhygienic handling can also affect human health (1). Food handlers should therefore receive suitable training in the basic principles of food safety. Examples of outline curricula for training courses for food handlers personnel are types of foodborne illness, Food preparation – cooking and serving , Survival of microorganisms because of insufficient heating, Procedures for preventing foodborne illness, Killing of bacteria , parasites and viruses (2). Training of food handlers regarding the hazards confronting their products, safe handling and preparation of food and good hygienic practice, as practicable under local street-vending conditions, is an essential part of any strategy to improve the safety and quality of street-vended food. This should, ideally, be done in conjunction with licensing, but ongoing education and training sessions at intervals are strongly suggested (3). According to the Center for Disease Control and Prevention (CDC), five food safety risk factors related to employee behaviors and preparation practices have been identified as the leading contributing factors to food borne illness. They are improper holding temperatures, poor personal hygiene, …etc. Immediate correction is required whenever a risk factor violation occurs at a commercial establishment (4).

Clostridium perfringens

Clostridium perfringens are one of anaerobic bacteria which causes food poisoning and this cause severe stomach cramps and diarrhea . It is usually associated with food that has been allowed to stay warm for several hours. *Cl. perfringens* turns into another form called a spore. The spores of C.perfringens are very heat resistant and will withstand boiling for several hours (5). *Clostridium perfringens* is found in the gut and thus indicates faecal contamination although spores commonly occur in the environment. It is uncommon to detect this organism in properly handled ready-to-eat foods. Illness is caused by the ingestion of large numbers of viable vegetative bacteria, which sporulate in the lower small intestine and produces enterotoxin which causes diarrhoea. This enterotoxin is not produced in foods. Spores are common in the environment and may survive the cooking process such that low level contamination of the final product may occasionally occur. Control is achieved by preventing spore germination and growth in food and rapid cooling, adequate cold storage and adequate reheating of food are of paramount

importance. *Cl. perfringens* will grow between 15°C and 52°C with virtually no growth below 12°C. Not all *Cl. perfringens* produce enterotoxin and these non-toxigenic isolates (irrespective of the numbers of bacteria present) will not produce foodborne disease. However, the presence of high numbers of non-toxigenic Cl. perfringens in a ready-to-food is unsatisfactory and indicates poor processing, particularly during cooling (6). *C. perfringens* can be isolated from a variety of environments and foods. As the spores of *Cl. perfringens* can survive cooking, it is of most concern in cooked foods that have been temperature abused as this provides the opportunity for spores to germinate and grow. Potential temperature abuse scenarios include: Holding cooked foods at warm temperatures for extended periods of time, and cooling foods too slowly (7).

Source of *Cl. perfringens*:

According to Park (8), source of *Cl. perfringens:* the organism has been found in the faeces of the humans and animals, and in soil, water and air. The usual story (of outbreaks) is that food has been prepared and cooked 24 hours or more before consumption, and allowed to cool slowly at room temperature and then heated immediately prior to serving. Prevention consists either by cooking food just prior to its consumption or, if it has to be stored, by rapid and adequate cooling .

The existence of anaerobic spore forming bacteria like (*clostridium perfringens*) in milk considers as indicator and guide upon it contamination by feces, and it is distribute in the earth and water beside it existence in the human and animal intestine. As that the existence of these microbes in milk forms seriousness upon the public health for consumer, and the detection of these microbes can be by stormy fermentation test (9). According to Harrigan (10): "This method can be used to demonstrate the presence of *clostridium perfringens* in milk by the 'stormy-clot' reaction".

According to Forsythe (11) the food safety defined as: "assurance that food will not cause harm to the consumer when it is prepared and/or consumed according to its intended use".

Objectives of the study:

The general objective: To evaluate the safety of the boiled milk vended in the markets of El-Obied City .

The specific objectives: To detect the presence of anaerobic spore forming bacteria**(ASFB)** in boiled milk, and to determine the factors that contribute to the presence of anaerobic spore forming bacteria in the milk.

Materials & Methods

Study approach: Qualitative and quantitative approach.

Study type and design: Descriptive cross-sectional study.

Study variables: The variables of this study are holding of the boiled milk at room temperatures , slowly cooling of milk at room temperature and the covering of boiled milk.

Study area: The area of this study was the markets of El Obied City. El- Obeid is the capital of North Kordofan State, its area has been estimated by 81 km^2 and the distance from Khartoum is about 332 mile. There are about 30 markets in El- Obied City which are distributed in all parts of the City. El Obeid is supplied by milk from the surrounding villages by Lorries.

Study population: The populations for this study are vended boiled milk, the handlers of boiled milk in the markets of El-Obied City.

Sampling and milk sampling

Sampling: After the survey for all markets in Elobeid City, it was found that there were only (84) places that handle in the boiled milk. The sale points of boiled milk for this study were chosen by total coverage for the 84 places. The milk handlers were chosen by total coverage in each place who were 87 individuals, and the simple random sample was used to select 84 of them for the variables concerned to the relationships , also the boiled milk offering utensils were chosen by total coverage which were 84 utensils, then the milk samples were collected from each offering utensils of the boiled milk.

Milk sampling: The steps for milk sampling were according to the following orders as mentioned by Ministry of Agriculture, Food and Fisheries (12):

-   Identifing the sample containers with waterproof markings .
-   Avoiding the contact with the rim or inside of the container with fingers, as this will contaminate the inside of the container and alter the results.
-   Taking the sample only after milk has been properly mixed.
-   Taking the sample from an area free from foam.
-   Filling the container away from the utensil opening. The container could be dropped into the milk.
-   Filling the container two thirds full. Never fill the container completely, leave some space to permit mixing of the sample in the laboratory.
-   Securely close the sample container and put on ice immediately.

-   The samples were transported in cooler boxes with ice to the laboratory and analyzed [immediately].

Data collection:

Data were collected by structured questionnaire and observations from all the handlers of boiled milk at the markets that handle boiled milk in El-Obied City, and from the results of the laboratory analysis of collected milk samples. Boiled milk samples were collected in sterilized containers (100 ml) according to Harrigan (10) from the offering utensils at the sale points in the markets of El-Obied City, and were brought in ice box to the laboratory of veterinary research station in Elobeid City to Laboratory analysis.

Data analysis:

The data of questionnaire was analyzed manually.

The results were presented in tables showing the percentages. The relations between variables were done according to El-Gassas (13) and Le (14) by McNemar,s Chi- square (X^2) for the correlative percentages in the table (2x2) by the formula:

$$X^2 = \frac{(B - C)^2}{B + C}$$

Where:

B and **C** are cells in the table 2x2 (without the cells of the total) as in the following shape :

A	B
C	D

The value of x^2 obtained from this formula compared with the value of x^2 obtained from the table of x^2 . The result have statistical significance when calculated value is larger than the tabulated value under significance level (0.05).

The null hypothesis is rejected at the 0.05 level when $X^2 \geq 3.84$.

Methods of detection of anaerobic spore forming bacteria in milk samples

According to El-kholy (9) the method is:

-   In sterile test tube with stopper,10 ml of well mixed milk sample was put.
-   Put in the tube on the surface of the milk 1-2 cm of melted paraffin wax. Or sterile melted vaseline according to Harrigan (10).
-   The tube was put in water bath at 80º C for 30 minutes to kill the vegetative microorganisms.
-   Then the tube was put in the incubator at 37º C for 3-5 days.

In the case of formation of the clot and gas production in the tube, the test was considered positive for

anaerobic spore forming bacteria (See picture of stormy fermentation test in the section of the results at page 5).

Ethical consideration(clearance)

Ethical permission for the study was obtained prior to the beginning of the study, by contacting the environmental health manager of the locality of Shekan, in El Obied City. As well as from milk handlers.

THE RESULTS

Table 1: The presence of anaerobic spore forming bacteria in boiled milk vended in Elobeid markets – 2015

The presence of anaerobic spore forming bacteria	Frequency	Percentage
Present	25	30
Not present	59	70
Total	84	100

In above table the **presence of anaerobic spore forming bacteria in boiled milk was found in 30%.**

> **Picture of stormy fermentation test**
>
> For the detection of anaerobic spore forming bacteria (ASFB) in the milk samples

Key:
(**1**): Position of the sterile melted paraffin wax or sterile melted vaseline layer **before** incubation period.
(**2**): milk sample.
(**3**): Position of the sterile melted paraffin wax or sterile melted vaseline layer **after** incubation period (for +ve results).
(**4**): milk clotting.
(**5**): milk sample **after** incubation period (for +ve results).
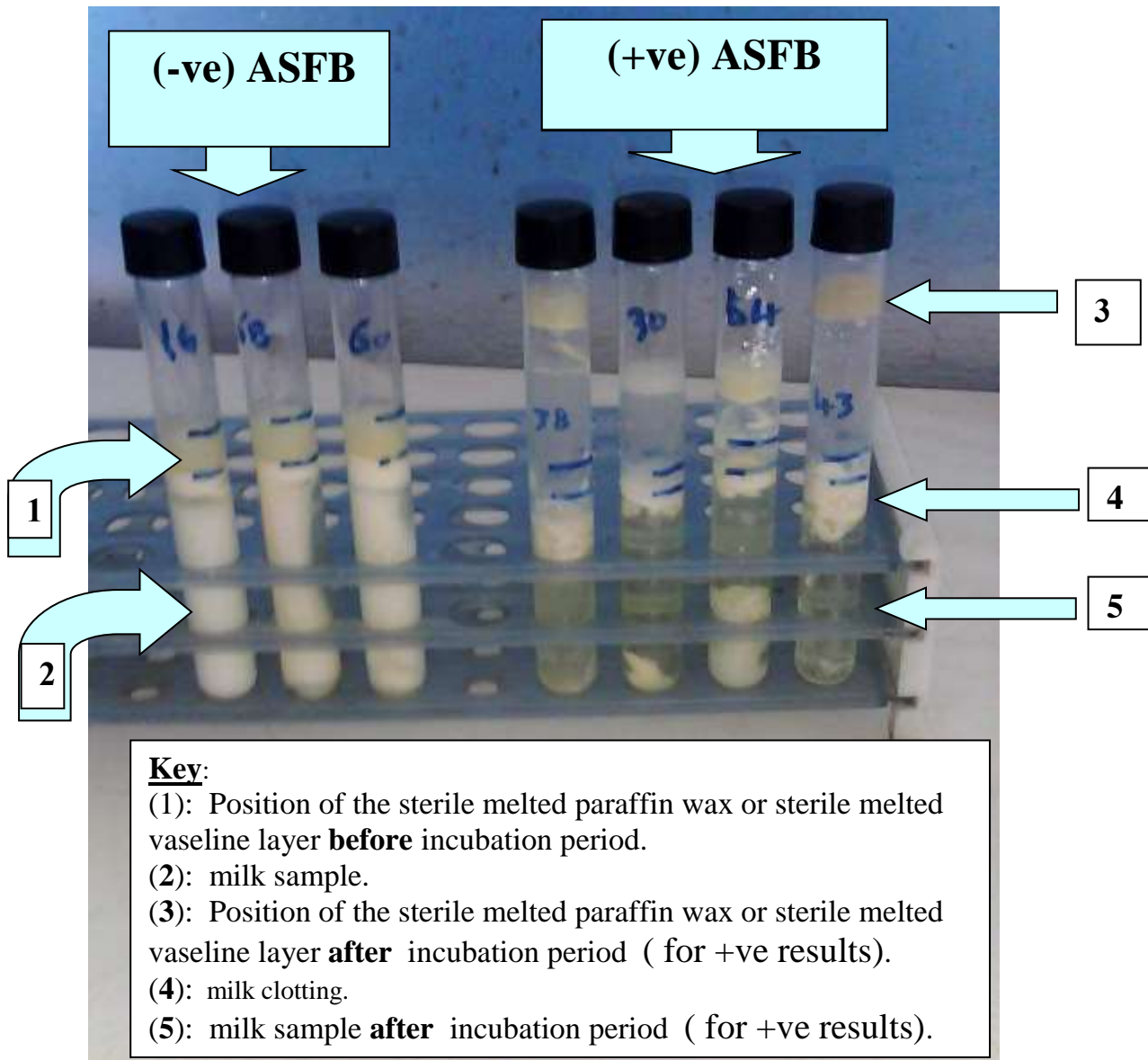
Table 2: Holding of the boiled milk at room temperatures for extended periods of time in Elobeid markets – 2015

Holding of the boiled milk at room temperatures	Frequency	Percentage
Hold	56	67
Not hold	28	33
	84	100

As shown in table (2) the holding of the boiled milk at room temperatures for extended periods of time was found in 67% of milk places and not found in 33%.

Table 3 : What done for milk after completing the boiling or bubbling in Elobeid markets – 2015

What done to milk	Frequency	Percentage
Immediate and quick cooling on ice water	6	7.14%
Slowly cooling at room temperature (on the land, table or bunsen)	78	92.86%
Total	84	100%

In above table (3) the immediate and quick cooling of milk on ice water was only (7.14 %) and slowly cooling on the land, table or bunsen at room temperature was (92.86 %).
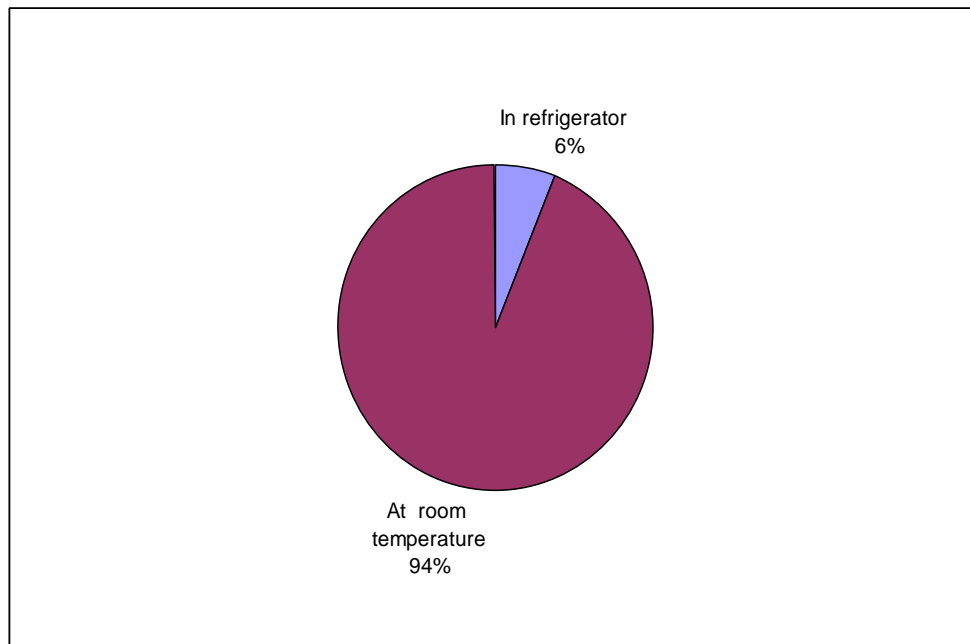
N=84

Fig. (1): The keeping of boiled milk at the sale points in Elobeid markets – 2015
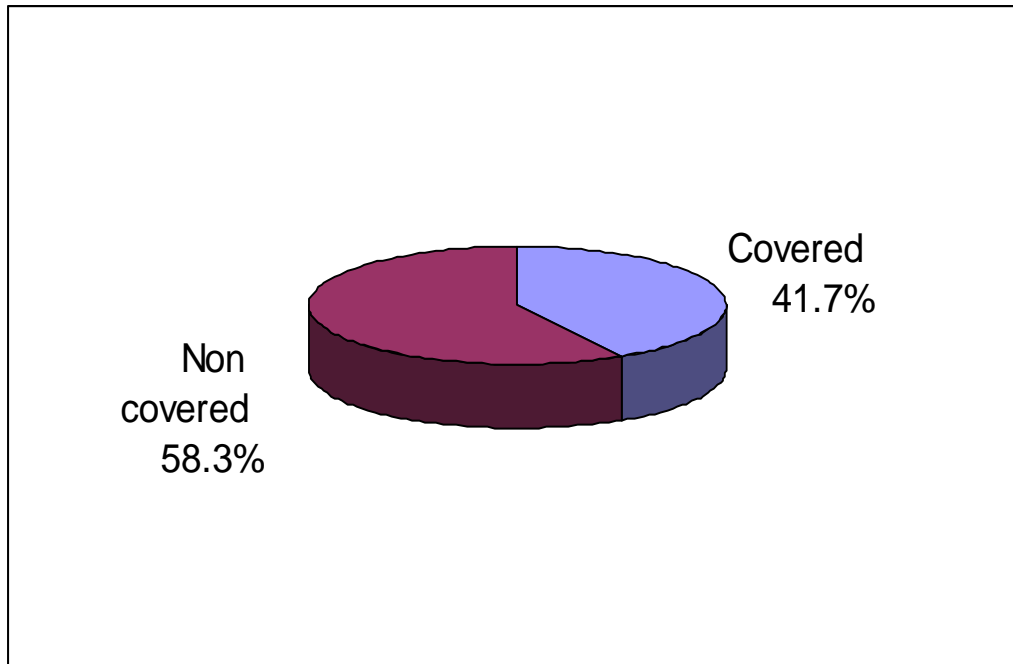
N=84

Fig. (2): The covering of boiled milk when the samples collected from the places at the sale points in Elobeid markets – 2015.

Table (4): Making (leave) the milk open after it down from the fire by milk handlers in Elobeid markets – 2015

Making the milk open	Frequency	Percentage
Yes	84	96.6%
No	1	1.1%
Not answered	2	2.3%
Total	87	100%

It was found that in 96.6% of milk handlers, the milk was leaved open after it down from the fire, at 1.1% of them it was covered, and 2.3% of them not answered as presented in above table (4).
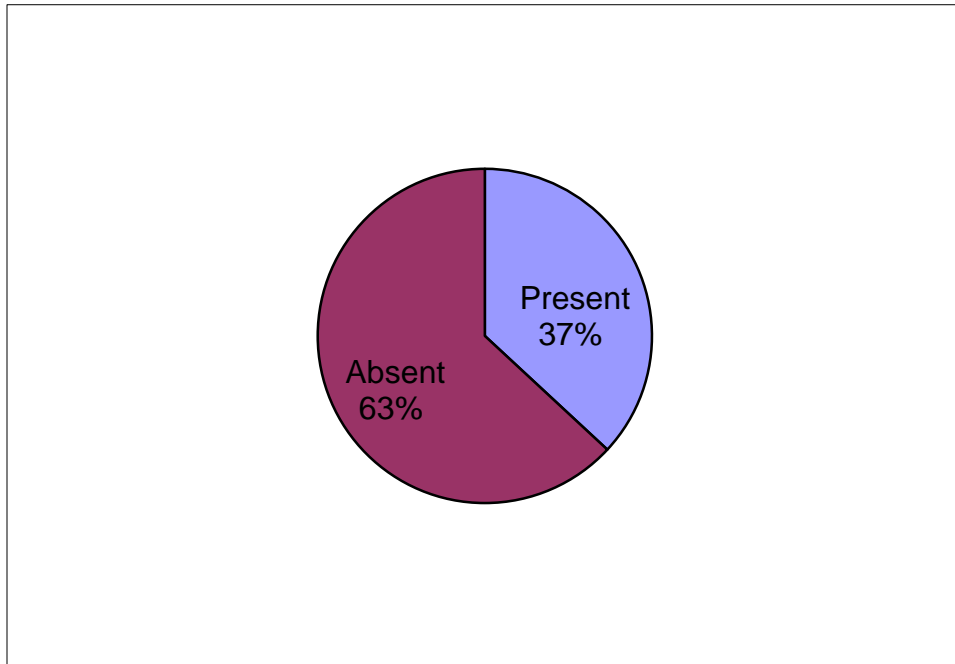
N=84

Fig. 3: The presence of the dust around the milk sale points in Elobeid markets – 2015

As it shown in above Fig**. (3)**. the presence of dust around the milk sale points, was found in 37% of milk sale points.

Table (5): The relation between holding of the boiled milk at room temperatures for extended periods of time and the presence of anaerobic spore forming bacteria(ASFB) in the samples of milk vended in Elobeid markets – 2015

Presence of ASFB / Holding of the milk	Present (%)	Absent (%)	Total (%)
Holding**(%)**	**24**	43	67
Not holding**(%)**	**6**	27	33
Total**(%)**	30	70	%100

N = 84 X^2 : calculated = **27.9** and tabulated = **3.84** Significant level = **0.05**

DISCUSSION

As illustrated in table (1) the presence or existence of anaerobic spore forming bacteria in the samples of boiled milk was 30% , and this existence was obtained by stormy fermentation test, which is used to demonstrate the existence of *Clostridium perfringens* in milk, as mentioned by Harrigan (10) "This method can be used to demonstrate the presence of *clostridium perfringens* in milk by the ʻstormy-clot' reaction".

The existence of anaerobic spore forming bacteria (Clostridium perfringens) in milk samples is considered an indicator of it's contamination by feces and an indicator for seriousness the consumption for that milk. This agrees El-kholy (9) "The existence of anaerobic spore forming bacteria like Clostridium perfringens in milk considers as indicator and guide over it contamination by feces, and … as that the existence of these microbes in milk forms seriousness over the public health for consumer and the detection of these microbes can be by stormy fermentation test".

Also the positive samples of boiled milk were considered containing *Cl. perfringens* organisms according to what was mentioned by Ramanathan (5)**:** "*Cl. perfringens* turns into another in most milk form called a spore, it is usually associated with food that has been allowed to stay warm for several hours", because it was found in most milk places (67%) the boiled milk was **hold** at room temperatures for extended periods of time, as shown in table (2), and most milk handlers **(** 92.86%) let the milk to **cool slowly** at room temperature (on the land, table or bunsen) after completing the boiling or bubbling asshown in table (3)**.**

The factors that contribute to the presence of anaerobic spore forming bacteria in the milk are:
- Holding of milk handlers for the boiled milk at room temperatures for extended periods of time, and slowly cooling of milk at room temperature as illustrated in tables (2 , 3). This conforms with what was mentioned by NSW Food Authority (7): " as the spores of *Cl. perfringens* can survive cooking, it is of most concern in cooked foods that have been temperature abused as this provides the opportunity for spores to germinate and grow. Potential temperature abuse scenarios include: holding cooked foods at warm temperatures for extended periods of time, and cooling foods too slowly".

Holding of the boiled milk at room temperatures by milk handlers is consider one of the factors that lead to food borne illness as mentioned by CDC (4): " five food safety risk factors related to employee behaviors and preparation practices have been identified as the leading contributing factors to food borne illness. They are improper holding temperatures , … etc " .

The keeping of boiled milk at room temperature was found in (94%) of sales points (Fig.1) and this provides favorite temperature for Cl. perfringens to grow as mentioned NSW Food Authority (7): "Cl. perfringens will grow between 15°C and 52°C with virtually no growth below 12°C.".

The presence of dust around the milk sale points was found in 37% (Fig. 3) , and making the milk open after it down from the fire was 96.6% (table 4), this consider another factors leading to milk contamination by anaerobic spore forming bacteria like Cl. perfringens because it found in the air as mentioned by Park (8): " the organism has been found in the … **soil**, … and **air** ".

The results of table (5) indicate that the high percentage (24%) for the presence of anaerobic spore forming bacteria (ASFB) belongs to holding of the boiled milk at room temperatures for extended periods of time. Those results confirm that the holding of the boiled milk at room temperatures for extended periods of time increases the presence of anaerobic spore forming bacteria on milk to 24%. This results were have statistical significance, because the calculated value of X^2 was larger than the tabulated value (27.9 > 3.84) under the significance level 0.05.

CONCLUSION

- The presence of anaerobic spore forming bacteria was found in 30% of milk samples.
- The factors that contribute to the presence of anaerobic spore forming bacteria in the milk are: Slowly cooling of milk at room temperature (92.86%).
- Also the holding of the boiled milk for extended periods of time at improper temperatures (at room temperatures) contributed to the presence of anaerobic spore forming bacteria in the boiled milk in 24%.
- The study recommend that health authority of Shekan locality is strongly recommended by doing health education and necessary training to the milk handlers about milk hygiene and safety (or hygienic handling) prior authorizing.

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EFFECT OF MATERNAL ABO BLOOD TYPE ON BIRTH WEIGHT

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ABSTRACT

Background*: ABO blood group has been recognized as a risk factor for distinct disease states. The association between ABO blood group and adverse pregnancy outcomes has not been extensively studied, especially in relation to birth weight. The aim of the present study is to determine whether ABO blood group contributes to the adverse pregnancy outcomes like low birth weight.*

Methods*: Medical data including ABO phenotypes were collected from hospital database and retrospectively reviewed. Adverse pregnancy outcome studied was low birth weight. Birth week was also noted for each subject.*

Results: *500 charts of mothers who had given birth in our hospital were studied. Overall 146 (29.2%) women had type O blood, 108 (21.6%) had type A blood, 194 (38.8%) had type B blood and 52 (10.4%) had type AB blood. Pregnant women with type B blood group had significantly lower birth weights compared with type O, A and AB. Birth weeks of all groups were found to be similar with no statistically significant difference*

Conclusions: *Maternal ABO phenotype is associated with low birth weight, while no association was found between blood type and birth week. We postulate that maternal/fetal immune system genes which are directly associated with ABO blood groups could affect pregnant with a resulting birth weight alterations.*

KEYWORDS: *ABO blood type, Birth weight, Pregnancy.*

I.INTRODUCTION

Various studies have shown a strong association between ABO blood groups and increased susceptibility to certain disease conditions including cardiovascular events, viral or bacterial infections, colorectal cancer, intracranial aneurysm and thromboembolic diseases. [1-4] Moreover, the relation between ABO blood type and adverse pregnancy outcomes has also been reported in literature including preeclampsia (PE), chorioamnionitis, venous thromboembolism and post-partum haemorrhage.[5] Unfortunately, controversies have arisen among these studies that have reported a possible relation between blood types and pregnancy outcomes.

ABO blood group antigens (namely, A, B, AB and O) which have been discovered nearly a century ago is expressed on the surface of a wide range of

human cells and tissues. [5,6] The blood group of a person depends upon the presence or absence of two genes A and B. Both the A and B alleles encode slightly different versions of the enzyme glycosyltransferases that produce both A and B antigens. The O allele encodes an inactive glycosyltransferase that leaves the ABO antigen precursor unmodified. These antigens exist in different cell and tissue systems including red blood cells (RBC), vascular endothelium, epidermis, platelets, and neurons.[7,8] Because of this wide range of expression, ABO blood group antigens constitute an intriguing field of research outside the area of transfusion and transplantation medicine including the area of reproductive medicine. Preliminary studies suggest that ABO blood type of pregnant women is an independent risk factor for adverse pregnancy outcomes.[9,10]

Adverse pregnancy complications including Pre Eclampsia, preterm birth and delivery of low birth weight (LBW) babies represent a major global public health concern. Although these complications generally depend upon the underlying maternal medical conditions such as poorly controlled blood pressure and diabetes, fetal and placental factors can also be responsible from this fetal complication.[11] In this context, LBW is one of the most intractable and yet clinically relevant complication affecting human pregnancies with an increased neonatal mortality and morbidity rates. Regardless of gestational age, LBW is defined as a birth weight of a live born infant of 2500 g or less. LBW babies are significantly at risk of death, contributing to the high perinatal morbidity and mortality. [12] Despite a great number of risk factors that is known to be associated with LBW, in 40% of cases the exact mechanisms causing LBW are not known. [13] Based on the association between ABO blood group and adverse pregnancy outcomes, we hypothesized that blood group antigens may be responsible for the pathogenesis of LBW babies. Therefore, the goal of this study was to evaluate ABO blood types with common adverse pregnancy event like LBW and preterm delivery.

II. METHODOLOGY

This retrospective study was conducted in the Department of Pediatrics at Northern Railway Central Hospital , New Delhi. After the approval from the Institutional Ethics Board, we used the hospital's database which contains details on demographic and clinical variables for both mothers and neonates. We retrospectively analyzed 500 women who had given birth in our hospital between June 2020 and December 2020. Only mothers with documented ABO blood group were included in the present study. Women having a history of any drug use (except for vitamins, iron and folate), multi-fetal pregnancy, erythroblastosis fetalis were excluded from the study. Regardless of gestational age, LBW was defined as weight at birth <2500 grams. The gestational age at birth was classified as term (≥37 weeks) and preterm (≤36+6 weeks). Statistical analysis was done with SPPS version 22.

III. RESULTS

A total of 500 pregnant women included in the present study. Mean age of study participants were 24.8±3.4. Mean age of the study participants according to ABO blood groups are presented in Table 1. The most common blood type detected in our study group was type B positive (37.0%).

Table-1: ABO blood types of study participants.

Blood Group	N	%
A+	102	20.40
A-	6	1.20
B+	185	37.00
B-	9	1.80
O+	137	27.40
O-	9	1.80
AB+	50	10.00
AB-	2	0.40
Total	500	100

194 out of 500 pregnants had type B blood, 146 had type O blood, 108 had type A blood and 52 had type AB blood. Mean birth weight and birth week of pregnant women are given in Table 2. Pregnant women with type B blood group had significantly lower birth weights compared with type O, A and AB. Birth weeks of all groups were found to be similar with no statistically significant difference.

Table 2: Birth week and birth weight according to blood groups.

Mean of	Blood Group				
	O (n=146)	A (n=108)	B (n=194)	AB (n=52)	p value
Birth wt. (gm)	2960	3021	2774	2996	<0.00001 *
Birth week	38.5	38.3	38.1	38.3	Not significant

*B blood type versus O, A and AB blood type.

9.58% pregnant women with O group, 6.48% with A group, 18.04% with B group and 7.69% pregnants with AB group had LBW babies. (Table 3). LBW babies were significantly higher in mothers with B blood group (p<0.005)

Table 3: Low birth weight babies (<2500 grams) according to maternal ABO blood group

	Blood Group	N	%
Low Birth Weight	O	14/146	9.58
	A	7/108	6.48
	B	35/194	18.04
	AB	4/52	7.69

IV.DISCUSSION

Several lines of evidence had previously suggested a possible association between ABO blood group and risk of adverse pregnancy outcomes including Low birth weight,Pre Eclampsia, chorioamnionitis, and venous thromboembolism. [5,6] Despite potential pathophysiological mechanisms and pathways which have been put forward to explain these associations, many conflicting results still awaits resolution. This study is performed in order to understand the existing knowledge and to fill the gap in this area. The main finding of the present study is to show that type B blood group is associated with LBW in pregnant women with no associated disease. Although no literature data exists regarding the association between ABO blood groups and birth weight, it is believed that ABO blood group antigens attached to cell surface glycoconjugates play many important roles in immune and coagulation systems. Moreover, particular combinations of maternal/fetal immune system genes which are directly associated with ABO blood groups could affect pregnants with a resulting birth weight alterations. In addition, fetal growth in uterus partially depends on the maternal blood supply to the placenta which necessitates structural modifications of the uterine spiral arteries. Therefore, the causative role of non-O blood type in arterial thrombosis may put a pregnant at a specific risk according to her inherited blood group antigens during pregnancy.

We admit some limitations of this analysis. Firstly, this is a retrospective study which includes a cohort from a single academic center. Second, we didn't analyse the association between ABO blood group and other adverse pregnancy outcomes such as pre eclampsia , chorioamnionitis, venous thromboembolism and gestational diabetes mellitus. And finally, missing data in this retrospective study may have weakened the association of the variables examined in this study.

V.CONCLUSION

In conclusion, we have to say that there is a potential association between ABO blood groups and birth weight which needs to be further investigated by prospective randomized trials.

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IMPACT OF DIGITALIZATION OF BANKS

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ABSTRACT

Years ago, when people talked about the work of a bank, they would come up with answers such as accepting deposits and providing loans, but today the scenario has changed, nowadays it's more like bankinganytime, banking anywhere. This requires an innovative, robust, secure, optimized and agile platform to meet the expectations of empowered and tech-savvy customers. This is due to digitalization of banks. Change of data into a digital database with appropriate use of technology is called as digitalization. The concept of digitalization is not a mere transformation from traditional methods of banking towards a digital method. It is a crucial change how banks and other financial institutions learn about, interact and satisfy customers. Banks are the backbone of any economy. Banking sector is the largest and vital player in financial sector, it plays a dominant role in the development of the individual as well as the nation. IT (information technology) has given a push new innovations and methods in the product development and their delivery in the banking and finance sector. The focus of banking is shifting from mass banking to class banking. The start of value added and customized products and services leads them to technology enable banking. The main objective of this paper is to understand the impact as well as the pros and cons of digitalization.

KEY WORDS: *Digitalization, Innovative, Banking sector, Information technology, Customized products*

INTRODUCTION

Financial sector plays a prominent role in growth of a country's economy. Banking is an important medium in today's financial activities and digital banking is becoming more popular and more advanced. One of the trends in the banking industry is large banks investing more and more in R&D and into the future. The modern world is filled with digitalization, banking sector is not exception to it. Digitalization has become integral part of our life, without which we feel the world is nothing. Banks of all sized are making huge investments in digital initiatives in order to maintain a unique nature and deliver the maximum need of a customer. Digitalization leads to more customisation and closer to customer. When a bank renders its services through online and

customer can make transactions, other activities online, it is called digital banking. In order to improve the customer service, Reserve Bank of India in 1988 set up a committee on computerization in banks headed by Dr. C. Rangarajan. The first bank in India to offer internet banking was the ICICI bank in 1996. Indian banks used technology-based solution to raise the revenues, increase customer experience and reduce cost structure.

Digital revolution in the Indian banking sector
(www.forbesindia.com)

OBJECTIVES
- To understand the pros and cons of digitalization.
- To understand the impact of digitalization of banks in India.
- To know the future of banking technology in India.

METHODOLOGY
This study is done by studying and referring theoretical data available from various online resources. This is purely theoretical paper.

PROS OF DIGITALIZATION
- **Customer service:** With the internet freely available everywhere, the customer needs to connect and can access his account. It saves time and expense as he no longer travels to the bank. One can sit back relax and make works done, even in the travelling also. Customers no longer wait in a long queue for his work.

- **Time constraint:** Some services in bank has fixed time period. Even the banks put boards at their branches specifying time for the particular services, even the cashing of cheque takes lot of time. But with digital banking it is instant, and no longer have time constraints.

- **Online bill payments:** With the start of online payments customers van save their time and money, by paying online. They no longer carrying cash and standing in queue for the payment of bills.

- **Lower heads:** Digital banking has drastically reduced the operating costs of a bank. So, banks also reduced the service costs and increased interest rates for its customers.

- **Banking benefits:** With the increase of anywhere, anytime banking, the number of customers also increased. Human error

calculations and record keeping reduced. With the records made electronical, it is possible to generate reports and compare whenever possible.

- **Reduction of fake currency:** With the use of digital banking and digital currency, most of the fake currency has reduced due to less usage of physical notes.
- **Gap between Rural and Urban:** Before digitalization only urban areas has all services, but not rural areas. From digitalization both rural and urban gets services from wherever they want. This the gap between rural and urban has reduced.
- **Increase of customers:** The encouragement of government to use electronic wallets made a rapid growth in the usage of technology in financial services. Nation can expect a greater number of people using debit/credit cards in the coming years.
- **Chatbots:** Many banks are already using AI based chatbots in their customer care services. People will see more updated chatbots with speed in their response, quality of interaction and quality of services rendered.
- **Mixed digital and physical processes:** Banks today offer merge digital and physical process to their customers. The customers could walk to bank and do their transactions by using their devices. This would certainly increase, especially in rural areas.

CONS OF DIGITALIZATION

- **Security threats:** External risks such as hacking, sniffing expose banks to security risks. Not only external, banks also have internal risks such as employee fraud or employee with collision with customers.
- **Customer awareness:** Though banks are updated but most of the customers are not, they don't know the use of e-services. This also may lead to fraud by external people. This is the major drawback in India.
- **Fear factor:**The biggest barriers of digital banking is fear of losing money. People from rural areas or older people use only conventional methods due to this reason. They fear of e-services.
- **Training:** Lack of sufficient knowledge and skills is a major backdrop for workforces to deal with pioneering and updating technologies. Training for all the employees whenever there is a change in IT is required.

IMPACT OF DIGITALIZATION OF BANKS

Digitalization in the country brings innovation, job opportunities and growth in the economy. Due to this adoption the banking sector in the country face a remarkable change. It is not possible to avoid the growth and services rendered by banks. By looking at the present scenario customers are taking more and more advantage of digitalization. With this bank have become more customer centric. Following are the devices and methods which changed the phase of Indian banking system.

- ATM's (Automatic teller machines)
- Telebanking
- Electronic Compensation Services (ECS)
- Electronic funds transfer (EFT)
- Real time gross settlement (RTGS)
- Point of sale terminal

In this crucial innovative business model, there is a key challenge where customers are protected against cybercrime. The change of digitalization and the continuity of it should try to reduce the costs for the industry, since it will reduce labour and automate the system.

FUTURE OF BANKING TECHNOLOGY IN INDIA

- **Machine learning:** Customers' needs can be predicted and provide them more customised which suits them through Data science. Some of the private banks have already adopted the technology and working on it for more efficiency.
- **Artificial Intelligence:** With artificial intelligence making a place in digital banking India, brings major changes in the banking process. In the future banking AI brings the power of innovative data analytics to challenge fraudulent activities, it also accomplishes anti-money laundering activities within seconds, which normally take hours or days.
- **Personalized service:** Digitalization of banks help customers, to customize their screens based on their past usage data. It will also help in filling certain details of the customer automatically in online forms. This will ensure well user practice.
- **Safekeeping:** With passwords and OTPs already in usage, customers now able to use biometric authentication, face recognition and voice recognition. ATMs will be screenless and can be controlled by smart devices.

- **Blockchain 2.0 technology:** More and more the usage of blockchain technology that means the account details of a customer will be upheld in real time across banks, neutralizing the risk of frauds by criminals.It offers a high-security, low-cost way of sending payments that cuts down on the need for verification from third parties and beats processing times for traditional bank transfers.

CONCLUSION

Technologically India is a very escalating country. Our country not only adopt technology but are constantly innovating,we are at the cutting edge of technology. Therefore, Indian digital banking future is bright and nation can expect new innovations and services from the banking sector. Artificial intelligence (AI) and Business Analytics has power to bring a key change. AI powered Robots is projected to be the future game changer in the banking sector. Several private banks are preparing to replace Robots for customer service, credit approval process and investment advisory to improve the customer service and cost feasible in the long run. The most preferred banking in the future is digital baking.

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THE FOLIAR SPRAY APPLICATION OF SELECTED ORGANIC FERTILIZERS AND THEIR EFFECTS ON SELECTED PLANTS – A REVIEW

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ABSTRACT

The organic fertilizer or manures like banana peel, coconut peat and waste milk tea (TW) are highly rich in nitrogen, potassium and phosphorus etc. (Vu, H. T., et al., 2018; Khan, M.Z., et al., 2019; Sial, T.A., et al., 2019). The sandy soil is one of the most severe conditions which negatively affect the growth of plant. The aim of the study is to report the foliar spray effect of milk tea waste extract, banana peel extract, coconut peat extract, on the growth of coriander and spinach plants. In this analysis different pots for various organic fertilizers were used to check their effect on plant growth and to investigate the improvement of biochemical properties of sandy soil (Vu, H. T., et al., 2018; Khan, M.Z., et al., 2019; Sial, T.A., et al., 2019).According to review, using various fertilizers growth parameters like plant height, numbers of leaves, shoot moisture content, NPK content present selected in plants can be compared. This review describes the best organic fertilizer among banana peel, coconut peat and waste milk tea and their effect on the growth parameters of coriander and spinach plant.

KEYWORDS: *Banana peel, Coconut peat, Waste milk tea, Fertilizer, Plants growth, Soil analysis.*

1. INTRODUCTION

The continuous increase of the global population puts great pressure on the environment, food, and vegetable production (Sial, T.A., *et al.*, 2019) to meet leafy plant production; vegetable crop production for future will put a stain on soil and water resource security in coming decades (Sofyan, E.T., *et al.*, 2019) Fertilizer is any organic or inorganic material of natural or synthetics origin that is added to a soil to supply one or more plant nutrients essential to the growth of the vegetable crop (Ismail, M.M., *et al.*, 2017). The use of organic fertilizer has long been recognized in

agriculture as advantages for maintenance of plant and yield development and soil fertility; new approaches to the use of organic matter in farming improving the soil structure (Arancon *et al.*, 2005).

The banana peel contains a high amount of antioxidants that are beneficial to our health in many ways (Farina *et al.*, 2006). Nutrient values vary greatly among organic fertilizers (Sofyan, E.T., et al., 2019). The milk tea waste and coconut peat is a batter option for the strong root growth traits [13, 25]. Cheapest and harmless materials can be used for the plant growth.
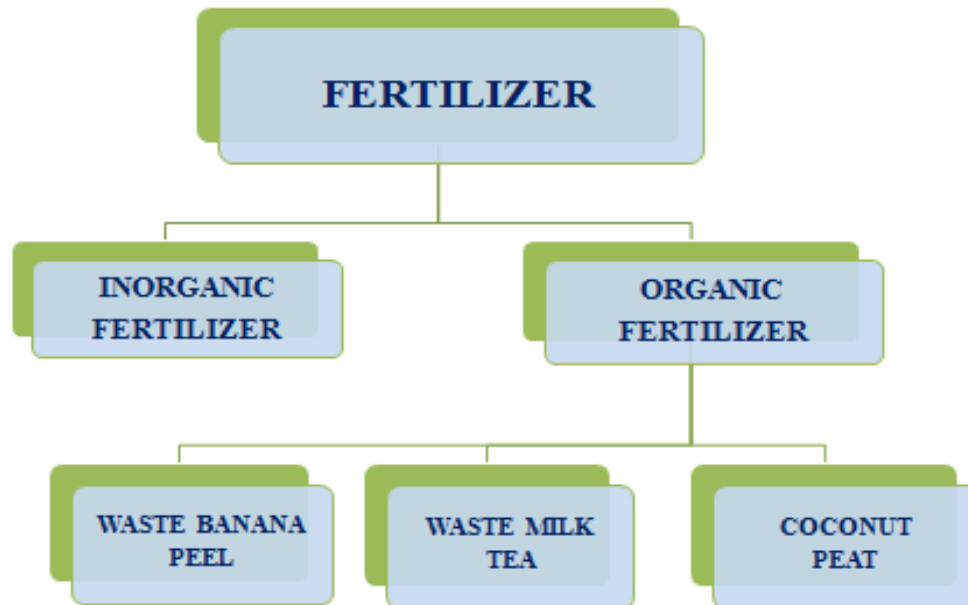
Figure 1. :-Types of selected organic fertilizers

1.1. GERNAL CHARACTERISTICS OF THE BANANA PEEL

Foods are essential for people with a large percentage. Banana peels are easily available agricultural waste that is being used as potential development (jariwala, H.J., *et al.*, 2016). The banana peels use as organic fertilizer which is cheapest and harmless material (Mercy, S., *et al.*, 2014). Banana peel helps to the medium of yeast, despite their rich carbohydrate content and other basic nutrients supporting yeast development (Mohapatra, D., *et al.*, 2010). Based on research banana peel is non- toxic and environmentally friendly ash to compatible as matrix for producing plant (QADER, H. et al., 2019). In banana peels iron and zinc were found in higher concentration and other nutrients like potassium, magnesium, phosphorus, calcium, etc. present in banana peels (Nik Yusuf, N.A.A., *et al.*, 2016).The cellulose, hemicelluloses, lignin and simple sugar also present in banana peel (Panwar, N. *et al.*, 2015). The banana peel contains two important source antioxidant and carbonaceous matter (QADER, H. *et al* 2019; Vu, H.T., *et al* 2018). The dietary proteins, essential amino acid, fibers, polyunsaturated fatty acids present in banana peel (Agama-Acevedo, E., *et al.*, 2016). The potassium helps plants to grow for their fruiting and flowering. The sodium in banana peels helps water flow between cells.

No.	Name of nutrients present in banana peel	Percentage
1.	starch	13%
2	Raw protein	6-9%
3	Raw fat	3.8-11%
4	lignin	6-12%
5	Pectin cellulose	7.6-9.6%
6	hemicelluloses	6.4-9.4%

Table no.:-1 percentage of nutrients present in banana peel (Panwar, N. et al., 2015)

1.2. GERNAL CHARACTRISTIC OF THE MILK TEA WASTE

The milk tea waste is a batter option for the root traits, plant growth soil quality and nutrients contents of sandy soil. The milk tea applied as nutritional source for plants and sandy soil combined with chemical fertilizer (Sial, T.A., *et al.*, 2019) Milk tea waste contains nutrients like nitrogen, potassium, phosphorus and low C: N ratio as compared to other organic amendments. It could be better amendment for sandy and low fertile soils. The TW breaks down and decomposes the soil (Sial, T.A., *et al.*, 2019).

Due to the high growing trend of grain demand, supplements of NPK are required. Increasing the population, causing economic and environmental harm, In particular in sandy soil, there are high N, P, K loss due to leaching and other environment effect (Muningsih, R., *et al.*, 2017). Nitrogen (N) is the element required by crops in greatest amount because the nitrogen is helpful to improvement of chlorophyll, an integral part of protein, and metabolic reaction (Khayum, N., *et al.*, 2018). The organic fertilizer improves the soil quality, and N can be supplied under different soil texture for crop demands. High rate improved mild carbon fraction of soil c breakdown by nitrogen macro organism (Sial, T.A., *et al.*, 2019). The phosphorus and potassium also helpful to improvement of plant growth and physiological effects for low fertility soil (Khayum, N., *et al.*, 2018). If we can use excessive chemical fertilizer to become a weak soil quality and plant growth. So milk tea waste is the best option for crop production.

1.3. GERNAL CHARACTERISTIC OF THE COCONUT PEAT

The coconut palm (*Cocos nucifera* L.) is a member of the family Arecaceae (palm family). It is the only accepted species in the genus *Coco* (Noguera, P., *et al.*, 1998). In modern year, Intensive crop production or cultivation using high-yielding multilateral crops with unbalanced fertilizer has mined rare native soil nutrients to support crop growth and production, Major soil ecological process in India have severely affected fertility and major soil production (Kurniawan, E. *et al.*, 2019). Available data indicated that most of our soil fertility deteriorated over the year. In the sandy soil the soil quality is very low so used the organic fertilizer (coconut peat) for crop production (Awang, Y., *et al* 2009; Beozzi, S., *et al*; 2015). The many nutrients present in coconut peat like nitrogen, calcium, sodium, magnesium etc. nutrients (Da costa, *et al*; 2019; Khan, M.Z., *et al.*, 2019).

The coconut peat has a high water holding capacity and has been traditionally used to improve the physical and chemical properties of soils. When one applied the coconut peat they help to improve moisture of soil, retention capacity and increase the available nutrient content, infiltration rate, total porosity and hydraulic conductivity of soil (Khan, M. Z., *et al.*, 2019). Coconut peat as organic fertilizer can also help in decrease environmental pollution and the use of organic manure in soil. The Coconut peat promotes strong root growth (Mariotti, B., *et al* 2020).

1.4. SELECTED PLANTS
1.4.1. CORIANDER (*Coriandrum sativum* L.)

Coriander (*Coriandrum sativum* L.), is one of the most important spice and medicinal an annual

herb in the family Apiaceae . It is also known as Chinese parsley, dhania or cilantro. It can be grown on a loamy soil and can also grow on heavy black soil (Da costa, R.S., *et al.*, 2019). All parts of the plant are edible, but the fresh leaves and the dried seeds (as a spice) are the parts most traditionally used in cooking. Excessive use of inorganic fertilizers result in salt accumulation in soil and forced the plant to spend more energy to take the water from the soil and may results in low yield or the complete wilting of plant (Ismail, M.M., *et al.*, 2017). It is cool season crop.

1.4.2. SPINACH (*Spinacia oleracea* L.)

Spinach (*Spinacia oleracea* L.) is an important leafy vegetable, of which the leaves and tender shoots are consumed fresh or processed (Citak, S., *et al.*, 2010). Spinach is native to central Asia, most probably Persia (Iran). Spinach (*Spinacia oleracea* L.) belongs to the family Chenopodiaceae. Spinach is annual for leaf production and biennial for seed production (Adhikay, S. *et al.*, 2012).

Spinach growing problems are related to growing spinach in the wrong season. Weather conditions may also be to blame for growing spinach. If the weather is too hot, seeds won't germinate, and if it's too cold, they could germinate much more slowly. Finally, keep soil evenly moist, as too little or too much water can also stop germination. An organic fertilizer high in nitrogen, the first number on the fertilizer package, will help produce dark, healthy plant leaves (Citak, S., *et al.*, 2010).

2. REVIEW OF THE LITERATURE

Sail, T. A.*et al.*, 2019 presented the treatment including practical usage of milk tea waste (TW) combined with chemical fertilizer. The application of organic amendments with inorganic fertilizers is an economically viable and environmentally comprehensive method to develop sustainable agriculture. The milk tea waste amendment combined with chemical fertilizer application can be used to improve the biochemical properties of sandy soil and wheat growth. The treatment control without amendment (T1), chemical fertilizer (T2), TW2.5% + F (T3), TW5%+F (T4), and TW10%+F (T5) was followed. The result showed the highest chlorophyll and carotenoids, shoot, and root dry biomass. The highest root total length, root surface area, root volume and diameter were recorded for T4 among all treatments. The greatest uptake of N, P, K, contents for T4 increased for the shoot by 68.9%, 58.3%, and 57.1% and for the root by 65.7%, 34.3%, and 47.4 % compared to the control.

Mercy, S.*et al.*, 2014 studied the effect of the fruit peels for the effective growth of plants and higher yield. Different fruit peels are used as pomegranate, orange, sweet lime, and banana. Fruit peels of banana, pomegranate, sweet lime and orange are highly rich in potash, ion, zinc, etc. Fruit peel powder formulation from the trace amount to higher amount is taken for the preparation of three formulations as formulation 1, formulation2, and formulation 3. The 1g of fruit peel powder was taken in 100ml distilled water. And then 3g of fruit peel powder was taken in 300ml distilled water and mixed thoroughly for the preparation of extract. Three formulation of fruit peel powder according to that were applied on soil and properly mixed for uniform distribution and water poured every day. As a result length of the plant was observed as lower in control and size of the leaves was increased in the plants which were grown on the soil having applied formulation.

Nik Yusuf, N. A. A., *et al.*, 2016 performed the analysis of the soil to degrade the bio-polymer with the help of banana peel and waste egg shell. The banana peel and waste egg shell producing bio-mulching film is new innovation in agricultural industry. Bio-mulching film is a biodegradable plastics film that can help in increasingthe moisture content of soil and improving the soil ingredients in order to make the plants grow well. The thin film is produced by using the waste banana peels the reinforcement fiber. The banana peel with egg shell 10% were affected bio – degradation in soil burial test.

QADER, H. 2019 studied the effect of the fruit peel like banana peel and orange peel as a natural fertilizer at dose (0, 4,8,12 g/ pol) by different methods like as powder, powder extract ,foliar spray on growth and development of chickpea plants. The powder method applied to each pot mixed with soil; in powder extract method 1g fruit peel was taken in 100ml distilled water and mixed thoroughly for the preparation of extract. And this prepared extract was used as foliar spray for each plant. It was noticed that fruit peels had a positive effect on growth and development of chickpeas plants. The fruit peels of banana and orange by different methods such as powder peels, powder extract, foliar spray have effective roles in growth and development by enhancingvegetative growth such as plant height, number of branches, water content, stem diameter, yield characteristics and chemical contents. Foliar application of banana and orange peel has been proven more effective than other methods.

Khan, M. Z., Era, M. D.,*et al.*, 2019 presented the effect on the coconut peat on growth and yield responses of *ipomoea aquatica* for pirojpur pot experiment and the experiment was laid to fit completely randomized design with five treatment

[control (T0), 1000kg coconut peat / ha (T1), 1500kg coconut peat /ha (T2) , 2000kg coconut peat /ha (T3), 25000 kg coconut peat/ha (T4) of coconut peat were compared with plants growth and yield with 0kg/ha coconut peat which was control for experiment and exhibited result having parameters like number of leaves per plant, root length per plant, shoot length per plant, fresh weigh per plant, dry weight per plant, moisture content per plant. At last the result of experiment showed that among the five treatments, comparatively T4 treatment has shown highest response of plant growth. The sequence of response was in the order T4>T3>T2>T1>T0.

Mariotti, B.*et al.*, 2020 presented the peat is a non sustainable resource is still predominately used in forest nurseries. Peat and coir in combinations were used in the various fertilization treatments and it was found in the result that they affected above and below ground morphology and to a lesser extent the physiological trait of quercus seedling. In this experiment the three species were used to study the growth with the help of combination of pure coir and coconut peat, and they used K- enriched and P-enriched fertilizers. In result they observed that the K-enriched fertilization promoted taller seedlings.

Vu, H. T.*et al.*, 2018 presented the study on phenolic compound within banana peel. They investigated the chemical profile of banana peel. The phenolics within banana peels have been found to possess potent antioxidant and antimicrobial properties linked with various health benefits. This paper highlights the phenolic compounds as well as a major factor affecting their presence within the banana peel.

Awang, Y.*et al.*, 2009 studied the effect of incorporation of coarser materials into coconut peat and presented that it could improve the aeration status of media. The selected chemical and physical characteristics of five types of growing media comprising of (v/v) 100% cocopeat, 70% cocopeat: 30% burnt rice hull, 70% coconut:30% perlite, 70% coconut peat:30% kenaf core fiber were determined and their suitability as growing media was tested using *celosia cristata*. The result of growth and flowering of *celosia cristata* were the greatest when grown in a mixture of 70% coco peat: 30% burnt rice hull and perhaps linked with a good balance in aeration and moisture of the media.

Muningsih, R.*et al.*, 2017 presented the study to determine the nutrient content of liquid waste from the processing of green tea and green tea fermentation liquid waste used as organic fertilizer. The benefits to be obtained is to provide information on the nutrient content of the liquid waste from the processing of green tea and green tea fermentation liquid waste used as organic fertilizer. Results of analysis of liquid waste showed high content of organic C (5, 7%) and nutrient content of macro and micro low i.e. N 0.24%, P 0.06%, K 0.69%, Cu 1.63 ppm and Zn 3.33 ppm. Liquid waste green tea as much as 1 liter with the addition of starter (EM-4) as much as 10 ml has not shown the effect on the percentage of seedlings and growth of seedlings i.e. plant height, number of leaves and greenery.

Kurniawan, E.*et al.*, 2019 studied the effect of fermentation time and influence of EM4 composition on nutrient quality insolid organic fertilizer (Coco peat husk waste And Goat of Dirt used). The results obtained based on the length of time of fermentation and Volume Effective Microorganism 4 (EM4) then obtained the best results at 60 ml EM4 volume and 16th day's fermentation time with 0.90% nitrogen content, 0.93% phosphorus, and potassium levels of 1.48%. The longer and more EM4 volume the more nutrients it gets.

The uses of milk tea waste combined with chemical fertilizer as a soil nutrients sources for better wheat growth, root trait, and soil biochemical properties within sandy soil (Sail, T. A., *et al.*, 2019). The application banana fruit peel powder extraction effective roles in growth and development of plants and foliar application is more effective than other methods (QADER, H. 2019). The coconut peat high rates increase the growth of *Ipomoea aquatica* and treatments gave significantly (p<0.05) difference in plant growth from the control (Khan, M. Z., Era, M. D.,*et al.*, 2019).

3. CONCLUSION

This review represents the effect of organic fertilizers added to soil having physiological changes such as plant height, plant weight, fresh leaves weight, dry leaves weight, and shoot moisture content of plant growth. It also includes the comparison of the different fertilizers like coconut peat, cow milk waste, and banana peel. In addition to that morphological study of coriander plant and spinach plant having effect of selected organic fertilizers are also included. After the growth of plants comparison of the soil fertility in control soil and soil with different organic fertilizers is also pointed out. Overall, the all three organic fertilizers are proven as potential, cheap and rich sources of nutrients and phenolic compounds.

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t-REGULAR t-DERIVATIONS ON p-SEMISIMPLE BCIK-ALGEBRAS

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ABSTRACT

In this paper, Introduced BCIK – algebra and its properties, and also we introduce the notion of derivation of a BCIK-algebra and investigate some related properties. We introduce the notion of t-derivation of a BCIK-algebra and investigate related properties. Moreover, we study t-derivation in a p-simisimple BCIK-algebra and establish some results on t-derivations in a p-semisimple BCIK-algebra.

KEYWORDS: *BCIK-algebra, p-semisimple, t-derivations, t-regular.*

1. INTRODUCTION

In 1966, Y. Imai and K. Iseki [1,2] defined BCK – algebra in this notion originated from two different sources: one of them is based on the set theory the other is form the classical and non – classical propositional calculi. In [3]. Y.B. Jun and X.L. Xin applied the notion of derivation in ring and near – ring theory to BCI – algebras, and they also introduced a new concept called a derivation in BCI–algebras and its properties. We introduce combination BCK–algebra and BCI–algebra to define BCIK–algebra and its properties and also using Lattices theory to derived the some basic definitions, an algebra of type (1,0), also known as BCIK-algebra, and they also introduced a new concept called a regular derivation in BCIK-algebras. We introduce left derivation p-semisimple algebra and its properties.

After the work of Jun and Xin (2004) [3], many research articles have appeared on the derivations of BCI-algebras In different aspects as follows: in 2005 [13], Zhan and Liu have given the notion of f-derivation of BCI-algebras and studied p-semisimple BCI—algebras by using the idea of regular f-derivation in BCI-algebras. In 2006 [14] Abujabal and Al-sheshri have extended the results of BCI-algebra. Further, in the next year 2007[15] they defined and studied the notion of left derivation of BCI-algebra and incestigated some properties of left derivation in p-semisimple BCI-algebras. In 2009 [16], Ozturk and Ceven have defined the notion of derivation and generalized derivation determined by a derivation for a complicated subtraction algebra and discussed some related properties. Also, in 2009 [17], Ozturk et al. have introduced the notion of generalized derivation in BCI-algebras and established some results. Further, they have given the idea of torsion free BCI-algebra and explored some properties. In 2010 [18], Al-Shehri has applied the notion of left-right (resp.,right-left)derivation in BCI-algebra in BCI-algebra and obtained some of its properties. In 2011[19], IIbira et al, have studied the notion of left-right(resp.,right-left)symmetric biderivation in BCI-algebras.

Motivated by a lot work done on derivations of BCI-algebra and on derivations of other related abstract algebraic structures, in this paper we introduce the notion of t-derivation on BCIK-algebras and obtain some of its related properties. Further, we characterize the notion of p-semisimple BCIK-algebra xby using the notion of t-derivation and show that if d_t and d_t' are t-derivations on X, then d_t o d_t' is also a t-derivation and d_t o d_t' = d_t' o d_t. Finally, we prove that d_t' * d_t, where d_t and d_t' are t-derivations on a p-semisimple BCIK-algebra.

2. PRELIMINARIES

Definition 2.1 BCIK algebra

Let X be a non-empty set with a binary operation * and a constant 0. Then (X, * ,0) is called a BCIK Algebra, if it satisfies the following axioms for all x, y, z Є X:

(BCIK-1) x*y = 0, y*x = 0, z*x = 0 this imply that x = y = z.

(BCIK-2) ((x*y) * (y*z)) * (z*x) = 0.

(BCIK-3) (x*(x*y)) * y = 0.

(BCIK-4) x*x = 0, y*y = 0, z*z = 0.

(BCIK-5) 0*x =0, 0*y = 0, 0*z = 0.

For all x, y, z Є X. An inequality ≤ is a partially ordered set on X can be defined x ≤ y if and only if

(x*y) * (y*z) = 0.

Properties 2.2. [5] I any BCIK – Algebra X, the following properties hold for all x, y, z Є X:

(1) 0 Є X.
(2) x*0 = x.
(3) x*0 = 0 implies x = 0.
(4) 0*(x*y) = (0*x) * (0*y).
(5) X*y = 0 implies x = y.
(6) X*(0*y) = y*(0*x).
(7) 0*(0*x) = x.
(8) x*y Є X and x Є X imply y Є X.
(9) (x*y) * z = (x*z) * y
(10) x*(x*(x*y)) = x*y.
(11) (x*y) *(y*z) = x*y.
(12) 0 ≤ x ≤ y for all x, y Є X.
(13) x ≤ y implies x*z ≤ y*z and z*y ≤ z*x.
(14) x*y ≤ x.
(15) x*y ≤ z ⇔ x*z ≤ y for all x, y, z Є X
(16) x*a = x*b implies a = b where a and b are any natural numbers (i. e)., a, b Є N
(17) a*x = b*x implies a = b.
(18) a*(a*x) = x.

Definition 2.3. [4, 5, 6, 7] Let X be a BCIK – algebra. Then, for all x, y, z Є X:

(1) X is called a positive implicative BCIK – algebra if (x*y) * z = (x*z) * (y*z).
(2) X is called an implicative BCIK – algebra if x*(y*x) = x.
(3) X is called a commutative BCIK – algebra if x*(x*y) = y*(y*x).
(4)   X is called bounded BCIK – algebra, if there exists the greatest element 1 of X, and for any x Є X, 1*x is denoted by GGx,
(5) X is called involutory BCIK – algebra, if for all x Є X, GGx = x.

Definition 2.4. [5, 7] Let X be a bounded BCIK-algebra. Then for all x, y Є X:

(1) $G1 = 0$ and $G0 = 1$,

(2) $GG_x \le x$ that $GG_x = G(G_x)$,

(3) $G_x * G_y \le y*x$,

(4) $y \le x$ implies $G_x \le G_y$,

(5) $G_{x*y} = G_{y*x}$

(6) $GGG_x = G_x$.

Theorem 2.5. [8] Let X be a bounded BCIK-algebra. Then for any x, y $\in$ X, the following hold:

(1) X is involutory,

(2) $x*y = G_y * G_x$,

(3) $x*G_y = y * G_x$,

(4) $x \le G_y$ implies $y \le G_x$.

Theorem 2.6. [5] Every implicative BCIK-algebra is a commutative and positive implicative BCIK-algebra.

Definition 2.7. [10,11] Let X be a BCIK-algebra. Then:

(1) X is said to have bounded commutative, if for any x, y $\in$ X, the set $A(x,y) = \{t \in X : t*x \le y\}$ has the greatest element which is denoted by x o y,

(2) $(X, * , \le)$ is called a BCIK-lattices, if $(X,\le)$ is a lattice, where $\le$ is the partial BCIK-order on X, which has been introduced in Definition 2.1.

Definition 2.8. [11] Let X be a BCIK-algebra with bounded commutative. Then for all x, y, z $\in$ X:

(1) $y \le x$ o $(y*x)$,

(2) $(x$ o $z) * (y$ o $z) \le x*y$,

(3) $(x*y) * z = x*(y$ o $z)$,

(4) If $x \le y$, then x o $z \le y$ o z,

(5) $z*x \le y \Leftrightarrow z \le x$ o y.

Theorem 2.9. [12] Let X be a BCIK-algebra with condition bounded commutative. Then, for all x, y, z $\in$ X, the following are equivalent:

(1) X is a positive implicative,

(2) $x \le y$ implies x o $y = y$,

(3) x o $x = x$,

(4) $(x$ o $y) * z = (x*z)$ o $(y*z)$,

(5) x o $y = x$ o $(y*x)$.

Theorem 2.10. [8, 9, 10] Let X be a BCIK-algebra.

(1) If X is a finite positive implicative BCIK-algebra with bounded and commutative the $(X, \le)$ is a distributive lattice,

(2)   If X is a BCIK-algebra with bounded and commutative, then X is positive implicative if and only if $(X, \le)$ is an upper semi lattice with x $\vee$ y = x o y, for any x, y $\in$ X,

(3) If X is bounded commutative BCIK-algebra, then BCIK-lattice $(X, \le)$ is a distributive lattice, where x $\wedge$ y = $y*(y*x)$ and x $\vee$ y= $G(G_x \wedge G_y)$.

Theorem 2.11. [8] Let X be an involutory BCIK-algebra, Then the following are equivalent:

(1) $(X, \le)$ is a lower semi lattice,

(2) $(X, \leq)$ is an upper semi lattice,

(3) $(X, \leq)$ is a lattice.

Theorem 2.12. [6] Let X be a bounded BCIK-algebra. Then:

(1) every commutative BCIK-algebra is an involutory BCIK-algebra.

(2) Any implicative BCIK-algebra is a Boolean lattice (a complemented distributive lattice).

Theorem 2.13. [7, 9] Let X be a BCK-algebra, Then, for all x, y, z $\in$ X, the following are equivalent:

(1) X is commutative,

(2) $x*y = x*(y*(y*x))$,

(3) $x*(x*y) = y*(y*(x*(x*y)))$,

(4) $x \leq y$ implics $x = y*(y*x)$.

3. Regular Left derivation p-semisimple BCIK-algebra

Definition 3.1. Let X be a p-semisimple BCIK-algebra. We define addition + as $x + y = x*(0*y)$ for all x, y $\in$ X. Then $(X,+)$ be an abelian group with identity 0 and $x - y = x*y$. Conversely, let $(X,+)$ be an abelian group with identity 0 and let $x - y = x*y$. Then X is a p-semisimple BCIK-algebra and $x + y = x*(0*y)$, for all x, y $\in$ X (see [16]). We denote $x \square y = y * (y * x)$, $0 * (0 * x) = a_x$ and
$L_p(X) = \{a \in X / x * a = 0$ implies $x = a$, for all x $\in$ X$\}$.

For any x $\in$ X. $V(a) = \{a \in X / x * a = 0\}$ is called the branch of X with respect to a. We have $x * y \in V(a * b)$, whenever x $\in$ V(a) and y $\in$ V(b), for all x, y $\in$ X and all a, b $\in$ $L_p(X)$, for $0 * (0 * a_x) = a_x$ which implies that $a_x * y \in L_p(X)$ for all y $\in$ X. It is clear that $G(X) \subset L_p(X)$ and $x * (x * a) = a$ and $a * x \in L_p(X)$, for all a $\in$ $L_p(X)$ and all x $\in$ X. For more detail, we refer to [17,18,19,20,21].

Definition 3.2. ([3]) Let X be a BCIK-algebra. By a (l, r)-derivation of X, we mean a self d of X satisfying the identity
$$d(x * y) = (d(x) * y) \wedge (x * d(y)) \text{ for all x, y } \in X.$$
If X satisfies the identity
$$d(x * y) = (x * d(y)) \wedge (d(x) * y) \text{ for all x, y } \in X,$$
then we say that d is a (r, l)-derivation of X
Moreover, if d is both a (r, l)-derivation and (r, l)-derivation of X, we say that d is a derivation of X.

Definition 3.3. ([3]) A self-map d of a BCIK-algebra X is said to be regular if $d(0) = 0$.

Definition 3.4. ([3]) Let d be a self-map of a BCIK-algebra X. An ideal A of X is said to be d-invariant, if $d(A) = A$.
In this section, we define the left derivations

Definition 3.5. Let X be a BCIK-algebra By a left derivation of X, we mean a self-map D of X satisfying
$$D(x * y) = (x * D(y)) \wedge (y * D(x)), \text{ for all x, y } \in X.$$

Example 3.6. Let X = {0,1,2} be a BCIK-algebra with Cayley table defined by

*	0	1	2
0	0	0	2
1	1	0	2
2	2	2	0

Define a map D: X $\rightarrow$ X by

$$D(x) = \begin{cases} 2 & if\ x = 0,1 \\ 0 & if\ x = 2. \end{cases}$$

Then it is easily checked that D is a left derivation of X.

Proposition 3.7. Let D be a left derivation of a BCIK-algebra X. Then for all x, y $\in$ X, we have

    (1) x * D(x) = y * D(y).
    (2) D(x) = $a_{D(x)\square x}$.
    (3) D(x) = D(x) $\wedge$ x.
    (4) D(x) $\in$ L $_p$(X).

Proof.
    (1) Let x, y $\in$ X. Then
       D(0) = D(x * x) = (x * D(x)) $\wedge$ (x * D(x)) = x * D(x).
Similarly, D(0) = y * D(y). So, D(x) = y * D(y).
    2) Let x $\in$ X. Then
         D(x) = D(x * 0)
             = (x * D(0)) $\wedge$ (0 * D(x))
             = (0 * D(x)) * ((0 * D(x)) * (x * D(0)))
            $\le$ 0 * (0 * (x * D(x))))
             = 0 * (0 * (x * (x * D(x))))
             = 0 * (0 * (D(x) $\wedge$ x))
             = $a_{D(x)\square x}$.
Thus   D(x) $\le$ $a_{D(x)\square x}$. But
                $a_{D(x)\square x}$ = 0(0 * (D(x) $\wedge$ x)) $\le$ D(x) $\wedge$ x $\le$ D(x).
Therefore, D(x) = $a_{D(x)\square x}$.
    (3) Let x $\in$ X. Then using (2), we have
         D(x) = $a_{D(x)\square x}$ $\le$ D(x) $\wedge$ x .
But we know that D(x) $\wedge$ x $\le$ D(x), and hence (3) holds.
    (4) Since a_x $\in$ L $_p$(X), for all x $\in$ X, we get D(x) $\in$ L $_p$(X) by (2).

Remark 3.8. Proposition 3.3(4) implies that D(X) is a subset of L $_p$(X).

Proposition 3.9. Let D be a left derivation of a BCIK-algebra X. Then for all x, y $\in$ X, we have

    (1) Y * (y * D(x)) = D(x).
    (2) D(x) * y $\in$ L $_p$(X).

Proposition 3.10. Let D be a left derivation of a BCIK-algebra of a BCIK-algebra X. Then

    (1) D(0) $\in$ L $_p$(X).
    (2) D(x) = 0 + D(x), for all x $\in$ X.
    (3) D(x + y) = x + D(y), for all x, y $\in$ L $_p$(X).
    (4) D(x) = x, for all x $\in$ X if and only if D(0) = 0.
    (5) D(x) $\in$ G(X), for all x $\in$ G(X).

Proof.
    (1) Follows by Proposition 3.3(4).
    (2) Let x $\in$ X. From Proposition 3.3(4), we get D(x) = $a_{D(x)}$, so we have

       D(x) = $a_{D(x)}$ = 0 * (0 * D(x)) = 0 + D(x).
    (3) Let x, y $\in$ L $_p$(X). Then
       D(x + y) = D(x * (0 * y))
            = (x * D(0 * y)) $\wedge$ ((0 * y) * D(x))
            = ((0 * y) * D(x)) * (((0 * y) * D(x) * (x * D(0 * y)))

$$= x * D(0 * y)$$
$$= x * ((0 * D(y)) \wedge (y * D(0)))$$
$$= x * D(0 * y)$$
$$= x * (0 * D(y))$$
$$= x + D(y).$$

(4) Let $D(0) = 0$ and $x \in X$. Then
$$D(x) = D(x) \wedge x = x * (x * D(x)) = x * D(0) = x * 0 = x.$$
Conversely, let $D(x) = x$, for all $x \in X$. So it is clear that $D(0) = 0$.

(5) Let $x \in G(x)$. Then $0 * = x$ and so
$$D(x) = D(0 * x)$$
$$= (0 * D(x)) \wedge (x * D(0))$$
$$= (x * D(0)) * ((x * D(0)) * (0 * D(x))$$
$$= 0 * D(x).$$
This give $D(x) \in G(X)$.

Remark 3.11. Proposition 3.6(4) shows that a regular left derivation of a BCIK-algebra is the identity map. So we have the following:

Proposition 3.12. A regular left derivation of a BCIK-algebra is trivial.

Remark 3.13. Proposition 3.6(5) gives that $D(x) \in G(X) \subseteq L_p(X)$.

Definition 3.14. An ideal A of a BCIK-algebra X is said to be D-invariant if $D(A) \subset A$.
Now, Proposition 3.8 helps to prove the following theorem.

Theorem 3.15. Let D be a left derivation of a BCIK-algebra X. Then D is regular if and only if ideal of X is D-invariant.
Proof.
Let D be a regular left derivation of a BCIK-algebra X. Then Proposition 3.8. gives that $D(x) = x$, for all $x \in X$. Let $y \in D(A)$, where A is an ideal of X. Then $y = D(x)$ for some $x \in A$. Thus
$$Y * x = D(x) * x = x * x = 0 \in A.$$
Then $y \in A$ and $D(A) \subset A$. Therefore, A is D-invarient.
Conversely, let every ideal of X be D-invariat. Then $D(\{0\}) \subset \{0\}$ and hence $D(0)$ and D is regular.
Finally, we give a characterization of a left derivation of a p-semisimple BCIK-algebra.

Proposition 3.16. Let D be a left derivation of a p-semisimple BCIK-algebra. Then the following hold for all x, y $\in X$:
(1) $D(x * y) = x * D(y)$.
(2) $D(x) * x = D(y) * Y$.
(3) $D(x) * x = y * D(y)$.
Proof.
(1) Let x, y $\in X$. Then
$$D(x * y) = (x * D(y)) \wedge \wedge (y * D(x)) = x * D(y).$$
(2) We know that
$$(x * y) * (x * D(y)) \leq D(y) * y \text{ and}$$
$$(y * x) * (y * D(x)) \leq D(x) * x.$$
This means that
$$((x * y) * (x * D(y))) * (D(y) * y) = 0, \text{ and}$$
$$((y * x) * (y * D(x))) * (D(x) * x) = 0.$$
So
$$((x * y) * (x * D(y))) * (D(y) * y) = ((y * x) * (y * D(x))) * (D(x) * x). \quad (I)$$
Using Proposition 3.3(1), we get,
$$(x * y) * D(x * y) = (y * x) * D(y * x). \quad (II)$$

By (I), (II) yields

$(x * y) * (x * D(y)) = (y * x) * (y * D(x))$.

Since X is a p-semisimple BCIK-algebra. (I) implies that

$D(x) * x = D(y) * y$.

(3) We have, $D(0) = x * D(x)$. From (2), we get $D(0) * 0 = D(y) * y$ or $D(0) = D(y) * y$.

So $D(x) * x = y * D(y)$.

Theorem 3.17. In a p-semisimple BCIK-algebra X a self-map D of X is left derivation if and only if and if it is derivation.

Proof.

Assume that D is a left derivation of a BCIK-algebra X. First, we show that D is a (r,l)-derivation of X. Then

$D(x * y) = x * D(y)$

$= (D(x) * y) * ((D(x) * Y) * (x * D(y)))$

$= (x * D(y)) \wedge (D(x) * y)$.

Now, we show that D is a (r,l)-derivation of X. Then

$D(x * Y) = x * D(y)$

$= (x * 0) * D(y)$

$= (x * (D(0) * D(0)) * D(y)$

$= (x * ((x * D(x)) * (D(y) * y))) * D(y)$

$= (x * ((x * D(y)) * (D(x) * y))) * D(y)$

$= (x * D(y) * ((x * D(y)) * (D(x) * Y))$

$= (D(x) * y) \wedge (x * D(y))$.

Therefore, D is a derivation of X.

Conversely, let D be a derivation of X. So it is a (r,l)-derivation of X. Then

$D(x * y) = (x * D(y)) \wedge (D(x) * y)$

$= (D(x) * y) * ((D(x) * y) * (x * D(y)))$

$= x * D(y) = (y * D(x)) * ((y * D(x)) * (x * D(y)))$

$= (x * D(y)) \wedge (y * D(x))$.

Hence, D is a left derivation of X.

4. t-Derivations in a BCIK-algebra/p-Semisimple BCIK-algebra

The following definitions introduce the notion of t-derivation for a BCIK-algebra.

Definition 4.1. Let X be a BCIK-algebra. Then for t ∈ X, we define a self map $d_t : X \rightarrow X$ by $d_t(x) = x * t$ for all x ∈ X.

Definition 4.2. Let X be a BCIK-algebra. Then for any t ∈ X, a self map $d_t : X \rightarrow X$ is called a left-rifht t-derivation or (l,r)-t-derivation of X if it satisfies the identity $d_t(x * Y) = (d_t(x) * y) \wedge (x * d_t(y))$ for all x, y ∈ X.

Definition 4.3. Let X be a BCIK-algebra. Then for any t ∈ X, a self map $d_t : X \rightarrow X$ is called a left-right t-derivation or (l,r)-t-derivation of X if it satisfies the identity $d_t(x * y) = (x * d_t(y)) \wedge (d_t(x) * y)$ for all x, y ∈ X.

Moreover, if d_t is both a (l,r) and a(r.l)-t-derivation on X, we say that d_t is a t-derivation on X.

Example 4.4. Let X = {0,1,2} be a BCIK-algebra with the following Cayley table:

*	0	1	2
0	0	0	2
1	1	0	2
2	2	2	0

For any t ∈ X, define a self map $d_t : X \rightarrow X$ by $d_t(x) = x * t$ for all x ∈ X. Then it is easily checked that d_t is a t-derivation of X.

Proposition 4.5. Let d_t be a self map of an associative BCIK-algebra X. Then d_t is a (l,r)-t-derivation of X.

Proof. Let X be an associative BCIK-algebra, then we have

$d_t(x * y) = (x * y)$

$$= \{x * (y * t)\} * 0$$
$$= \{x * (y * t)\} * [\{x * (y * t)\} * \{x * (y * t)\}]$$
$$= \{x * (y * t)\} * [\{x * (y * t)\} * \{(x * y) * t\}]$$
$$= \{x * (y * t)\} * [\{x * (y * t)\} * \{(x * t) * y\}]$$
$$= ((x * t) * y) \wedge (x * (y * t))$$
$$= (d_t(x) * y) \wedge (x * d_t(y)).$$

Proposition 4.6. Let d_t be a self map of an associative BCIK-algebra X. Then, d_t is a (r,l)-t-derivation of X.
Proof. Let X be an associative BCIK-algebra, then we have
$$d_t(x * y) = (x * y) * t$$
$$= \{(x * t) * y\} * 0$$
$$= \{(x * t) * y\} * [\{(x * t) * y\} * \{(x * t) * y)]$$
$$= \{(x * t) * y\} * [\{(x * t) * y\} * \{(x * y) * t\}]$$
$$= \{(x * t) * y\} * [\{(x * t) * y\} * \{x * (y * t)\}]$$
$$= (x * (y * t)) \wedge ((x * t) * y)$$
$$= (x * d_t(y)) \wedge (d_t(x) * y)$$
Combining Propositions 4.5 and 4.6, we get the following Theorem.

Theorem 4.7. Let d_t be a self map of an associative BCIK-algebra X. Then, d_t is a t-derivation of x.

Definition 4.8. A self map d_t of a BCIK-algebra X is said to be t-regular if $d_t(0) = 0$.

Example 4.9. Let X = {0, a, b} be a BCIK-algebra with the following Cayley table:

*	0	a	b
0	0	0	b
a	a	0	b
b	b	b	0

(1) For any t $\in$ X, define a self map d_t : X $\rightarrow$ X by

$$d_t(x) = x * t = \begin{cases} b \, if \ x = 0, a \\ 0 \, if \ x = b \end{cases}$$

Then it is easily checked that d_t is (l,r) and (r,l)-t-derivations of X, which is not t-regular.
(2) For any t $\in$ X, define a self map d'_t : X $\rightarrow$ X by
$$d_t'(x) = x * t = \ 0 \ if \ x = 0, a$$
$$b \ if \ x = b.$$
Then it is easily checked that d_t' is (l,r) and (r,l)-t-derivations of X, which is t-regular.

Proposition 4.10. Let d_t be a self map of a BCIK-algebra X. Then
(1) If d_t is a (l,r)-t- derivation of x, then $d_t(x) = d_t(x) \wedge x$ for all x $\in$ X.
(2) If d_t is a (r,l)-t-derivation of X, then $d_t(x) = x \wedge d_t(x)$ for all x $\in$ X if and only if d_t is t-regular.
Proof.
(1) Let d_t be a (l,r)-t-derivation of X, then
$$d_t(x) = d_t(x * 0)$$
$$= (d_t(x) * 0) \wedge (x * d_t(0))$$
$$= d_t(x) \wedge (x * d_t(0))$$
$$= \{x * d_t(0)\} * [\{x * d_t(0)\} * d_t(x)]$$
$$= \{x * d_t(0)\} * [\{x * d_t(x)\} * d_t(0)]$$
$$\leq x * \{x * d_t(x)\}$$
$$= d_t(x) \wedge x.$$
But $d_t(x) \wedge x \leq d_t(x)$ is trivial so (1) holds.
(2) Let d_t be a (r,l)-t-derivation of X. If $d_t(x) = x \leq d_t(x)$ then
$$d_t(0) = 0 \wedge d_t(0)$$

$$= d_t(0) * \{ d_t(0) * 0\}$$
$$= d_t(0) * d_t(0)$$
$$= 0$$

Thereby implying d_t is t-regular. Conversely, suppose that d_t is t-regular, that is $d_t(0) = 0$, then we have
$$d_t(0) = d_t(x * 0)$$
$$= (x * d_t(0)) \wedge (d_t(x) * 0)$$
$$= (x * 0) \wedge d_t(x)$$
$$= x \wedge d_t(x).$$

The completes the proof.

Theorem 4.11. Let d_t be a (l,r)-t-derivation of a p-semisimple BCIK-algebra X. Then the following hold:
  (1) $d_t(0) = d_t(x) * x$ for all x $\in$ X.
  (2) d_t is one-0ne.
  (3) If there is an element x $\in$ X such that $d_t(x) = x$, then d_t is identity map.
  (4)   If $x \leq y$, then $d_t(x) \leq d_t(y)$ for all x, y $\in$ X.

Proof.
  (1) Let d_t be a (l,r)-t-derivation of a p-semisimple BCIK-algebra X. Then for all x $\in$ X, we have x * x = 0 and so
$$d_t(0) = d_t(x * x)$$
$$= (d_t(x) * x) \wedge (x * d_t(x))$$
$$= \{x * d_t(x)\} * [\{x * d_t(x)\} * \{d_t(x) * x\}]$$
$$= d_t(x) * x$$
  (2) Let $d_t(x) = d_t(y) \Longrightarrow x * t = y * t$, then we have x = y and so d_t is one-one.
  (3) Let d_t be t-regular and x $\in$ X. Then, $0 = d_t(0)$ so by the above part(1), we have $0 = d_t(x) * x$ and, we obtain $d_t(x) = x$ for all x $\in$ X. Therefore, d_t is the identity map.
  (4) It is trivial and follows from the above part (3).
  (5) Let $x \leq y$ implying x * y = 0. Now,
$$d_t(x) * d_t(y) = (x * t) * (y * t)$$
$$= x * y$$
$$= 0.$$

Therefore, $d_t(x) \leq d_t(y)$. This completes proof.

Definition 4.12. Let d_t be a t-derivation of a BCIK-algebra X. Then, d_t is said to be an isotone t-derivation if $x \leq y \Longrightarrow d_t(x) \leq d_t(y)$ for all x, y $\in$ X.

Example 4.13. In Example 4.9(2), d_t' is an isotone t-derivation, while in Example 4.9(1), d_t is not an isotone t-derivation.

Proposition 4.14. Let X be a BCIK-algebra and d_t be a t-derivation on X. Then for all x, y $\in$ X, the following hold:
  (1) If $d_t(x \wedge y) = d_t(x) d_t(x) d_t(x)$, then d_t is an isotone t-derivation
  (2) If $d_t(x \wedge y) = d_t(x) * d_t(y)$, then d_t is an isotone t-derivation.

Proof.
  (1) Let $d_t(x \wedge y) = d_t(x) \wedge d_t(x)$. If $x \leq y \Longrightarrow x \wedge y = x$ for all x, y $\in$ X. Therefore, we have
$$d_t(x) = d_t(x \wedge y)$$
$$= d_t(x) \wedge d_t(y)$$
$$\leq d_t(y).$$

Henceforth $d_t(x) \leq d_t(y)$ which implies that d_t is an isotone t-derivation.
  (2) Let $d_t(x * y) = d_t(x) * d_t(y)$. If $x \leq y \Longrightarrow$ x * y = 0 for all x, y $\in$ X. Therefore, we have
$$d_t(x) = d_t(x * 0)$$
$$= d_t\{x * (x * y)\}$$
$$= d_t(x) * d_t(x * y)$$
$$= d_t(x) * \{ d_t(x) * d_t(y)\}$$
$$\leq d_t(y).$$

Thus, $d_t(x) \leq d_t(y)$. This completes the proof.

Theorem 4.15. Let d_t be a t-regular (r,l)-t-derivation of a BCIK-algebra X. Then, the following hold:
   (1) $d_t(x) \leq x$ for all $x \in X$.
   (2) $d_t(x) * y \leq x * d_t(y)$ for all $x, y \in X$.
   (3) $d_t(x * y) = d_t(x) * y \leq d_t(x) * d_t(y)$ for all $x, y \in X$.
   (4) $Ker(d_t) := \{ x \in X : d_t(x) = 0 \}$ is a subalgebra of X.
Proof.
   (1) For any $x \in X$, we have $d_t(x) = d_t(x * 0) = (x * d_t(0)) \wedge (d_t(x) * 0) = (x * 0) \wedge (d_t(x) * 0) = x \wedge d_t(x) \leq$ x.
   (2) Since $d_t(x) \leq x$ for all $x \in X$, then $d_t(x) * y \leq x * y \leq x * d_t(y)$ and hence the proof follows.
   (3) For any $x, y \in X$, we have
$$d_t(x * y) = (x * d_t(y)) \wedge (d_t(x) * y)$$
$$= \{d_t(x) * y\} * [\{d_t(x) * y\} * \{x * d_t(x)\}]$$
$$= \{d_t(x) * y\} * 0$$
$$= d_t(x) * y \leq d_t(x) * d_t(x).$$
   (4) Let $x, y \in$ ker $(d_t) \implies d_t(x) = 0 = d_t(y)$. From (3), we have $d_t(x * y) \leq d_t(x) * d_t(y) = 0 * 0 = 0$ implying $d_t(x * y) \leq 0$ and so $d_t(x * y) = 0$. Therefore, $x * y \in$ ker (d_t). Consequently ker(d_t) is a subalgebra of X. This completes the proof.

Definition 4.16. Let X be a BCIK-algebra and let d_t, d_t' be two self maps of X. Then we define $d_t \circ d_t' : X \rightarrow X$ by $(d_t \circ d_t')(x) = d_t(d_t'(x))$ for all $x \in X$.

Example 4.17. Let $X = \{0, a, b\}$ be a BCIK-algebra which is given in Example 4.4. Let d_t and d_t' be two self maps on X as define in Example 4.9(1) and Example 4.9(2), respectively.
   Now, define a self map $d_t \circ d_t' : X \rightarrow X$ by
$$(d_t \circ d_t')(x) = \begin{cases} 0 \, if \ \ x = a, b \\ b \, if \ \ x = 0. \end{cases}$$
Then, it easily checked that $(d_t \circ d_t')(x) = d_t(d_t'(x))$ for all $x \in X$.

Proposition 4.18. Let X be a p-semisimple BCIK-algebra X and let d_t, d_t' be (l,r)-t-derivations of X. Then, $d_t \circ d_t'$ is also a (l,r)-t-derivation of X.
Proof. Let X be a p-semisimple BCIK-algebra. d_t and d_t' are (l,r)-t-derivations of X. Then for all $x, y \in X$, we get
$$(d_t \circ d_t')(x * y) = d_t(d_t'(x,y))$$
$$= d_t[(d_t'(x) * y) \wedge (x * d_t(y))]$$
$$= d_t[(x * d_t'(y)) * \{(x * d_t(y)) * (d_t'(x) * y)\}]$$
$$= d_t(d_t'(x) * y)$$
$$= \{x * d_t(d_t'(y))\} * [\{x * d_t(d_t'(y))\} * \{d_t(d_t'(x) * y)\}]$$
$$= \{ d_t(d_t'(x) * y)\} \wedge \{x * d_t(d_t'(y))\}$$
$$= ((d_t \circ d_t')(x) * y) \wedge (x * (d_t \circ d_t')(y)).$$
Therefore, $(d_t \circ d_t')$ is a (l,r)-t-derivation of X.
   Similarly, we can prove the following.

Proposition 4.19. Let X be a p-semisimple BCIK-algebra and let d_t, d_t' be (r,l)-t-derivations of X. Then, $d_t \circ d_t'$ is also a (r,l)-t-derivation of X.
   Combining Propositions 3.18 and 3.19, we get the following.
Theorem 4.20. Let X be a p-semisimple BCIK-algebra and let d_t, d_t' be t-derivations of X. Then, $d_t \circ d_t'$ is also a t-derivation of X.
   Now, we prove the following theorem

Theorem 4.21. Let X be a p-semisimple BCIK-algebra and let d_t, d_t' be t-derivations of X. Then $d_t \circ d_t' = d_t' \circ d_t$.
Proof. Let X be a p-semisimple BCIK-algebra. d_t and d_t', t-derivations of X. Suppose d_t' is a (l,r)-t-derivation, then for all $x, y \in X$, we have

$$(d_t \ o \ d_t')(x * y) = d_t(d_t'(x * y))$$
$$= d_t[(d_t'(x) *y) \wedge (x * d_t(y))]$$
$$= d_t[(x * d_t'(y)) * \{(x * d_t(y)) * (d_t'(x) * y)\}]$$
$$= d_t(d_t'(x) * y)$$

As d_t is a (r,l)-t-derivation, then
$$= (d_t'(x) * d_t(y)) \wedge (d_t(d_t'(x)) * y)$$
$$= d_t'(x) * d_t(y).$$

Again, if d_t is a (r,l)-t-derivation, then we have
$$(d_t \ o \ d_t')(x * y) = d_t'[d_t(x * y)]$$
$$= d_t'[(x * d_t(y)) \wedge (d_t(x) * y)]$$
$$= d_t'[x * d_t(y)]$$

But d_t' is a (l,r)-t-derivation, then
$$= (d_t'(x) * d_t(y)) \wedge (x * d_t'(d_t(y)))$$
$$= d_t'(x) * d_t(y)$$

Therefore, we obtain
$$(d_t \ o \ d_t')(x * y) = (d_t' \ o \ d_t)(x * y).$$

By putting y = 0, we get
$$(d_t \ o \ d_t')(x) = (d_t' \ o \ d_t)(x) \text{ for all } x \in X.$$

Hence, $d_t \ o \ d_t' = d_t' \ o \ d_t$. This completes the proof.

Definition 4.22. Let X be a BCIK-algebra and let d_t, d_t' two self maps of X. Then we define
$d_t * d_t' : X \rightarrow X$ by $(d_t * d_t')(x) = d_t(x) * d_t'(x)$ for all $x \in X$.

Example 4.23. Let X = {0, a, b} be a BCIK-algebra which is given in Example 3.4. let d_t and d_t' be two self maps on X as defined in Example 4.9 (1) and Example 4.10 (2), respectively.
Now, define a self map $d_t * d_t' : X \rightarrow X$ by

$$(d_t * d_t')(x) = \begin{cases} 0 \ if \ x = a, b \\ b \ if \ x = 0. \end{cases}$$

Then, it is easily checked that $(d_t * d_t')(x) = d_t(x) * d_t'(x)$ for all $x \in X$.

Theorem 4.24. Let X be a p-semisimple BCIK-algebra and let d_t, d_t' be t-derivations of X. Then $d_t * d_t' = d_t' * d_t$.
Proof. Let X be a p-semisimple BCIK-algebra. d_t and d_t', t-derivations of X.
Since d_t' is a (r,l)-t-derivation of X, then for all x, y $\in$ X, we have
$$(d_t \ o \ d_t')(x * y) = d_t(d_t'(x * y))$$
$$= d_t[(x * d_t'(y)) \wedge (d_t'(x) * y)]$$
$$= d_t[(x * d_t'(y)]$$

But d_t is a (l,r)-r-derivation, so
$$= (d_t(x) * d_t'(y)) \wedge (x * d_t(d_t'(y))$$
$$= d_t(x) * d_t'(x).$$

Again , if d_t' is a (l,r)-t-derivation of X, then for all x, y $\in$ X, we have
$$(d_t \ o \ d_t')(x * y) = d_t[d_t'(x * y)]$$
$$= d_t[(d_t'(x) *y) \wedge (x * d_t'(y))]$$
$$= d_t[(x * d_t'(y)) * \{(x * d_t'(y)) * (d_t'(x) * y)\}]$$
$$= d_t(d_t'(x) * y).$$

As d_t is a (r,l)-t-derivation, then
$$= (d_t'(x) * d_t(y)) \wedge (d_t(d_t'(x)) * y)$$
$$= d_t'(x) * d_t(y).$$

Henceforth , we conclude
$$d_t(x) * d_t'(y) = d_t'(x) * d_t(y)$$

By putting y =x, we get
$$d_t(x) * d_t'(x) = d_t'(x) * d_t(x)$$
$$(d_t * d_t')(x) = (d_t' * d_t)(x) \text{ for all } x \in X.$$

Hence $\quad\quad\quad d_t * d_t' = d_t' * d_t.$ This completes the proof.

5. CONCLUSION

Derivation is a very interesting and are of research in the theory of algebraic structures in mathematics. The theory of derivations of algebraic structures is a direct descendant of the development of classical Galosis theory. In this paper, we have considered the notation of t-derivations in BCIK-algebra and investigated the useful properties of the t-derivations in BCIK-algebra. Finally, we investigated the notion of t-derivations in a p-semisimple BCIK-algebra and established some results on t-derivations in a p-semisimple BCIK-algebra. In our opinion, these definitions and main results can be similarly extended to some other algebraic system such as subtraction algebras, B-algebras, MV-algebras, d-algebras, Q-algebras and so forth.

Acknowledgments

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VERSATILITY IN VERSIONS OF EPIC NOVELS ABOUT "YUSUF AND ZULAYKHO" ("JOSEPH AND ZULEYKHA")

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ABSTRACT

The article comparatively examines the issue of versatility in a literature piece in the translation of Abd ar-Rakhman Jami's "Yusuf and Zulaykho" ("Joseph and Zuleykha") by Muhammadrizo Agahi, in addition to series of epics by Durbek, Mirza Alim Devona and Holis and Nurmuhammad Andalib's story on the same topic. As a result of a comparative analysis among the abovementioned, it has been concluded that any kinds of variations in artistic work is not a subject for the creation of a new piece. Versatility in a literary work should be assessed as a change in ideas, suggestions, the system composition, plot, characters, creative style and genre. It was estimated that these works are different in composition, plot, creative style and genre. The results of the comparative analysis are theoretically generalized.

KEYWORDS: *Yusufnama (tales about Joseph), dastan (epic story), translation, plot, composition, course of events, version, interpretation, comparative analysis.*

INTRODUCTION

The most frequently used plot in the literature of the Muslim East is the story of "Yusuf and Zulaykho". The works on the basis of this plot have been created for very long time, taking place in various spaces and belong to a wide geographical area, as well as the participation of authors of different categories and strata, manifested in different ideological content, different artistic interpretations and views. This is not unique issue for only the plot of "Yusuf and Zulaykho". There are many series of such works in the world literature, which are called "transferred plots". As the word *variant* (French: "variante", Latin: "varians" – to change, differentiate) represents different meanings in different areas of science. When described from a literary point of view, it is a view of a particular work of art that has undergone certain alterations. However, it should be kept in mind that a certain part of a work of art containing novelty alone does not mean that a new version of it has been created. It should be acknowledged that a variant is created only when the change occurs in the *idea, theme, interpretation, composition, plot, system of imagery, creative style and genre*. Sometimes the appearance of a work, which has changed as a result of editing a line, paragraph or chapter, is also interpreted as a variant[1]. Such alterations of the texts – variants correspond to the textual criticism. The comparative analysis of the epics written by Abdurahmon Jami (translated by Agahi), Durbek, Mirzo Alim Devona and Kholis, as well as the story of Nurmuhammad Andalib, written in the plot of "Yusuf and Zulayho" allows us to draw important conclusions in terms of variability.

RESOURCES AND METHODOLOGY

At the time of writing this article is a manuscript of the epic "Yusuf and Zulaykho" by Abdurahmon Jami, translated by Muhammad Rizo Agahi in the XIX century, stored in the Institute of Oriental Studies of the Academy of Sciences of Uzbekistan under inventory number 809 and a copy published in 2018 by Professor Nurboy Jabborov [1 , 307- 612], Durbek 1959 edition of "Yusuf and Zulaykho", Mirza Alim Devona's epic "Ravzai asror" in the fund of the Institute of Oriental Studies of the Academy of Sciences of Uzbekistan 1338 inventory number The manuscript of the epic "Yusuf and

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[1] Literary encyclopedic dictionary. - Moscow: Soyuznaya encyclopedia. 1987. - p. 102.

Zulaykho" is kept in the department of rare books of the Samarkand State University Scientific Library under inventory number 824261 and the lithography of Nurmuhammad Andalib's story "Yusuf Zulaykhoi turkiy" was published in 1915 in the lithography "Asia" in Tashkent. The fact that most of the essays discussed in the article are primary sources, some auxiliary sources were involved in the study of variability, the opinions of experts who conducted research on this topic were used and discussed with them where necessary, are the factors that ensured the analysis and conclusions.

In writing the article, scientific methods such as comparative-historical, comparative-typological, descriptive, which have been tested in the study of primary sources of Oriental literature, have been used.

RESULTS AND DISCUSSION

Second place according to possessing several variants of the same texts after "Yusuf and Zulaykho" in Persian and Turkish literature belongs to the epic story of "Layli and Mejnun". Its famous versions were created by such poets as Nizami Genjevi, Khusrav Dehlevi, Abdurahmon Jami, Alisher Navai, Muhammad Fuzuli, Nuriddin Andalib. In addition to those, it is well known that much many poets have written on this subject, as well. The basis of the epic, which consists of stories about a girl named Layli and young men who were in love with her, which existed among the Arab before Nizami Ganjavi, confirms this idea.

The story of Yusuf (p.b.u.h.), which is based on a religious source, later attracted the attention of great representatives of Turkish literature. Hundreds of works of art have been created in various forms of prose and poetry. Talented creators have further enriched the Qur'anic theme using their own skills and inspiration. They created true masterpieces. This great cultural heritage left by our ancestors is an everlasting treasure of our spirituality. It should be noted that "the introduction of Qur'anic themes into world and Uzbek literature in particular is not only from a religious point of view, but also clarifies for us the abstract aspects of Eastern literature, reveals the sources of various literary themes and connects modern Uzbek literature with Islamic literature. It has also helped to re-establish close ties with our national identity and traditional values."[2]

The theme of Yusuf and Zulaykha became widespread and a favorite work of literature for a lot of people sometimes in the form of a story, sometimes in a narrative, and sometimes in the form of an epic. Those Yusufnamas (stories about Yusuf) can be divided into two groups according to their formal structure:

Yusufnamas of the first group are valuable as masterpiece examples of art, even though basing on an existing tradition. Qasim Ferdowsi, Qul Ali, Shayyod Hamza, Durbek, Abd ar-Rahman Jami and Alim Devona's works are prominent illustrations for this.

The works of the second group were written in a prose, enriching the series of Yusufnamas with a new literary genre. A vivid example of this can be Abu Ali ibn Sina's (Avicenna's) "Qissai Yusuf" ("Story of Yusuf")[3], Rabg'uziy's "Story of Yusuf Siddiq (p.b.u.h.)" and Andalib's "Yusuf and Zulaykho". The stories reflect creative intentions, dreams, divine-mystical cognition and literary-life experiences of each writer.

The enumerated yusufnamas are even more valuable to the reader as they convey the truths of ancient history. Among them the stories of Abd ar-Rahman Jami, Durbek, Mirza Alim Devana and Nurmuhammad Andalib are quite prominent with a unique artistic interpretation of Qur'anic story. The above-mentioned writers, on the example of their literary experiences, laid the foundation for the tradition of creating large-scale works based on the story of Yusuf and Zulaykho.

Every time writers start creating a new work based on the legends about Yusuf and Zulaykho, they base on a series of life events about the heroes. They make certain changes to the plot based on their creative goals. The main storyline reproduces the followings:

1. Yusuf (Jopseph) is the most beloved son of his father Ya'qub (Jacob), which emergence jealousy of all his brothers.

2. A dream story that foretells the future of Yusuf (Jopseph).[4]

3. Yusuf (Jopseph)'s being thrown into a pit by his brothers and being sold for slavery to Egypt.

4. Joseph's meeting Zulaykho and the romantic adventures between them.

5. Joseph's glory in Egypt and his accession to the throne.

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[3] See in: Irisov A. The Story of Yusuf by Ibn Sina. // Uzbek language and literature. - Tashkent: Fan, 1967, No 6. - p. 46-47; same author. The Story of Yusuf by Ibn Sina. // Uzbek language and literature. - Tashkent: Fan, 1971, No2. - P. 55; same author. Abu Ali Ibn Sino. Heritage of life and works. - Tashkent: Fan. 1980; Mirzaev S. Works of Ibn Sina at the Institute of Oriental Studies (bibliography). - Tashkent, UzFA Publishing House, 1955. – p. 19–20.

[4] Romantic epic series often begins with a dream. There are many examples of this in Eastern literature: Ruzimbaev S. Khorezm epics. - Tashkent: Fan, 1985. - p. 65.

Yusuf and Zulaykho, the third of Jami's seven epics, was written in 1483 and is recognized as a unique example of a transferred plot. According to professor Nurboy Djabbarov: "Abdurrahman Jami's "Yusuf and Zulaikha" has its prominent place among other stories of the same theme written in Tajik-Persian and Turkic languages. So the glory of this work is common in all the countries of the East, it has been translated into many languages. According to scholars, who explore the literal heritage of Jami, "Yusuf and Zulaykho" is distinguished by the breadth of the subject matter and the high art of Abdurahman Jami."[5]

This work, which was later translated by Agahi, served as poetic perfection of Yusufnama epics due to its attractive language, general style of description, and artistic perfection.[6] Plot lines are not complicated, the composition is thorough, the expression is clear and fluent. The course of events goes smoothly. Probably, Jami did not complicate this work because he gave it as part of his seven. Both in size (58 chapters only) and in terms of the course of events, the poet's epic "Yusuf and Zulaykho" is different from the works of other artists who addressed this topic.

It was noted that Abdurahman Jami wrote "Yusuf and Zulaykho" in the epic genre. Therefore, from the very beginning of the work peculiarities of epic story stand out. Traditionally, the following chapters are included at the beginning of the epic before the main events begin:

1. Praises to Allah.
2. Praises to the prophet may peace be upon him.
3. Praises to the prophet may peace be upon him, the one who possesses a highly order in the eyes of God and the ultimate day.
4. Wearing the dress of forgiveness and modesty is our realm.
5. Praises to the king and sultan.

After the above five chapters comes a chapter dedicated to Yusuf and the main events begin. "Analysis shows that the work is based on a free approach, not a literal translation. The lyrical experiences in the work, as well as the fact that there was a separate chapter dedicated to Muhammad Rahim Khan the second included, give grounds for such a conclusion."[7]

The introduction to the epics of Durbek and Alim Devona is similar to the work of Abd ar-Rahman Jami. Such creative pursuit is not in vain as ultimately there were a lot of authors who were inspired by Jami's "Yusuf and Zulaykho" and composed their poems of the same title. Professor N.Kamilov, who explored the translation of Agahi states: "It is correct to say that this epic is the masterpiece of Jami's creativity. Therefore, after Jami, dozens of answers were written to this work, which include some of the Uzbek poets as well."[8] The most famous of these answers is Nazim Herati's "Yusuf and Zulaykho"; the epics of Jami and Herati have been comparatively explored[9]. Alim Devona also follows Jami, even though he created his epic under a different name. This can be seen in the following lines of the author:

Navhi haqiqat aro daryoi jarf,
Hazrati Jomiy shahi iqlimi sarf.
So'z duriga ul beribon intizom,
Bog'ladi mazmunig'a mundoq nizom.[10]

Translation

Among the sea of the truth the river of truth,
Hazrat Jami the king in the world of word.
Creating the pearls of word wisdom,
Gave he to the words the following meaning.

Chapters in the work of Jami are also available in Alim Devona's version. However, he included additional two more praising chapters devoted to four khalifas and Samarkand. Durbek composed the first three short chapters in his epic traditionally, starting with the praise of God and the Prophet that was followed by section devoted to the introduction of the book. This feature is different in the works of Nurmuhammad Andalib and Halis. Andalib created his work both in prose and poetry. That is why the praise is also different from other authors. Written in verse, it also includes information about the reasons for writing the story and his biography:

Keldi qoshimg'a mani bir shahsuvor,
Nutqi tar ermish, so'za intizor.
Keldi yana bir necha hamdardlar,
Qurbi shijoatda sheri mardlar.
Barchalari manga erdi hamnishin,
Yuzlari gul so'zlaridur ankabin.
Dedi onlar: Andalibi benavo,
Ko'nglimizga tushti ajib mojaro.
Bor qissa ichra ajib doston,
Na bo'ladur qilsang oni guliston.

[5] Jabborov N. Thoughts on the Turkish translation of Jami's Yusuf and Zulaykho. / Abdurahmon Jami. - T: the Institute of Manuscripts, 1997 - p. 172.
[6] Abdurahman Jami. Yusuf and Zulaykho. / The storehouse of love. (Translator: Muhammad Riza Ogahi. Prepared by: N.Jabborov). - Tashkent: Tasvir, 2018. –p.307- 612.
[7] Jabborov N. Comments on the Turkish translation of Jami's Yusuf and Zulaykho. / Abdurahmon Jami. - Tashkent: Institute of Manuscripts, 1997. - p. 173.

[8] N.Komilov. Khorezm translation school. Dissertation for the degree of Doctor of Philology. Tashkent, 1988. - p.106.
[9] Shernazarov B. "Yusuf and Zuleykha" of Nazim Khirati and its comparison with Abduraxman Jami's poem. – PhD. Diss. - Dushanbe: TSPU, 2003.
[10] Mirza Alim Devona. Ravzai-asror (Garden of secrets), Manuscripts Fund of Oriental studies university, No1338. - p. 29[a].

Yusufi Siddiq Zulayxoni san,
Turki xaloyiqgʻa sen qilsang chaman...
Ismim erdi Nurmuhammad gʻarib,
Soʻzda taxallusim erdi Andalib.
Shahrimiz Urganj viloyat edi,
Xonimiz shoh Gʻoziy jamoat edi…

Translation:

A person came to me,
Narrow speech, longing for words.
A few more sympathizers came,
The lions are brave in their courage.
They all came to me,
Their faces are the words of a flower.
They said: person from Andalib,
We had a wonderful conflict.
There is a wonderful story in the story,
Anyway, at least I didn't go down without explaining myself first.
Yusufi Siddiq for Zulaykho,
What can you do for the Turkish people ...
My name was Nurmuhammad Gharib,
My nickname was Andalib.
Our city was Urgench region,
Our King was Ghazi's congregation.

Halis starts his version of "Yusuf and Zulaykho" with introduction of his own life and previous works. He then praises God, combines the praise verses of the prophets Muhammad and Yaʼqub (Jacob), and gives a short, more precise ten-byte prayer. After these chapters, he moves on to the main events.

Every author begins by introducing the main events, first and foremost, to Yaʼqub (Jacob) and his children. However, the translation of Agahi is an exception from this rule. He starts the story with the description of Yusuf's beauty. The epic says that Adam (peace be upon him) was given a chance to constantly monitor the lives of the prophets who are his descendants. In time, the prophets will change one by one. When it comes to Prophet Yusuf Adam asks God why he was given such a beauty:

Hamul johu jalol Odam chu koʻrdi,
Savol aylarga til mundoq evurdi –
Ki: Yo Rab, bu qayu gulshan gulidur?
Va yo qaysi kishi jomi mulidur?
Ango qaydin etushmishdur bu davlat,
Jamolu johu izzu zebu ziynat?

Translation:

As soon as Adam saw him,
The question has been around for months -
He said: O Lord, is this a wild rose?
Or who is the he indeed?
Where did he get all that beauty –
That nobody has seen ever?
God answers to the question of Adam (peace be upon him): He is your descendant, the fruit of Yaʼqub (Jacob)'s garden. Then Adam divides his own beauty into three parts. He gives two-thirds to

Yusuf (Joseph) and the rest to the others. Then he blesses Yusuf (Joseph).

This episode does not occur in any other epic variations. This makes the version so different from the rest ones.

It is time to explore the descriptions of the children of Jacob. Naturally, they appear different in each of the plays.

Jami:
Topib Yusufdin oʻzga oʻn bir avlod,
Vale Yusufdin erdi joni obod.
Durbek:
Bir otadin oʻn edilar sar-basar,
Tengri yoʻlida barisi rohbar.
Bir onadin Yusufu Ibni Yamin,
Ikki qarindosh edilar, pok din.
Alim Devona:
Tengri oning poyasin aylab baland,
Berdi oʻn ikki xalafi arjumand.
Biri alardin guli tahqiq edi
Koni adab Yusufi Siddiq edi.

Translation:

Jami
Though having eleven children besides Yusuf,
All of the Yusuf was well.
Durbek:
One father was there for ten,
In God's way, everyone is a leader.
Yusuf and Ibn Yamin had the same mother,
They were two relatives, pure religion.
Alim Devona:
God made him walk high,
Gave him twelve successors.
One was just like flower
Rish in kindness was Yusuf Siddiq.

In the variations of Jami and Alim Devona information about children is general, without excessive commentary. Durbek gives an ambiguous tale about Jacob's children. It states that ten sons were born from one father, of whom Yusuf and Ibn Yamin were born from the same mother. No word is said about the mothers of the remaining children. They remain uncertain.

In the story of Andalib, these images are given as follows: "However, Jacob had twelve sons. Each two sons had the same mother. Yusuf (p.b.u.h) and Ibn Yamin had the same mother. She passed away from this world. Her name was Rohila..."[11] The information about children is given in detail in Andalib's work. At this point, it is fair to mention that the author, unlike others, tries to connect the course of events more deeply and thoroughly, perfectly reflecting the names of brothers and character features: "Each son of Yaʼqub possessed a

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[11] Andalib Nurmuhammad. Yusuf Zulaykhoi Turki. - Tashkent: "Asia" lithography, 1915. - B. 3. (In the text is referred as Andalib)

unique characteristic. One of them was Yahudo. All the people would burst into tears if he screamed in anger. Each body hair would become as stiff as a spear. And another one was Sham'un. His characteristic was that if he would sword struck, the sword would cut the mountain and the stones into two. And another son was Rovil. His characteristic was that whenever an army came, His characteristic was that if an enemy would strike he would beat them with his lion-like roar."[12]

In this regard, Halis cited the following:

Zamon erdi, (ki Ya'qub) payambar,
Bani isroiliyga erdi sarvar.
Ani o'n ikki o'g'li ham bor erdi,
Har ikki bir onadin bo'lub erdi.
Yusufu Ibni Yamin onglag'aysiz,
Alar birla bor erdi yana bir qiz.
O'shal qizni oti ham erdi Norjon,
Onalari o'lub erdi o'shal on…[13]

Translation:

There was a time when (Jacob) was a prophet,
The chief of the children of Israel.
And he also had twelve sons,
Each two had same mothers.
You know Yusuf and Ibn Yamin,
There was another girl with them.
That girl's name was Norjon,
Their mother died at that moment.

From the passages quoted, it is clear that the works of Andalib and Halis have been quite perfect in this regard. That is, they briefly dwell on the mother of Yusuf and Ibn Yamin, making it clear that both children were from the same mother. Romantic relationships play an important role in both while describing events in detail is of little importance.

If we pay attention to the composition and plot of the works about Yusuf and Zulaykho, we can see that there are many differences, as mentioned above. Details of event-specific event in one author will not be a matter of importance for the narration of the other. We have attempted to analyze and highlight the most important of them. These types of stories owe a lot of special characteristics that make them unique literary works. All of them are the further matter of exploration for the future literary scholars.

CONCLUSION

Summarizing the results of the research, it can be said that Agahi's translation of the epic "Yusuf and Zulayho" by Abdurahman Jami, the epics about the life of Yusuf and Nurmuhammad, described as "ahsanu-l-qasas" ("the best of stories") by Durbek, Mirza Alim Devona and Khalis. The

study of the narrative on this subject in the context of variance allows us to draw important conclusions for textual studies. The comparative analysis of the works in the above-named Yusufnama series does not mean that a change in a particular part of a work of art alone creates a new version, but that a change must take place within the idea, theme, interpretation, composition, plot, image system, creative style and genre. leads to the conclusion.

The results of the comparative analysis show that there are certain differences in the works analyzed above in terms of composition, plot, creative style, and genre features. Research on the variants of Yusufnama leads to the conclusion that Abdurahman Jami's epic "Yusuf and Zulayho", translated by Muhammad Riza Agahi in the XIX century, is the most artistically perfect among them.

In general, a comparative study of a number of works created on the basis of closely related mobile plots in a particular category from the point of view of variability is important because it allows identifying their specific and different aspects. Consistent continuation of scientific research in this area is one of the urgent tasks facing textual critiques.

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THE IDEA OF ENLIGHTENMENT IN THE CREATION OF BEHBUDI

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ABSTRACT

Behbudi's work entered the literature of Turkestan in the early twentieth century as the leader of the Jadids. He wrote the drama "Padarkush" in 1911 and laid the foundation for Uzbek drama. He created the drama "Padarkush" on the basis of folk traditions as a real picture of life in Turkestan. He showed in practice that ignorance is inferiority.

The demise of the country through ignorance has proved that children are becoming father killers. His drama "Padarkush" plays an important role in educating the Uzbek nation in the spirit of enlightenment in Turkestan.

KEYWORDS: *ignorance; caravan leader; dramaturgy; ignorance; theater; tragedy; ignorance, filth; negligence; pesa.*

DISCUSSION

According to intellectuals, after graduating from high school, our young people should study for a doctorate in law in St. Petersburg and Moscow, law, engineering, judiciary, industrial science, economics, wisdom, teaching. Not only that, we need to send our children to France, America, Istanbul for education. In this regard, it is necessary to learn from the rich people of the Caucasus, Orenburg, Kazan. It is worth noting that they pay special attention to the education of poor children. The above statements by the intelligentsia are the result of Behbudi's high artistic skills. An extremely compact, short scene - through the line, the author manages to more vividly embody the character of the rich. Through such typification, Behbudi creates a generalized image of the greedy rich in Turkestan.

How does an intellectual react to the richness of the thoughts he expresses with sorrow? He sighs as he leans to one side in his seat. It is here that Behbudi's artistic mastery becomes even more apparent. Unable to tell the rich intellectual to go out, he said to the servant, "Leave my place, I have fallen asleep, there is a lot of work tomorrow, I have to go to bed for a while." Here is the image of the rich man. Through a brief thought, he was able to show his true inner world, his attitude to the painful thoughts expressed about his people, his nation.

Some of our researchers contrast the image of the teacher and the intellectual with him (1).

In fact, the author's goal was to develop the image of the teacher through the image of the enlightened. That is, this is evident in the interpretation of life by linking religious science with secular science. Life experience led to the creation of these two twin images. Behbudi's views are embodied in these images.

Researcher A.Aliev wrote the following about this image: "The image of the intellectual in the poem fully reflects the views of Behbudi and the whole Jadid movement on the education of youth, science - enlightenment, education, school - education. In this symbol, the call to awaken from the slumber of ignorance is expressed"(2).

The image of life in the drama is simple. But in this day-to-day past, the playwright simply sees the tragedy of society in the background, for the fate of the children who have borne the brunt of society's tragedy is a sign that society's foundations are cracked and shaken. During the course of events, the activities of the participants are first of all reflected in their behavior - actions, status, words, speech, in accordance with the laws of the drama genre. In the monologues formed as the most important artistic medium in the play, the dramatic situations are summed up at one point. It is at this point that the inner experiences of the participants, the uniqueness of the spiritual world, emerge - a series of foggy views.

In the first act of the drama, the characters who are rich and opposed to his son are depicted as

Domla, Ziyoli's pain, anxiety, spiritual turmoil in his heart, and torments that irritate his heart.

The intellectual first said to the rich man, "I intend to tell you about science. Perhaps rich people like you should strive to educate the children of the nation." At the end of the first act, he saw that the rich man did not encourage science. "May the Ummah have mercy on Islam, especially on us Turkestans," he said. The intellectual state - creates experiences in the psyche.

The plot of the work is a bright page from the negative consequences of the colonial regime of Tsarist Russia. The difference of the drama from other works is its originality. The work is not only chronologically important, but also artistic and skillful. The composition of the drama is compactly constructed. The system of images is applied in place, appropriately. The second image that follows one image complements the other. At the same time it shows the structure of the drama as a whole.

The drama shows that due to the colonial policy, alcoholism and domestic violence have started to spread among the local population, especially among the youth. In order to illustrate this issue in a drama, the author uses a number of secondary images. One such figure is the Armenian Artun. She started a lucrative pub, and "ugly" women like Lisa began to follow local youths. Such disruptions are troubling to progressives like Behbudi, who are tracking the upbringing of young people and dragging them into ruin.

Artun is the main reason for the increase in the number of liars in the drama. Because the tavern he opened leads young people to rudeness. It only drags on to evil, not to good. There are a few other images that are familiar, violent, because of the tavern. They enter the scene through the actions of the gangsters gathered around Artun's tavern - Tangrikul, Davlat, Nor, Boy's son Tashmurad pesada. It's a bunch of young people drinking in Artun's tavern. He raises his glass and says, "Body enters - joy comes out." They say nonsense, nonsense, which comes to their minds with the power of alcohol. It's all "Oh Lizajon, oh Lizajon, where are you!" they shout. Liar, children praise Tashmurad and drink to his health one after another. He treated her falsely and lied, "O rich man, we are poor. What about you? There is no money in your pocket, "they said, stirring Tashmurad even more and twisting him.

The liar sitting in the pub is not making enough money for the elevators to bring Liza. Their only hope was from the rich man's son Tashmurad.

The state gave the leader of the group, Tashmurad, the idea of theft. He is the first to offer to steal money from the rich man's house. He also made the plan. The State that also remembered Lisa first.

The image of Lisa embodies a spiritually, morally depraved wife. It seems that this image needs to be interpreted more broadly, but the playwright must have thought of censorship. But even in short appearances, it is clear what features this image has.

The force that brings the naughty children together is Artun. He is a person who is at the forefront of moral depravity. Uncle Artun deceives the elevators. Because he sells beer in large quantities and misleads Muslim children, which is also an understatement. He deliberately uses Lisahan as an object in order to gain wealth. He organized the brewery to achieve his evil goals. Artun and Lisa are not at all interested in the fact that the upbringing of young people is deteriorating. The elevators are forced to take the path of theft to find the money that Artun and Lizaxon demanded.

Behbudi does not mean that every child is an enemy to his parents and family, in which case there is no intention to mediate between the parent and the child. However, there is an emphasis on the role of parental responsibility in the upbringing of children, the role of the chosen method of upbringing in the physical and spiritual development of the child. The drama is only meant to arouse hatred, to warn people, against the criminal acts that take place because of ignorance, ignorance, illiteracy, and ignorance. If Boy had taught his child by following the words of Ziyoli and Domla, Tashmurad would not have joined the evil circle, that is, the liars like Nor, Davlat, Tangrikul, would not have gone to the taverns, would not have met Artun and Lisa.

Tashmurad suddenly becomes accustomed to stealing from his house on the way to life. Because his subconscious is accustomed to raising children. He takes Tangrikul home to steal. At Tashmurad's direction, Tangrikul Boy enters the bedroom and takes his money and wealth. When Tashmurad saw that his father had woken up, he fired his pistol at the top of the pistol, and the neighbors became confused. Tangrikul, meanwhile, stabs Boy to death. Taking the fortune, the two run out of the house, and they go to the tavern again. As if nothing had happened, Tashmurad was having a good time. There can be no more indifference, more tolerance. It is natural that this scene evokes feelings of hatred in the heart of any reader (viewer).

In the tavern, all his friends drink to Lisa's health, and at the height of the excitement, noise is heard from outside, and the guards come rushing in. Lisa runs away. The rich man's son Tashmurad, the liars: Davlat, Tangrikul, Nor are captured. The conclusion that this is the consequence of illiteracy is the opposite of drama.

Pesada Boy "What will happen if I teach my son?" not even interested. This was a tragic mistake of the rich man, who was eventually killed "by his son." In upbringing, which is the main issue, the rich remain in sin. Because in drama, tragedy happens as worthless money. Tashmurad's carelessness is the result of his laziness, lack of self-awareness, ignorance, blindness, spiritual blindness.

At the end of the drama, the author comments on ways to escape the tragedy through the image of Ziyoli: "This is the fate of children without knowledge and education. If his father had taught them, this crime and patriarchy would not have happened to them, and they would not have drunk alcohol, and the diet would not have been justified. For the rest of his life, there would be no Siberia and no bandit and doomsday, no hell. If they did not drink alcohol, they would not be tormented and tormented forever in this world and in the Hereafter. Oh, it is the ignorance that really killed the rich and tormented these guys forever. It is rudeness and ignorance that destroys us, destroys us, and destroys us; homelessness, homelessness, complication, poverty and necessity and humiliation are all the fruits and result of ignorance and ignorance. The advanced nation of the world develops by means of science. From ignorance in captivity and captivity. Since we are uneducated and do not educate our children, bad events and misfortunes must always prevail among us. There is no other way but to study and teach these things to disappear. " These thoughts are the pinnacle of drama content. Researcher Ahmad Aliyev explores these points in a unique way: - Behbudi education shows that his son led the looting and even murder of Boy in order to make as deep as possible the horrors of tragedies in life caused by children with impaired education. It also explains the consequences of the crime committed in both worlds. In his next words, Behbudi stressed the need to raise the level of the population and teach them to understand themselves in order to get rid of the negative effects of the colonialists.

The opinion of the researcher is in line with the opinion of everyone who correctly understands the idea of "Padarkush". Because in "Padarkush" the main task of the time is to start education from the family.

When it comes to Behbudi's language, as we have seen in the section on his journalism, we see that it is also possible to use dialectical materials, albeit sometimes from popular words. This feature was also transferred to the drama "Padarkush". Including,

Intelligent - Now is a new and different time. It is said that a nation without knowledge and skills will lose its wealth, husband and tools day by day, as well as its morals and reputation, and even its religion will be weak;

The state- Business will be the opposite. Do you have money? Take it all out (everyone takes it out. The government counts, less than five rubles). This mine is nothing. We need to find a way.

The use of ga instead of da and the use of mines instead of with are mentioned in the hero's speeches, which is a characteristic feature of Samarkand dialect.

In the drama "Padarkush" the plot shows the events of the past and the future before our eyes, as it is today. It also draws the reader into the realm of what is happening and turns them into a living witness.

A characteristic feature of the drama composition is conciseness and cohesiveness. One of the characters in "Padarkush" demands the other. The episodes in the play are also directly inevitably linked to the previous episode. In other words, the next episodes are prepared by the episode in the previous episode. The incident at the rich man's house causes the next events to take place. The debate between Boy, Domla, Tashmurad, Ziyoli in the first act - the controversial events allow to create a picture of the pub in the second act. The drama composition was creatively found by the author.

Commenting on the shortcomings of the drama "Padarkush", Bakhtiyor Nazarov writes: In particular, the murder episode is more artificial. The idea in the play always comes not from the action of the protagonist's character, but rather from the author's desire to reveal his goals more quickly. This is probably due to the submission of the image movement to the idea and the lack of experience in the drama genre"(3).

The researcher's opinion is reasonable, but it will be necessary to evaluate the author's work based on the current situation. Because at that time no dramatic work was created in the Uzbek language. It is also known that Behbudi was the first to enter this genre. It should be noted that in the creation of this poem, Behbudi made the liberation of the people from colonial oppression through enlightenment the main task. That is why the above-mentioned shortcomings are overshadowed by the issue raised in the drama.

Thus, Mahmudkhoja Behbudi's drama "Padarkush" laid the foundation of Uzbek drama and theater. With this work, Behbudi made a significant contribution to the formation of modern literature as the head of the Uzbek theater.

The main theme of Jadid literature is enlightenment, and Behbudi started this direction with the drama "Padarkush". At the same time, it was important that the written drama be in the vernacular. In this regard, Behbudi became a role model for his successors.

Mahmudhoja Behbudi's enlightenment journalism, drama and activities are significant in that they reflect the views of Jadidism. The drama "Padarkush" is based on a certain concept, despite the shortcomings of its first work. The value of Padarkush becomes even more apparent when we recall that during the Soviet era, the concept was lost and replaced by more nude politics.

All of Behbudi's work and creativity was built on a single concept. It was the concept of enlightenment. Enlightenment is stronger than any

revolution, higher than any revolution. Enlightenment is also what makes a person beautiful, refreshed, cleansed, and made intelligent, wise, and civilized. Enlightenment is more effective than any weapon. A nation that seeks knowledge, a thirst for knowledge, a nation that possesses knowledge is the best nation, an enlightened nation is a free nation. An enlightened nation cannot be enslaved, enlightenment is freedom.

Looking at Behbudi's work, mainly analyzing the drama "Padarkush", we see that he had a similar understanding of the concept of enlightenment. Behbudi believes that enlightening the nation is tantamount to liberating it.

One of the great works of Behbudi is that he laid the foundation for the Jadid movement, its program and views with all his creativity, mainly through the drama "Padarkush". Life today has proved that what he started is not a half-hearted, but a movement based on a complete, holistic, solid concept.

Thus, with the drama of Behbudi, he made a significant contribution to the development of artistic and aesthetic thinking of the nation.

Impressed by Padarkush, one by one he began to write plays. The opinion of the well-known scholar Izzat Sultan is noteworthy: "Qadiri's poems" Ahvolimiz "and" Millatimga "and the drama" Juvonboz "were written in imitation of Behbudi."

The scholar compares the work of Behbudi and the early work of Qadiri. He compares their work, saying that Qadiri's work was influenced by Behbudi's work. If we compare "The Unhappy Groom" and "Padarkush", we can see the democratic tendency in the work of Abdullah Qadiri. While Behbudi in the drama Padarkush shows the distortions of the local bourgeois environment and calls for its correction, A. Kadyri takes a different path - following the rich, having a big wedding and depicting the tragedy of a poor young man who was unhappy "(4).

So, between 1914 and 1917, like Abdullah Qadiri, Nusratillo Qudratullo's son's "Wedding", Haji Muin Shukrullo's "Old School - New School", "Poppy", "Youth Victim", "Judge and Teacher", "Rich and Servant", " The Oppressed Woman ", Abdullah Badri's" The Fool "," Juvonmarg "," Prayer Thief "," Mr. Poisonous Life "and about twenty other poems. In most of these, the idea of enlightenment is the main issue.

During the twentieth century, the Uzbek play was born and grew. It can be said that he has reached maturity. We can proudly say that there is a unique original play. That is why Padarkush has a special place in the history of our literature and its importance cannot be underestimated. The development of Uzbek drama cannot be imagined without the drama Padarkush (5). Because this play introduced Behbudi to Uzbek literature as the first playwright.

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MANAGEMENT ISSUES FOR DIGITIZATION OF KNOWLEDGE RESOURCES

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INTRODUCTION

The global information infrastructure is transforming with the growth in full-text digital resources and fast communication facilities. This is so because institutions, agencies and departments in every country are busy capturing, processing, storing and disseminating information in the digital form. It is well established that fast access to desired information can lead to rapid developed of a country, an institution or an individual. While there are controls on this growing information resource, it has global implications and applications and therefore digitization is not a local affair as long as we understand that we can contribute to global information resources and also access its resources for any purpose.

From giving bibliographic and catalogue services in digital form to the users, the libraries are slowly creating full-text digital data with multimedia applications. These applications have already begun to revolutionize methods of research and access to education material. It will further transform life and cultural patterns the world over. The knowledge resources including books, journals, manuscripts, etc. available in libraries, archives, museums and private collections are getting identified through library and information networks and access to them has already made success stories around the world. It is now the turn of full-text multimedia –based digital resources that are becoming essential these days.

KNOWLEDGE RESOURCES

Promoting Infrastructure and Competencies

India holds in its libraries, archives, museums, private collections books stores and information centers millions of books, journals, manuscripts, reports, grey literature, CD-ROMs video-recordings, sound-recordings, including objects of art and historical and archaeological evidence. The contributions made by Indian scholars for more than the last few millennia lie scattered in such repositories of documents. Several management issues come to mind in this regard. They are given as follows:

Cooperation at the National Level

It is important to promote interest in the digitization of documents among commercial agencies through competitiveness, cooperation methods and the relevance of partnerships for a reasonably profitable business. In order to achieve this result well, it is necessary to create a system for resolving copyright issues.

Scope of Content

The scope of content at the national level needs to be drawn to the attention of the commercial sector so that they take immediate interest in the job. For instance, the digitization work in the public sector including government organizations is much too large and this needs to be undertaken quickly. To achieve this objective, experiments will have to be made at the national level to promote cooperation and avoid duplication in this work. The central government and state governments could fund foundations to undertake this massive job and develop infrastructure for cooperation with the agencies like publishers that create content in the print form. The whole process demands the creation of a new financing policy so that there are incentives for developing this nation resource.

Training

Training at state and national levels will have to be arranged to implement the processes of content creation and achieve a higher degree of competency in content creation.

Types of Projects to be Undertaken

Content creation works in digital form needs to done by each institution, ministry or department in the country. For instance, courseware needs to be made available by institutions such as the University Grants Commission and made available through the Internet to students. Since integrated access to knowledge is needed on any subject three is a need to coordinate content creation processes. This will result in a variety of digital learning resources for the users.

In the field of education special attention will have to be given to upgrading the skill of teachers in accessing digital resources, use of digital television, and to the general public in using knowledge in the digital form. This means training on a much larger scale will have to be introduced by private and government agencies, associations and NGOs.

Standards

Efforts will have to be made to introduce standards for Meta information and data security which is at par with global standards.

Communication Facilities

Broadband connectivity at all levels in the country needs to be established to enable data for images and video-conferencing to move fast. This will lead to distribution of varied content and the promotion of electronic transactions and commerce.

This general telecommunication framework and the compulsions for using electronic commerce and full-text digital resources will have international implications. Education and research activities will receive a boost and the public will begin to appreciate the importance of digitization at the national and international levels.

Management of Digitization Processes

Management of digitations' processes would include all kinds of documents. Owing to lack of space, we are referring only to the management issues concerning printed documents.

The committees

The committees of experts for technical purposes as well as for the selection of documents should be constituted to undertake the selection process.

Selection of Materials for Scanning
The Principles

The purpose of selecting documents for scanning should be based on the following principles:

a. Digital Document on the Web is a Published Document.

A document that is digitized and made available to the users in the world is open for use and comment by any scholar, professional and the general public. It is important to see that whatever has been digitized is a unique publication and it carries with it all the characteristics of a published document.

b. Own Copyright of the Document before digitizing it.

In order to execute the right of a publisher without violating copyright, It is important for every institution digitizing a document to own copyright of each document to be digitized.

c. Arrange Financial Resources to Support Preservation of Digital Databases

Digital databases need to be accommodated in new formats and hardware using compatible software from time to time. The financial support will have to be arranged to support the change over so that the users do not start having no access to the document. It is therefore important that the project should have the means of revenue generation or the facility of getting a regular grant for the maintenance of the digital data.

d. To Reduce Costs on Scanning Select the Best

The initial costs on scanning may not be much but coupled with quality

e. For Each Document Create a Well-Researched Documentation control checks, preparation of indexes catalogues and metadata the entire job becomes expensive. It is therefore advisable to select the best documents at the initial stage.

Before scanning is started each document, part by part, should be processed for appropriate captions and completeness of the document. Accompanying material needs to be written to give the necessary context to the document being digitized.

f. Don't Publish Sensitive Documents on the Web without Consulting the Concerned Officials or Organizations. Each institution has to keep in mind that any sensitive document for a group, society or country should not be digitized unless it is in the interest of the country that such information should reach a wider audience.

g. Undertake a Final Overall Quality Check

The Committee for Selecting Documents for Scanning should undertake a final quality check in terms of the authenticity and accuracy of information both for textual or visual materials and the overall presentation of the digital data on the Web.

It has to be kept in mind that the documents to be digitized conform to broader objectives of the institution. Therefore the document should be in perfect condition. If it is not, another copy of the document should be arranged for digitization purpose. Such documents which/are tiny/oversize, where the physical condition is bad, or the documents are available on a format like glass or birch bark special techniques need to be used.

Basic Selection Methods

For selecting documents for digitization the following there steps need to be taken into account.

A Nomination; A meeting of experts, author's library and information scientists, archivists, etc. should be held to collect names of documents that need to be selected for digitization purposes. While doing so the following guidelines need to be seriously considered:

a. How much of the collection is well and accurately documented at the item level in reliable and complete indices and finding aids, and where are these well documented items?

b. How much of the collection is in stable or good condition, and where are these stable materials?

c. What portion of the collection is standard and consistently sized, normal contrast, black-and –white and/or printed materials, and where do these materials fall? Note; a void oversized, unusual and varying format, long-tonal range, color and handwritten materials for start-up projects.

d. What materials are easy to provide to researchers because of their size, format, or viewing requirement and where are they in the collection?

e. What percentage of the materials does the institution have the copyrights to or licenses for, and where are the public domain materials?

f. What percentage of the materials has no restrictions or sensitivities of any sort (such as privacy, publicity, defamation, obscenity and sensitivity, or donor restrictions), and where is this restricted and non-sensitive material?

g. What materials are of highest monetary value and well secured, and where are they in the collections?

h. What materials are judged to be at highest risk and why, and where are they located in the collections? Of these, which are stable enough to be scanned without damage or which have already been well photographed?

i. What materials are used most frequently, and they used, and where are they located?

j. What materials are unique to the institution, and where are they located?''

In order to collect a variety of view points as given above, the Handbook for Digital Projects advises to use two nomination forms, one for selection and the other for deselecting. This exercise is considered to be very important.

Evaluation

The Selection Committee or the Sub-Committee in a particular discipline should examine the suggestions made and decide on which items to be included and deleted.

The Selection Committee should evaluate the recommendations made and deselect, if found necessary, according to international practices set for this purpose. The following principles which are based on the recommendations given in the Handbook for Digital Projects need to be kept in mind:

a. Mission Statement is the document to be digitized falling within the purview of the project? If not, don't digitize.

b. Scope of Collections Statement: If a complete collection is digitized, confirm that the document to be digitized falls within the repository scope of the collection.

c. Deselecting Requests from the Supporters of the Project: If the supporter of the Project recommends that the document should be digitized and they are challenged by equally important sources not to digitize, the document should not be digitized. However, if the selection Committee finds deselecting recommendations frivolous or insubstantial, then ignore them.

d. Donor Restrictions: If the donor of the document to be digitized puts substantial or non-negotiable restrictions which prevents the users to use document according to the policy defined by the institution digitizing the document then don't digitize the document. If the document is important and not available elsewhere try to re-negotiate the terms with the donor.

e. Copyrights: Don't digitize any document unless you are sure that it is in the public domain or you have obtained copyrights or licenses/ permissions.

f. Privacy Rights: if a document contains images/ pictures of living persons obtain permissions from them before digitizing the text.

g. Publicity Rights: if the document includes images or recordings of famous persons such as motion picture or recording stars, scientists, artists or authors obtain premising from the persons or their estates before digitizing the text.

h. IT Regulations: Don't digitize the document which is not permitted under the law or the information Technology Act.

i. Sensitivity; if the document contains sensitive information on subjects such as defense religion, etc. or is unbalanced in its point of view, the Selection Committee should get the advice of experts before taking a decision on digitization.

j. Evidential Value: if the document contains material that is evidential in nature or supports events with legal and historical proofs and/or interests a key audience as it has substantial information, then the document should be digitized.

k. Authenticity ; if the document is authentic and original in contribution it should be digitized.

l. Visual Accuracy : if the print/appearance of the document supports the creation of an accurate and sharp digital version then digitize it. If not, find alternate methods for doing so.

m. Documentation: if the document does not have appropriate captions and the budget does not permit to appoint staff to create them, then defer the digitations of that particular document.

n. Contextualization: if a document essentially needs substantial and expensive research inputs in terms of contextual support such as hypertext support for certain portions or viewing of document in relation with other documents simultaneously, etc. it may be necessary to reconstruct the archaeological support in the Encoded Archival Description (EAD) format or another suitable format. If it is not possible to do so, It would not be Advisable to digitize such a document.

o. Added Value; IF he document has become available for the first time, it fulfills the necessary conditions laid out for the selection of a document, it is considered necessary to make it available to a larger audience, and then if funds permit, digitize the document in order to:

i   Make the unique document available to a larger audience.

ii.   Create linkages to the document through HTML, SGML, and XML Coding.

iii.   Make it part of the virtual collections on the same subject using different techniques, format and bringing together physically separated documents either on the Web or in CD form.

iv.   Add new indexes and searching aids.

p.   Audience: if the digital version and the printed version reached the same audience, yet considering that the document is important to the Indian heritage or is an Indian contribution, the digitization of the document should be considered.

q.   Supplementary Selection Criteria: If the audience creates its own selection criteria, such   recommendations should be taken into the evaluation process.

r.   Technology: if the audience cannot afford the expensive equipment for using the digital version, then avoid digitization However, now that Internet is becoming available to more and more users in India , this factor does not apply. However, the technology should be such that every internet user can access the document easily.

s.   Condition: if the condition of the document to be digitized is very poor and it is likely that in the digitations process the document will get damaged, then do not digitize it.

t.   Control: Make sure that rare materials are kept under security during the process of digitization and are returned to the owner in the original condition.

u.   Duplication of Effort: if the document has been digitized elsewhere, locate the source, and find the quality of the digital version. If we can get a copy get a copy for general use, then it is not worth digitizing the document.

v.   Accessibility: if the original document is inaccessible but it is available in microfilm or microfiche form widely, it may not be ideal to digitize the document at this stage.

w.   Cumulation: It the document is relevant as part of a collection only, then the digitization of it alone must be seriously questioned by the Selection Committee and other reasons obtained for its selection before taking a decision for digitization of the document

Prioritization

The final list prepared for digitization purposes should be ranked in the order of priority keeping in mind the relevance of each document in a historical perspective its use in the present context and its physical condition. The international norms for prioritization should be considered.

Digitization; Some Important Management Factors

There are some important factors that help in the management of the documents. These need to be assessed while adopting digitization techniques.

(a)   Storage and distribution of data; The use of necessary storage and distribution Systems to provide global access to resources is essential.

(b)   Long-term preservation methods: Some sort of assurance that the scanned images will be visible for a long time to come.

(c)   Standardization of digitization processes: Standardization for wholesale conversion of paper documents in digital form is imperative.

These criteria are influenced by the evolution of new information objects and contents, the use of metadata and terms and conditions of intellectual property rights. The managers of digitations' jobs have to keep in mind these issues from a global point of view.

Management Aspects of Digital Library Architecture

The management issues need to be examined carefully in view of the fact that low connectivity's poor indexing facilities, lack of Web servers and poor quality document management software can have a major impact on digitization processes. It is therefore essential to have:

- High speed local server and fast connection to the internet
- Relational databases that support a variety of digital formats
- Full-text search engines with efficient indexing facilities
- Web servers and FTP servers
- Electronic document management facility

The facilities

These facilities should accommodate different types of documents including.

- Internet resources
- Primary materials in various digital formats.
- Photographs
- Numerical data sets, and
- Electronic journals.

Preservation

Management of the digitized documents for preservation is an important issue. In this regard the relevance of technical obsolescence has to be taken into consideration. It necessitates the adoption of new technical solutions periodically.

The following three types of "preservation" issues can be considered seriously:

- The preservation of the storage medium,
- The preservation of access to content,
- The presentation of fixed media materials through digital technology

The Preservation of the Storage Medium

The libraries will have to keep moving information in the digital formats such as tapes, hand

Drives and floppy discs from one storage medium to another storage medium.

The Preservation of Access to Context

It is a major issue it is essential to translate data from one format to another while making users to retrieve and display the necessary information. Since migration of data is costly, one has to ensure that in the process there is no distortion or loss of information. The US Commission on Preservation and Access and RLG states "the presentation community is only beginning to address migration of complex digital objects" and such migration remains "largely experimental".

The Presentation of Fixed-Media Materials

Since, there are no common standards libraries need to make CD-ROM and optical disk back-ups regularly. Several types of back-ups will ensure that there is no loss of contents. This is essential.

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NEW TERRITORIAL COMMUNITIES OF RECREATIONAL SPECIALIZATION IN UKRAINE. PREREQUISITES AND REQUIREMENTS FOR ARCHITECTURAL-SPATIAL ORGANIZATION

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ABSTRACT

Territorial development of settlements is important not only because of its special role in the socio-economic life of the state. Its importance is also connected with the fulfillment of Ukraine's commitments to harmonize the current legislation and quality of life standards with the requirements of the EU, cooperation with which remains one of the priorities of our country's European integration. The need for a modern comprehensive reassessment of the role of settlements in general in supporting the economic development of the region is due to the significant natural, resource-production, labor and other available potentials of the settlement environment. Ternopil region has a huge recreational potential, it is: natural resources, monuments of history and architecture, pilgrimage centers. All this attracts tourists, not only from Ukraine but also from abroad. The use of rich recreational resources will allow to build resorts, rest homes, tourist bases in Ternopil region, which in a short period of time can raise the economy of the region, welfare, recreation culture and improve the process and quality of population health recovery. Increasing the capacity of tourist and recreational infrastructure by attracting domestic and foreign investment is one of the priority areas of socio-economic and cultural development of Ternopil region in recent years. Increasing the share of inbound and domestic tourism, sightseeing should be an effective tool for economic growth of the region and increase its prestige in domestic and international tourism markets.

KEY WORDS: *territorial formations, united territorial communities (UTCs), recreational specialization, recreation, architectural and spatial organization.*

The purpose of the article: to explore the prerequisites and justify the requirements for the architectural and spatial organization of new territorial communities.

The following tasks are solved:
• Recreational potential and administrative-territorial changes in Ternopil region, Ukraine are characterized;
• new territorial formations with development prospects have been identified;
• selected UTCs of recreational specialization are characterized;
• the requirements to the architectural and spatial organization are substantiated.

1. General characteristics of the object of study.

Ternopil region is an administrative territorial unit of Ukraine with its center in the city of Ternopil. Located on the Podolian Upland, the southern border of the region runs along the Dniester River, the eastern - along the Zbruch river. The region occupies the eastern part of Galicia historic region and part of southern Volhynia historic region.

In the Ternopil region there are 1055 settlements, of which 18 have the status of cities, 17 - urban-type settlements and 1020 villages.

The process that has been much talked about in the last decade in Ukraine, the reform of the administrative-territorial structure of the state, is now

taking shape. The implementation of the reform will significantly affect the established settlement system in Ukraine, will change the functions of most settlements in the regions and open new prospects for the development of many of them.

The problem of forecasting and analyzing changes in functions becomes relevant, as well as outlining the ways of development of the most degraded settlements of regions (urban settlements), which during the Soviet period lost their historical role, and in the context of administrative-territorial reform, becoming usually administrative centers of new territorial communities, receive development prospects.

In the conditions of administrative-territorial reform on the territory of Ternopil region recreational resources should play a special role.

2. Characteristics of the recreational potential of the region (natural, historical, pilgrimage).

According to the register of the State Agency of Ukraine for Tourism and Resorts, 125 tourist enterprises operate in the Ternopil region: 25 tour operators and 100 travel agents and their number is growing every year. The number of employees employed in tourism and related industries in the Ternopil region is tens of thousands of people. Despite some achievements in the development, tourism industry needs further development and significant investment in its development.

Taking into account the natural and landscape conditions, historical and cultural heritage and the existing recreational and tourist infrastructure, the priority areas of tourism development in the region were identified, where investments should be directed, in particular: National Nature Parks "Dniester Canyon" and "Kremenets Mountains" ; Kremenets-Pochaiv and Berezhany historical and cultural reserves; "Ternopil Castles" National Reserve, cities of Ternopil, Berezhany, Borshchiv, Buchach, Terebovlia, Gusyatyn and Mykulyntsi resorts; Zarvanytsia village of Terebovlya district as a pilgrimage center. With such potential, tourism should be developed as a strategic sector of the economy of our region.

As of today, the material and technical base of tourist and recreational facilities does not meet modern requirements and requires significant investment for re-equipment and modernization. Today, the issue of increasing tourist flows to the region is directly related to the problems of organizing the accommodation of tourists and the construction of modern facilities for their service. The resource potential in small towns and rural areas is extremely underused. The level of provision of roads with tourist, service and information structure is also insufficient.

In summary, the development of tourism in the Ternopil region is hampered by: lack of recreation and entertainment industry (except Ternopil city), insufficient number of equipped places for short-term recreation of tourists, unsatisfactory condition of roads, lack of entrances to many popular tourist sites, unsatisfactory condition of most cultural heritage sites, insufficient provision of the tourism industry with highly qualified specialists and lack of systematic advertising and information support.

3. Characteristics of administrative-territorial changes in the region and the formation of new entities.

The main difficulty in forming a new administrative-territorial structure of the region is that in Ternopil region, as well as in the Western region of Ukraine as a whole, settlement system is historically different from other territories of Ukraine, in which a significant proportion are small settlements. Within the Ternopil region, today, there are 1,053 settlements, including 1,017 villages (581 village councils) with 656.8 thousand inhabitants. The average number of inhabitants of one village is 643 people. The urban population is about 50% of the total population of the region.

Administratively and territorially, the region consists of 17 districts, 18 cities (including 4 of regional subordination, 14 – district subordination) and 18 urban-type settlements. According to the latest census, the total population of Ternopil region is 1 million 138 thousand people. The region covers an area of 13,832 square meters. km., is 2.28% of the territory of Ukraine (2.36% of the population of Ukraine).

On December 16, 2015, by the order of the Cabinet of Ministers of Ukraine №1391, the perspective plan of formation of territories of communities of the Ternopil region was approved. On April 22, 2020, the order of the Cabinet of Ministers of Ukraine approved the order with latest amendments.

When preparing the Perspective Plan for the Formation of United Territorial Communities (UTCs), the Ternopil Regional State Administration should, first of all, take into account that an integral part of administrative-territorial reform should be optimizing the territorial management system, streamlining relations between different levels of government, providing real opportunities for everyone to receive the maximum number of quality social and administrative services from the authorities at each level, efficient use of resource potential, sustainable development of territories, ability to adequately respond to social and economic challenges, and ultimately - to improve the living standards of every citizen in every urban or rural settlement.

The long-term plan for the formation of united community territories, submitted by the Ternopil Regional State Administration for approval

to the Cabinet of Ministers of Ukraine, in general, did not fully meet both the above requirements and the Methodology for the formation of competent territorial communities. However, the Perspective Plan for the Formation of Territories of Communities of the Ternopil Region was approved by the order of the Cabinet of Ministers of Ukraine of December 16, 2015 № 1391-p. Given the passports of competent territorial communities (CTCs) (prepared by interested representatives of the communities themselves and identified by them as potential administrative centers), it is obvious that the region did not fully manage, as recommended by the Methodology of Formation of Capable Territorial Communities, a proper comparative analysis of communities, the conditions were insufficiently researched, and also the basic problems and tasks of the modern administrative-territorial system are not solved.

In determining the centers of communities and the territorial basis for the formation of an effective system of government, in the vast majority of cases, preference is not given to former district centers and other settlements, which residents of surrounding settlements have traditionally recognized as local centers of public, cultural, religious life, trade centers and objects of economic activity and the presence of investment-attractive areas.

The regional state administration did not take into account and did not use other information that is not contained in the passport of the CTCs - the location of the territorial community in the settlement system of the region; natural resource conditions of the community; significant disproportion in resource provision and levels of socio-economic development between administrative-territorial units of one level; availability of transport networks of regional and state importance; land structure; industrial potential; the opportunity for the community to provide residents with a full range of full-fledged socio-economic, administrative, household and other services.

In summary, administrative-territorial reform should not be an end in itself (reform for the sake of reform) with the main purpose of quick reporting to the central executive bodies on resolving the issue of forming the Perspective Plan by merging two or three village councils into a territorial community, without considering a number of factors, which will significantly affect the continued full existence of such communities and which will in no way be able not only to improve the provision of services, but also to provide them in general. The reform practically does not take into account the presence of a strong tourist and recreational potential of the region, which can become a driver of economic prosperity of the region.

4. Identification of new territorial formations of recreational specialization.

For this study, it was decided to identify key territorial entities with large recreational resource.

To identify and characterize the new territorial formations with the predominant recreational potential graphic method was used and three schemes of Ternopil region were created.

Scheme №1 reflects the location of notable resource and tourist facilities in the Ternopil region. There are temples, architectural monuments, castles, ruins, caves, parks, gardens, etc. With the help of this scheme, the largest clusters of objects are identified and divided into three main categories: natural-landscape, historical-cultural, religious-pilgrimage (Scheme №2). This method was used to obtain eight main areas with the prospect of recreation.

These areas were selected for further analysis. In scheme №3, the obtained scheme №2 was combined with the scheme of the perspective plan of formation of territories of UTCs of the Ternopil region from April 22, 2020.

It was found that some of the promising areas do not belong to any of the new proposed communities. For these areas, it is recommended to create communities based on the available recreational potential.
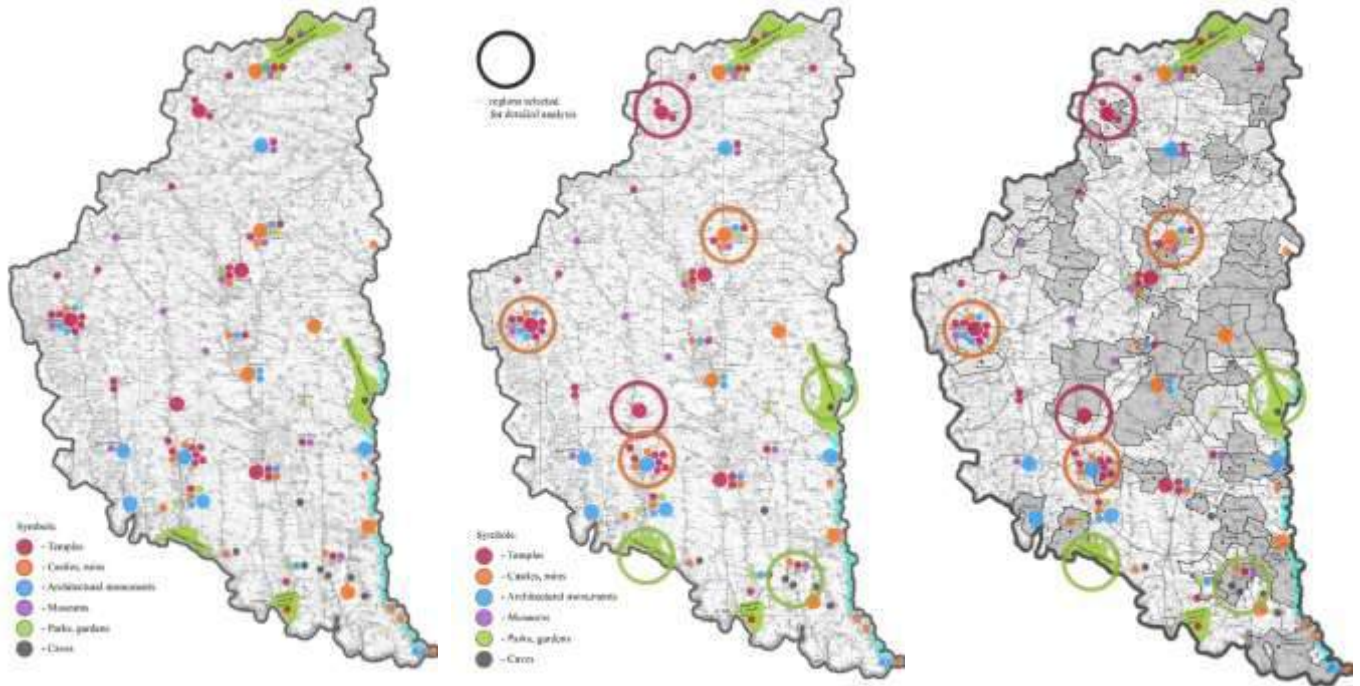
Scheme № 1   *Scheme № 2*   *Scheme № 3*

5. Characteristics of selected areas with recreational potential.

Recreational potential	Community name	The scheme of the territory	Number of united councils	Area (sq. Km)	Pop-on (people)	Description of available recreational potential
1. Religious and pilgrimage	1.1. Pochaiv city UTC		2	54.2	9395	Orthodox monastery. The largest Orthodox shrine in Volyn, the second, after the Kiev-Pechersk Lavra in Ukraine. For a long time - the Basilian monastery. The Pochaiv Theological Seminary is located on the territory of the Lavra.
	1.2. Zolotnykivs'ka rural UTC		14	284.3	7976	Zarvanytsia Spiritual Center is a world Marian pilgrimage center, one of the largest shrines in Podolia of the Ukrainian Greek Catholic Church.
2. Historical and cultural	2.1.Zbarazh community		-	-	-	Zbarazh Castle, fortification.
2. Historical and cultural	2.2. Berezhanska city UTC		2	59.85	19784	Brzezany State Historical and Architectural Reserve.

	2.3. Buchach community		-	-	-	Famous historical and architectural monuments - the Church of St. Nicholas, the Holy Intercession, the Exaltation of the Holy Cross, the Church of the Assumption of the Blessed Virgin Mary, the town hall, sculptures of Galician Michelangelo - John George Pinzel and more.
3. Natural and landscape	3.1. Hrymailiv Settlement UTC		2	45	2763	Medobory Nature Reserve
	3.2. Zalishchyts'ka community		-	-	-	Dniester Canyon National Nature Park
	3.3. Borshchiv city UTC		8	146.8	17772	A widespread network of caves in the region.

Selected communities have a significant tourist and recreational resource of various kinds. With proper administration aimed at the development of recreation and tourism, it is possible to improve the economic condition of these areas. This requires a comprehensive approach to the architectural and spatial organization of newly formed communities.

6. Substantiation of requirements to the architectural organization.

In their architectural organization, the new territorial communities are not considered as a certain integral structure with internal and external connections and relations, as well as their multifaceted interactions. The community is interpreted as a set of relationships, connections and elements of urban space. This organization of spatial structures is associated with solving a set of complex problems. Therefore, it is important to outline the main functions (specialization) of individual territorial communities, and the corresponding requirements for their architectural and spatial development.

1. Focusing on new territorial entities with a dominant recreational function, we clarify the basic concepts for this specialization. Thus, recreation refers to the activities of people in their spare time, aimed at recuperation and recovery through participation in cultural activities, various forms of tourism and recreation in specialized areas. Recreation covers all kinds of activity in free time. Recreation usually also includes treatment and rehabilitation, that is all facilities related to this function, outside of permanent residence (sanatoriums, resorts, recreation centers, etc.). Recreational areas and objects are those areas and objects which, due to their natural, historical and ethnographic features, are attractive for visiting, treatment and recreation. These are mostly natural complexes that have preserved their unique characteristics and have healing and health-improving properties (including monuments of history and architecture, reserves, reservoirs, travel routes, beaches, etc.). Attractive recreational resources affect the development of relevant areas. Architectural and landscape organization of recreational areas is an activity aimed at adapting the area to recreational functions. It includes three main aspects: protection of architectural and landscape properties of the region; ensuring conditions of communication accessibility of territories and objects; creation of infrastructural conditions for comfortable living, rest and rehabilitation both on places and on the road.

2. The main architectural and spatial characteristics of territorial formation are its territory, distances and location of the main elements in space. Thus, distances reflect the state of development of the road network and engineering infrastructure, and location - the nature of the location of individual zones. The basic problem of new territorial formations is the existing functional structure of the territory, which has developed historically. It is characterized by disorder and intertwining of zones of different functional nature - recreational, agricultural, urban, security, industrial.

3. Considering the architectural and spatial organization of new entities, we emphasize that changes in their spatial structure in recent decades have been due only to socio-economic transformations on a global scale (automation, reform of ownership, the formation of new cultural values, etc.). Architectural and spatial changes did not occur systematically and in many cases due to the deterioration of the environment.

4. With the implementation of administrative-territorial reform and the definition of key functions of new entities, it is necessary, first of all, to take into account the specifics and space requirements of individual objects that represent the main specialization. The organization of the space of these facilities will make them more attractive from a recreational and tourist point of view, which will facilitate the inflow of capital into the community. Proper zoning of the community will improve the perception of recreational facilities.

Improving the existing and creating a new road network and engineering infrastructure will make it possible to form close architectural, spatial and socio-economic links, both internal and external. This will increase the capacity of the recreational and tourist function of individual communities with this specialization and the region as a whole.

CONCLUSIONS

1. The recreational potential of Ternopil region is characterized and assessed.
2. The analysis of administrative-territorial changes in the Ternopil region is carried out and new territorial formations having prospects of development of recreational specialization are allocated.
3. The requirements to the architectural-spatial organization are substantiated: •Systematic requirement;
• functional sufficiency requirement;
• the requirement of landscape-spatial order;
• the requirement of advanced development of engineering and transport infrastructure;
• requirement of efficiency and ecological use of resource (recreational) potential.

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NATIONAL AND CULTURAL FEATURES OF ANTHROPONOMIC COMPONENT PHRASEOLOGICAL UNITS IN ENGLISH AND UZBEK LANGUAGES

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ABSTRACT

A phraseological unit is a unit related to language and speech as a linguistic phenomenon. A linguistic unit consisting of a combination of more than one independent lexeme form and having a figurative spiritual nature is called a phraseological unit: the top hair is straight; the vinegar does not carry water; to show the white feather, to play the first fiddle. Phraseological unity is also referred to by the terms phrase, phraseologism, stable compound, stable compound, phraseological compound. In this article, we will focus on phraseological units with anthroponomic components in Uzbek and English.

KEYWORDS: *anthroponomic phraseology, linguoculture, stable compound, lexeme, homonymy.*

DISCUSSION

Phraseology is a small branch of linguistics in which a phrase means a phrase and a logos means a doctrine. The term phraseology is used in two main senses:

1) The field of linguistics, which studies the phraseological structure of the language;

2) A set of phraseology of the same language.

The subject of phraseology is the nature and substantive features of phraseology and the laws of their application in speech. A set of words or phrases consisting of two or more words, representing a coherent portable meaning, having an effect, and having the same meaning as a word is called a phrase.

Phrases are studied in the phraseology department of linguistics, so we also call phrases phraseologies. In addition, the Department of Phraseology of Linguistics has studied the development of this field, linguists who have made significant contributions to the field of phraseology, phraseological meaning, phraseological polysemy, opposite meanings, phrase synonymy, phraseological paronymy and paraforma, phrase homonymy, phrase variation, specific grammatical features of phraseologies, etc. are studied. As you know, phraseology in linguistics has been studied in lexicology for many years. Because phraseological units are the equivalents of words in a language, lexicology is the discipline that studies the words that

make up the vocabulary of a language and their equivalents. In recent years, as phraseology has become a separate discipline of language or an independent language stage, phraseology has emerged as an independent branch of linguistics, an independent branch of lexicology since the 1950s, as a new field.

VV Vinogradov played an important role in the formation of phraseology as a separate linguistic direction, including the birth of Uzbek phraseology. It is because in the former Soviet Union, the phraseology of the languages of the colonial peoples was based on the teachings of this scientist.

In foreign linguistics, phraseology is sometimes included in the lexicon or stylistics. The fact that phraseology is an independent language discipline is often not recognized by Western European and American linguists. Nevertheless, the English school of phraseology has been studied with great interest by many scholars. In particular, such scientists as academicians A.Shakhmatov, A.Yefimov, N.Shansky, A.Kunin, N.Amosova, V.Zhukov have made their contribution to the development of this field, especially to the development and progress of the English school of phraseology.

Shavkat Rakhmatullayev's name is associated with the study of Uzbek phraseology on a consistent scientific basis. The scientist laid the foundation for the creation of our national phraseology with a

number of researches devoted to this field. In particular, the following research works of the scientist - "Explanatory phraseological dictionary of the Uzbek language",

With the scientific literature such as "Short phraseological dictionary of the Uzbek language", "Some issues of Uzbek phraseology", "Basic types of phraseological combinations", "Basic grammatical features of figurative verb phrasal units of modern Uzbek language" He contributed to the development of the Uzbek school of phraseology. Y. Pinkhasov also achieved great success in the study of phraseological units. His works such as "Phraseological expressions in the language of production Hamida Alimjana", "Modern Uzbek literary language" (lexicology and phraseology), "On the phraseology of the Uzbek language" are in the treasury of linguistics. The services of Yuldashev, Abdumurod and Abdugafur Mamatov are invaluable. B. Yuldashev elaborated on the connotative meanings of phraseologies, their potential as a means of artistic expression. Abdumurod Mamatov raised the problem of phraseological norm and showed the relationship between phraseological norm and phraseological variant. Abdugafir Mamatov, in a number of his works, raised the problems of phraseological formation and highlighted the factors of its emergence. He pointed out that an important distinguishing feature of phraseological units is semantic transformation. A widely used distributive method in linguistics can be used in the scientific study of phraseological units. By studying the features of the use of phraseological units in speech using the distributive method, their structural and semantic features are more deeply defined. In addition, in the study of phraseological units, it is necessary to consider their semantic and structural features in relation to the content plan of the language and its plan of expression. When examining the composition of phraseological units, it is necessary to consider the types of connections between its components, the nature of the connecting words on the basis of the valence method.

The main features of phraseological units are:

1. A phraseological unit consists of two or more lexemes.

2. Phraseological unit expresses a single lexical meaning.

3. Words in a phraseological unit have lost their lexical meaning.

4. A phraseological unit as a stable compound is only homonymous with a free compound.

5. The phraseological unit can only be replaced as a whole

6. Phraseological unit comes in a syntactic function as a whole in the structure of the sentence.

7. Phraseological unit cannot be translated literally into another language, it is translated as a whole. Since the phraseological unit is a lexical unit, it acts as an independent word in the speech process - it comes as a part of speech or as an augmentative: 1. Madamin fell from the accusation against her. 2. His head spun until he came to the table; Several candidates are already jockeying for position. 3. Such incidents, which are supposed to be eyebrow-raising, still occur in small numbers; Talks between staff and management will resume after a two week cooling off period. 4. The bucket needs to be adjusted; The sky is the limit. In sentences 1 and 2, the phraseological units are in the center of the sentence - in the participle position, in sentence 3 - the expander - the determiner, and in sentence 4 - as a whole ownerless sentence.

A phraseological unit is, in appearance, a phrase or a sentence. Phraseological unit in the form of a phrase: empty, touching the jaw; heavy father, to take care and so on. The phraseological unit of the sentence type is a product of the pattern "speech expander + cut": hot, butterfly flew; to let the cat out of the bag;

As for the phraseological units with an anthroponomic component there is no doubt that today language is not being evidently taught and learnt only by linguistic aspects but also by cultural studies as well. Culture is assumed to be implemented on the content plane of linguistic expressions, reproduced in an act of denomination and transmitted from generation to generation through linguistic, extra linguistic and cultural norms of usage. As one basic trend of cross cultural studies can be regarded linguoculturology. Linguoculturological science is a science which has emerged as the junction between linguistics and culturology engaged in research of manifestations of cultures which had displayed and established themselves in their languages. The term "linguoculturology" is being often used in association with the term "culture-through-language studies". As a special branch of science, linguoculturology emerged in the 1990s. As is evident from the analysis of English and Uzbek phraseological units, reference in English as well as in Uzbek phraseological units is often made to people or places with which the members of the respective culture are familiar. On the other hand, many phraseological units with the same origin are more universally used in several languages with the same cultural and historical background, which also holds true of English and Uzbek. The final finding is that proper names that are components of phraseological units and which are characteristic of a given culture should be observed from different points of view, such as historical, geographical, cultural, linguistic, cross-linguistic and social, and that more thorough studies of phraseological units with an onomastic component would contribute to a higher level of cross-cultural awareness.

In our paragraph, we investigate a number of English and Uzbek Phraseological units with anthropological elements. An overview of the personal names involved phraseological expressions in the English languages indicates the following types of source:

Phraseological units (further PhUs) containing anthroponymic constituents compose one of the most picturesque and colourful subsystems in every language and culture. It is to be interpreted as the reflection of the anthropocentric character of phraseology and language in general. Most of the anthroponymic PhUs have a rich cultural background, conceptualized in national memory as rigid associations-personalities. This fact convinces that modeling of such component of language system as anthroponymic phraseology is a promising area of learning language picture of the world of different nations in the framework of anthropocentric (nominative-pragmatic) paradigm at the junction of various sciences (in particular, onomastics, dialectology, cognitive linguistics, psycholinguistics, sociolinguistics, ethnolinguistics, etc.). From this point of view, anthroponymic PhUs as a universal phenomenon is one of the most interesting objects for the contrastive investigations at both synchronic and diachronic levels in two or more separate languages. Contrastive exploration of PhUs with anthroponymic component explicates one of the deepest layers of the picture of the world introducing universal (constant) and specific features of a native speaker and his culture, the reproducibility of which contributes to the translation of ethnospecific information between generations and the preservation of the collective cultural identity. It is worth considering that anthroponymic set expressions become the object of different linguistic studies of native and foreign scholars. Azhnyuk B., Kravchuk A., Lalayan N., Mokienko V., Moroz O., Pasik N., Safronov O., Stepanova L. and others, first of all, give a general description of the material or cover some aspects based on a particular language. At the same time, many problems are not finally solved yet. Interlingual comparison of the anthroponymic PhUs, which forms the foundation for a clarification of a lot of theoretical and applied trends of actual linguistic explorations, e. g. the problems ofphraseography and PhUs translation, the question of the parameters of a contrastive study of the anthroponymic PhUs are still at issue. A comprehensive contrastive study of linguistic features of idioms with an anthroponymic component in English versus Uzbek has so far not been dealt; a functional aspect of these universal language units and their national-cultural specificity has not been fully studied out. Therefore, the topicality of our article is determined by this fact. The objectives of the presented research are to trace the peculiarities of anthroponymic PhUs formation in English versus Uzbek, to identify the main semantic modifications that occur to the anthroponymic component before the process of its complete phraseologization, to describe the structural-grammatical types and models of English and Uzbek anthroponymic phraseology, to emphasize the differences conveying important cultural implications.

Originating in the religious anthroponomy:

1. Adam's Ale- reference to the only drink available to Adam, the first man in the biblical tradition, while in Eden
2. The Old Adam
3. Old as Adam
4. One's outward Adam
5. Since Adam was a boy
6. When Adam delved and Eve span who was then a gentleman?
7. The daughter of Eve (Eve's daughter) – Very beautiful, charming and gorgeous woman.

The following Phraseological Units are covered with the ideas and conditions that are connected with Adam and Eve. Here Adam and Eve are taken from Holy Bible and considered as a religious anthroponomy. Furthermore, Saints` names are used in the Phraseological Units as well.

8. Vitus's Dance – (behalf of Saint Vitus)
9. David and Jonathan– close friends (Bible II, Samuel I)
10. Judas Kiss - an act betrayal; Judas Iscariot, the disciple who betrayed Jesus, after the Bible (Mathew) 'and he that betrayed him gave them sign, saying, whomsoever I shall kiss, that same is he: hold him fast'
11. Doubting Thomas - a person who refuse to believe something without incontrovertible proof; a skeptic from the story of the apostle Thomas, who said that he would not believe that Christ had risen again until he had seen and touched his wounds; from the Bible(John)
12. The mark of Cain- the stigma of murder, a sign of infamy; the sign placed on Cain after the murder of Abel, originally as a sign of divine protection in exile.
13. Abraham`s bosom- heaven, the place of rest for the souls of the blessed; Abraham the Hebrew patriarch from whom all Jews trace their descent; from the Bible (Luke) 'And it came to pass, that the beggar died, and was carried by the angels into Abraham`s bosom' The above anthroponomy are taken from Bible

Originating in the Mythological anthroponomy:

1. Castor and Pollux – candles that are fired at the end of the competition. (Castor and Polluxare considered as twin sons of Jupiter and Leda in the Roman mythology).
2. Achilles' heel- a person`s only vulnerable spot, a weak point; from the legend of the only point at which Achilles could be wounded after he was

dipped into the River Styx, his having so that heel was protected from the river water by her grasp.

3. Pandora`s box- a thing which once activated will give rise to many unmanageable problems; in Greek mythology, the gift of Jupiter to Pandora, 'all-gifted', the first mortal woman, on whom, when made by Vulcan, all the gods and goddesses bestowed gifts; the box enclosed all human ills, which flew out when it was foolishly opened.

4. Cupid`s dart - the conquering power of love; Cupid the roman god of love, son of Mercury and Venus, represented as a beautiful naked winged boy with a bow and arrows.

5. Invita Minerva- lacking inspiration; Latin-Minerva (the goddess of wisdom unwilling).

6. Bow down in the house of Rimmon pay lip-service to a principle; sacrifice one`s principles for the sake of conformity; Rimmon- a deity worshiped in ancient Damascus.

Originating in the Historical person anthroponomy:

1. A banquet of Lucullus (a Lucculan, Lucculeanor Lucculian; party night, taken from the name of ancient Roman aristocrat.

2. Vandyke (or Van Dyke) beard- taken from the portrait of Van Dyke.

3. Big Bertha –German army`s big gun during the World War I; here phraseological unit is based on the historical event.

4. A beau Brummel – beautiful Brammel (G. B. Brammel 1778-1840, famous person of her period.

5. According to Cocker - right, correct (E. Cocker (1631-1675) – the author of the arithmetic textbook in English language.

6. The admirable Crichton– educated, broad horizon person, lettered husband; taken from the book of Scottish scientist G. Crichton lived in the XVI century.

7. Like the devil looking over Lincoln– distressed, grieved, upset.

8. Even blind Freddy could (would) see it! (Australian oral conversation) –this is evident event to blind; taken from the merchant lived in the Sydney in the 20s of the XX century.

9. Let her go, Gallagher! (Australian oral conversation) – Let`s go, go ahead! ; Tom Gallagher – famous coachman of his time.

Originating in the Political figures` anthroponomy:

1. Gladstone bag - suitcase made from skin: taken from the name of the Prime minister of England U. Gladstone.

2. Teddy Bear – a soft toy bear: taken from the name of American president T. Roosevelt (1858-1919)

3. Big Ben – the big watches of the Parliament of England; taken from the name of sir Benjamin Hall.

4. Teddy boy – a British man who has his own dressing style; Teddy is the short form of the name Edward; taken from the name of the England King Edward VII.

5. Appeal to Caesar – addressing to high authority.

Originating in the literary texts` anthroponomy:

1. Peck's bad boy – a person who makes others in uncomfortable condition with his bad-mannered behavior; taken from the name of the book "Peck's bad boy and his pa" by J. U. Peck.

2. Fortunatus' cup– a cup that does all wishes of its owner; Fortunatus is the hero of the fairy tale.

3. Dr. Jekyll and Mr. Hyde – a person who is sometimes good and sometimes bad; taken from the work by R. L. Stevenson "Strange case of Dr. Jekyll and Mr. Hide".

4. Father Knickerbocker – taken from the name of the satirical book by V. Irving.

5. Cornelia's gift – tiny and pleasant voice of women; Cornelia is the name of hero of Shakespeare's tragedy "King Lear".

6. Sherlock Holmes – police detective; Arthur Conan Doyle`s popular fiction personage

7. John Bull –stupid, drunk; "Jon Bull" is firstly used in the satiric pamphlet by J. Arbuthnot (J. Arbuthnot, 1667 - 1735)

8. Tom Sawyer – advocate; the main hero of the work by Mark Tween.

9. Beauty and the Beast - characters in a fairy story by the French writer for children 'Madame de Beaumont' (1711-80), translated into English in 1757.

10. Elementary, my dear Watson - remark attributed to Sherlock Holmes, but not found in this form in any book by Arthur Conan Doyle There are also numbers of real people anthroponomy in the structure of English phraseological units and especially they have negative meanings.

Originating in the real people anthroponomy:

1. Brown, Jones and Robinson – common Englishmen

2. Jack – the way of addressing to common English man.

3. Good-time Charlie – person who live with full of excitement in life.

4. a proper Charley (Charlie) – stupid. silly

5. turn Charlie – to fear, to be scared

6. cheap Jack (or John) – the clerk of cheap goods.

7. Cousin Betty – silly

8. Clever Dick – clever, intelligent

9. Dumb Dora (American jargon) – stupid girl

10. Jack and Jill; Jack-and-Jill – banknote, a box that us money saved, cash; taken from the name of the hero of children poem.

11. The Corsican ogre - Napoleon I (1769-1821), Emperor of France, in the reference his Corsican birthplace.

12. Homeric laughter - irrepressible laughter, proverbially like that of homer`s gods in the Iliad as they watched Lame Hephaestus hobbling.

Survives show that anthroponomy of real common people has not deep meaning and mostly are used in the negative marked phraseological units.

Some of Uzbek names are also created through the stylistic devices of antonomasia. Here proper names are made from common names. For example, To'lqin, Erkin, Oydin. In this case we will observe the lexical meanings of following words. The first main lexical meaning of the word To`lqin is: waved water. Figurative meaning of the word is: emotion, inner feelings, raging movement. The first main lexical meaning of the word Erkin is: free from any barrier. The second meaning is: political, financial and legal independent. The first main lexical meaning of the word Oydin is: bright, moon light. Figurative meaning of the word is: clear, evident, obvious. It should be taken into consideration that in the antonomasia two types of lexical meaning is expressed at the same time: main nominative and figurative text meanings: Aka-uka baliqchilar Tolmas va Qo'rqmas Qaytmasovlar (radiodan). Antonomasia has the connection between another stylistic devices for example, epithet and most cases is used with it. Epithet is stated person`s main qualities.

The closeness of antonomasia to epithet is seemed in the function of it, not in the form because the function of antonomasia is to give definition, to assign and to describe main peculiarities of person behave. Most nicknames of historical and social person were based on such describing. Samples: The Iron Duke (The first duke of Wellington), Old Hickory (Andrew Jackson, the seventh President of USA), the Iron Lady (M. Thatcher, former Prime minister of Great Britain) and etc.

CONCLUSION

Representatives of different nations use and understand the words and meanings of their language regarding their national traditions and mentality. This is the reason why one speech can be perceived differently by the representatives of different nations. Each culture has an experience gathered by the humanity by centuries. Perception and reasoning of the news are also related to the cultural habits of the nation. As the one basic ways of representation of linguoculturology can be regarded phraseological units (PU). Phraseology as a complex area of the linguistic system is a developing field of research and has attracted interest from many sides. The term Phraseology originated in Uzbek studies which developed from the late 1940s to the 1960s. Today, it is too crucial learning and teaching language through

culture. Names as the element of culture participate in the linguistic fields such as phraseological units that include phrases, proverbs, sayings and etc. In this case, we analyzed number of English and Uzbek phraseological anthroponomy comparatively.

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PSYCHOLOGICAL AND PEDAGOGICAL PECULIARITIES OF CONFLICTS BETWEEN OFFICERS AND PERSONNEL STAFF

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ANNOTATION

Man is actually created freely, but those who limit their freedom are other individuals. We know from our social way of life that there are actually different reasons for limiting the freedoms of people, while the reasons definitely bring about conflicts.

In the article, the reasons for the conflict between the officers and the personal composition and some features of the formation of the pedagogical and psychological knowledge of the commander and Chiefs in their prevention, as well as social reasons for the emergence of the conflict, the conditions in the workplace, the correspondent in the family, the tendency of the officer

KEYWORDS: *conflict, serviceman, officer, team, correspondent, psychological-pedagogical, professional activity.*

Conflicts can be personal, professional, long-term, short-term, acute and superficial, according to his temperament. The occurrence of conflicts certainly does not remain without showing its impact on social relations. Conflict is a broad concept that disrupts the atmosphere in the family, at work and at the place of residence. The problem of conflict has been studied and studied by various scientists. From the 20-ies of the XX century to the present day 2250 articles, 180 dissertations have been preserved in the Russian language on this problem, of which 23 doctoral dissertations and 350 books and brochures. The study of how many more books, dissertations, brochures and articles have been written from 2013 to today is a period requirement.

Any dependence will not be a contradiction, interests and worldviews should not coincide in order to be a conflict. As long as the conflict can occur suddenly and can arise due to internal discontent, which has accumulated over a certain period of time.

In the event of a conflict, the conflict may also arise because of the officers themselves or otherwise. The presence of conflict, on the one hand, has a positive effect on the effectiveness of the activity itself, on the other hand, has a negative effect, that is, there can not be an increase in activity. As a result of this, both the head and the employees under his hands are not able to effectively use the existing conditions for carrying out activities.

There are social reasons for the inconsistency of the officers, These are primarily the inability to be satisfied with the conditions in the workplace, the negative atmosphere in the family, the tendency of the officer or the employees at hand to conflict themselves and there may be other reasons. Any conflict is a process that has negative actions according to its temperament. Another aspect of the conflict in the work of the officers is that it is natural for the conflict to have its effect on the service chips, especially in emergency situations, the conflict between the officer and the officer, between the head and the subordinates, occurs very quickly. Because in such cases it is considered a time when everyone is nervous, any instructions and orders can seem rude to the serviceman at hand.

The conflict between the officer and the officer, the officer and the subordinates in case of an emergency does not last long, since every serviceman correctly understands and knows that it is necessary to carry out military service assignments. Conflicts between servicemen will certainly not be solved permanently positively, but the conflict is a social psychological officer with a state of transformation,

that is, one of the two sides will go to the kompramiss (agreement).

A literate military officer (chief) with many years of experience, skills will prevent conflict rather than enter into conflict, will try to educate the conflict officer to the maximum. By what methods the conflict can be taken: for example, to create conditions for the officer to carry out a full-fledged service; to provide his family with work; to provide housing; to place his children in a kindergarten and school; to provide him with a public transporti (bus, direction taxi) for his arrival to work; to create opportunities and conditions for family rest; to; to give Labor leave on time (from the circumstances) is to teach each employee to manage his psyche by correctly solving the issues of giving Labor leave to his ikkalina at the same time, if together with his family they serve in the same military unit. Prevention of conflicts means the management of the activities of the employee. The officer himself will solve the conflict between these best and convenient xech is one of the ways to whom he does not give contempt.

Early prevention without the occurrence of conflict is considered an extremely difficult process, since conflicts are divided by their character into conflicts in the open state and in the closed state. In open-situation conflicts, when employees, servicemen try to solve problems by saying their word with each other in an open situation, and in closed-situation conflicts, when both parties do not take measures to solve the problem openly, they hide the problem, that is, the Moss of conflict. As a result, the conflict occurs after a certain period of time, as a result of which a strong emotional state arises, An explosion (turns into a scandal) occurs, and the intervention of the commander-in-chief, the officers of the administration, as a result of which one or both sides is punished. Our observations showed that it was often found that touching personality between the officers and the individual content at hand could cause conflict. The fact that personality can not be touched is also contrary to the requirements of the Universal Charter. In the Prevention of any conflict, the pedagogical-psychological knowledge of the heads of the office is also considered a seal, since the officer works with individuals, not with the subject, which means that knowledge of the individual is directly and indirectly related to his psyche.

In solving the conflicts between the officer and the officer, the officer and the personnel at hand, we must of course know and study in depth the cause of the origin of the contradictions in the science of "criminology".

If the conflicts last long, then of course it is recommended to transfer one of the two employees (servicemen) to another service. Who is often prone to conflict? The results of our research on the question of "What is the difference between a military officer in all strata, who is most often in the "selfish" (egoists), in those who prefer the "I", in those who put a nickname and talk, who quickly becomes offended, knows himself as a constant 'True', tries to use others and is quickly given to the personality, tend to Therefore, even from the conflict resolution at first glance it seems to us that there is no base, and in fact, if the top of the ice in the water is visible to us, then we know later that the ice is two times larger than on the bottom of the water. Since the conflict question consists of seven letters, its power is destructive character, so the conflict always exists in every employee, but its solution is different in everyone. The main thing for the client, upbringing of the individual depends on the temperament of the conflict. Conflict according to its character to be between a person and a person, between a person and a group or community, between a team and a community, and between a system and a system have been studied in the scientific literature. And the conflict we are studying is the conflict between a serviceman and a serviceman, and between a serviceman and a team.

Of course there will be a conflict of interest if the conflict is between the person and the person, it does not require any proof. And the conflict between the team and the individual occurs because it is difficult to educate the individual, in this the consciousness of the individual determines his way of life, that is, his consciousness is determined by the circumstances. If a serviceman comes to serve a badly-armed team, then of course there will also be a violation in his professional activity. Itself will either adapt to the same circumstances or will have to go to another place of Service. Each serviceman has a concept of internal conflict, this concept is applied to practical activities when the situation and the opposition dictates this.

In place of the conclusion, I want to say that the opposition to the conflict at first glance looks like one concept, but not exactly, the reason is the conflict a) scientific concept; b) broad concept; C) conflict is used in relation to the person.

There are some special disciplines that deal with the problem of conflict, these disciplines extensively and profoundly study the causes, stages, consequences of the occurrence of conflicts.

The socio-psychological, pedagogical essence of the conflict between the officers is one of the problems in military pedagogy and psychology, which still needs to be studied.

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STAKEHOLDERS' PERCEPTION IN THE LAGUNA STATE POLYTECHNIC UNIVERSITY'S IMPLEMENTATION OF DISCIPLINE, SAFETY AND SECURITY MEASURES

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ABSTRACT

The main objective of this study was to determine the stakeholders (faculty/personnel, students, and clients) perception in the implementation of LSPUs Discipline, Safety and Security Measures. The research method used for this study is descriptive research to gather information regarding the problem. It is specifically designed for the collection of data in order to test the hypotheses and answer the questions concerning the study. The respondents of this study were fifty (50) employees, fifty (50) students, and fifty (50) clients in each of the four campuses of the Laguna State Polytechnic University comprised of six hundred (600) total respondents from Siniloan, Santa Cruz, San Pablo City and Los Baños, campuses. The following statistical tools were used; weighted mean and standard deviation and Pearson Product Moment Correlation. The Pearson's R was used to test the individual relationship between the Faculty/Personnel, Students, and Clients/Visitors perception on the implementation of Laguna State Polytechnic University's Discipline, Safety and Security Measures. The study revealed that all indicators of Security Policies and Procedures to wit; Miscellaneous Rules and Regulations, Norms and Decorum, and Disciplinary Measures are all significant, although respondents from Faculty/Personnel, and Students are significantly different to Client. Indicators of Security Risk Management Practices namely: Approach, Responsibilities, and Resources are all significant, although respondents from Faculty/Personnel and Students are significantly different to Client. Indicators of Security Measures namely: Preparedness, Efficiency, and Effectiveness are all significant, although respondents from Faculty/Personnel and Students are significantly different to Client. As to Preparedness, all indicators of security policies/procedures, security risk management practices are significantly related to its security measures the first four indicators show strong relationship as follow: Security Policies and Procedures Miscellaneous Rules and Regulations (r= .732, p= <.01), Norms and Decorum (r= .691, p= <.01), Disciplinary Measures (r= .730, p= <.01), Security Risk Management Practices Approach (r= .761, p= <.01) and the last two indicators shows very strong relationship as follows: Security Risk Management Practices Responsibilities (r= .837, p= <.01) and Resources (r= .810, p= <.01). Significance is clearly manifested by p values that are all <.01 significance level. As to Efficiency, all indicators of security policies/procedures, risk management practices are significantly related to its security measures. The first four indicators show strong Security Policies/Procedures Miscellaneous Rules and Regulations (r= .720, p= <.01), Norms and Decorum (r=.702, p= <.01), Disciplinary Measures (r=.724, p= <.01) Security Risk Management Practices Approach (r=.761, p= <.01). The last two indicators shows very strong relationship as follows: Security Risk Management Practices Responsibilities (r= .832, p= <.01), and Resources (r= .810, p= <.01). Significance is clearly manifested by p values that are all <.01 significance level. As to Effectiveness, all indicators of security policies/procedures, risk management practices are significantly related to its security measures. The first four indicators show strong Security Policies/Procedures Miscellaneous Rules and Regulations (r= .729, p= <.01), Norms and Decorum (r= .715, p= <.01), Disciplinary Measures (r= .731, p= <.01) Security Risk Management Practices Approach (r= .771, p= <.01). The last two indicators show very strong relationship as follows: Security Risk Management Practices Responsibilities (r= .822, p= <.01), and Resources (r= .819, p= <.01). Significance is clearly manifested by p values that are all <.01 significance level.

INDEX TERMS: *Security Risk Management, Approach, Responsibilities, Resources, Preparedness, Efficiency, Effectiveness*

BACKGROUND OF THE STUDY

In the Philippines, corporal punishment is prohibited, following the issuance in 1974 of the Child and Youth Welfare Code (Presidential Decree No. 63, Article 59). (I think this is irrelevant) It prohibits any mental and physical violence against children. The school is where the youth/students spend most of their time for the purpose of preparing them for their future through formal education. Universities have different strategies in providing the students with the most conducive learning environment as possible, free from physical violence or harm. The effectiveness of an educational institution strategy should not go beyond what is legal as learning institutions, students and their clientele deserve the protection that any educational institution could provide.

As mandated by Senate Bill No. 1324 by Hon. Manuel "Manny" Villar, Jr. "An Act to Promote Crime Awareness and Security on Campuses", this bill empowers the state to gather precious data regarding the occurrence of crimes that happen to an educational institution (Section IV Disclosure of Campuses Security Policy and Campuses Crime Statistics). Statistics concerning the occurrence on campus, during the most recent school year, and during the two (2) preceding school years, are available, including, but not limited to the following criminal offenses reported to campus security authorities or local agencies. (murder; rape; robbery; aggravated assault; sexual harassment; and motor vehicle theft) (Senate Bill 1342). This Senate Bill proves to be useful because all data gathered here could be the future reference in the creation of new guidelines that will be beneficiary to the welfare and protection of the students.

The primary goal of this study is to define the stakeholders' perception in the implementation of Laguna State Polytechnic University's Discipline, Safety and Security Measures, with the aim of helping the School Administrators to provide an enhanced Discipline, Safety and Security Measures to greatly benefit the school population.

OBJECTIVES

To evaluate the stakeholder's perception on the Laguna State Polytechnic University's Discipline, Safety and Security Measures. To know and identify the status of LSPU in terms of Security Policies and procedures and the Risk Management of this University.

To know the status of the Laguna State Polytechnic University's Security Policies and Procedures. To identify the significant between the independent and dependent variables.

REVIEW OF RELATED LITERATURE

Discipline, safety and security measures are important features of any Institution or Organization. Authorities and administrators are committed in assisting its clientele in providing a safe working environment for all its population. Great campus discipline, safety and security measures reduce crimes and support the organization mission.

Thornberg (2008) stresses that school rules are usually associated with classroom management and school discipline. However, rules also define ways of thinking about oneself and the world. Rules are guidelines for actions and for the evaluation of actions in terms of good and bad, or right and wrong, and therefore a part of moral or values education in school. Students' reasoning about rules varies across the rule categories. The perception of reasonable meaning behind a rule seems to be – not surprisingly – significant to students' acceptance of the rule. According to the students, relational rules are the most important in school. Students also value protecting and structuring rules as important because of the meaning giving to them. Etiquette rules are valued as the least important or even unnecessary by the students.

Moreover, from the study of Momodu (2014) states that the tendency to flout library rules and regulations has become a common phenomenon amongst library users. The data is staggering and widespread, and the trend has failed to abate with its attendant consequences –man-hour, financial and material losses. This however, does not imply that there are no effective rules and regulations, but enforcing them has their own challenges. It was indeed obvious, that there are many administrative, logistic and legal challenges militating against effective 'policing' and enforcement of relevant library rules and regulations. It is recommended that key policies be put in place to ameliorate the challenges of library rule violations, while funding and training/retraining of staff should be enhanced.

On the other hand, Díaz-Vicario, et. al. (2017) says that schools should be safe spaces for students, teaching staff and non-teaching staff. For the concept of "safety" to be meaningful, it must be interpreted broadly to encompass well-being in its widest sense. A common challenge for schools and educational authorities is, therefore, to manage school safety appropriately not only to prevent physical accidents and incidents, but also with the purpose of creating an environment that promotes physical, emotional and social well-being, both individually and collectively.

From Grayson (2012) mentions that the primary job of any security program is to prevent crime. Crime prevention is a good beginning, but great security

demands more. It must also deal with perception — the fear of crime. Great security programs reduce crime and support the organizational mission. They reduce actual risk along with the perception of risk and improve the organization's financial bottom line. When people feel safe and secure, learning improves, stress levels drop, sick days decrease while employee longevity increases. Feeling secure is a critical first step in the development of effective teams. Great security programs represent a true win-win opportunity for any organization.

Kim (2013) recommends that information security training be offered during the students' first semester in college. It may be a workshop during the incoming students' orientation or one class session of a required course for all first-year students. To develop the contents of training to fit students' needs, a university should assess students' understanding of information security awareness topics. Without having an assessment, training could be a one-size-fits-all approach, but that may not be effective and may be less attractive to students. Universities need to carefully monitored if students actually implement and follow what they learn. To monitor students' information security activities, a university can regularly survey its students or analyze hard data such as an information security incident reports, a help desk log file, hardware repair reports, or others.

In similar vein, Mewis, et. al. (2016) emphasize that no matter the mission of an organization is, the security of its facilities is critical. This is especially the case for education facilities, where so many students, staff and administrators spend the bulk of their days. Administrators have a moral and legal obligation to protect the people in their facilities. This can be accomplished with a proactive approach that identifies risk factors, establishes objectives and financial parameters, and results in a plan to carry out recommendations.

Booth, et. al. (2019) conclude that despite the importance of self-regulation for school readiness and success across the lifespan, little is known about children's conceptions of this important ability. Children depicted school as requiring regulation of their emotional, cognitive and behavioral responses. They characterized school as a dynamic setting, placing emphasis on the regulatory challenges of the outdoor environment. Children also described difficulties associated with navigating complex social interactions, often without assistance from external supports. The results inform strategies to support children's emerging self-regulation abilities.

Benson (2019) asserts that too many restrictions could hamper teens' individuality and resolve, as well as destroy relationships among school staff. Teenagers exist in a twilight zone of rights. Laws and regulations idiosyncratically define when it can be considered safe enough for a teen to exercise adult rights: to vote, to enlist in the military, to speak freely against authority, to wed, to drop out of school, to drive, to carry a gun, to have private conversations with medical providers, to watch certain movies.

Aviani (2006) stresses that in many middle schools, poor student lunchtime behavior is an ongoing problem. Such behavior can have a detrimental effect on a school's climate and culture, which can in turn degrade the quality of learning that occurs in the classroom. As a result, improving students' lunchtime behavior should be a priority for the staff. One solution is to make social skills instruction part of a school-wide discipline program. In many schools, administrators, teachers, support workers, and parents seek to create such programs through Effective Behavior Support (EBS). EBS is a positive and proactive approach to discipline problems in schools. The concept seeks to apply positive behavioral interventions and systems to bring about socially important change. For instance, EBS schools might seek to improve student behavior through environmental redesign, curriculum redesign, or the removal of rewards that inadvertently maintain problem behavior. The most successful interventions reinforce the values of students, parents, and educators.

Perkins, et. al. (2011) prove that bullying attitudes and behaviors and perceptions of peers were assessed in a case study experiment employing a social norms intervention in five diverse public middle schools in the State of New Jersey (Grades 6 to 8). In the baseline survey, students substantially misperceived peer norms regarding bullying perpetration and support for pro-bullying attitudes. As predicted by social norms theory, they thought bullying perpetration, victimization, and pro-bullying attitudes were far more frequent than was the case. Also as predicted, variation in perceptions of the peer norm for bullying was significantly associated with personal bullying perpetration and attitudes. Using print media posters as the primary communication strategy, an intervention displaying accurate norms from survey results was conducted at each of the five school sites. A pre-/post-intervention comparison of results revealed significant reductions overall in perceptions of peer bullying and pro-bullying attitudes while personal bullying of others and victimization were also reduced and support for reporting bullying to adults at school and in one's family increased. The extent of reductions across school sites was associated with the prevalence and extent of recall of seeing poster messages reporting actual peer norms drawn from the initial survey data.

Rates of change in bullying measures were highest (from around 17% to 35%) for the school with the highest message recall by students after a one-and-a-half-year intervention. Results suggest that a social norms intervention may be a promising strategy to help reduce bullying in secondary school populations.

Relatively, LaRusso (2008) says that positive school climates have been found to have favorable effects on adolescent health risk behaviors and mental health outcomes. However, the mechanisms by which teacher behavior may promote such effects in high schools have not been extensively studied. Based on social control theory and a social developmental-contextual model, it was predicted that by respecting students' points of view and decision-making capabilities, teachers could help build respectful school climates that encourage healthy norms of behavior. Structural equation modeling with a nationally representative sample of 476 youth ages 14–18 supported the model. Adolescents who reported higher teacher support and regard for student perspectives in their high schools were more likely to see their schools as having respectful climates and healthy norms of drug use which was associated with lower levels of personal drug use. Students in such schools also reported greater social belonging and fewer symptoms of depression.

In the study of Galván, et. al. (2011) point out that the perceived norms were assessed by asking participants to estimate how many grade mates were academically engaged, disengaged, and antisocial. To capture social values, peer nominations were used to assess "coolness" associated with these behaviors. Perceived norms became gradually more negative from fall to spring and across grades four to eight. Whereas academic engagement was socially valued in elementary school, negative social and academic behaviors were valued in middle school. Additionally, improved social status was associated with increased academic engagement in fifth grade, disengagement in seventh and eighth grades, and antisocial behavior in sixth grade. The findings suggest that differences between elementary and middle school cultural norms and values may shed light on negative behavior changes associated with the transition to middle school.

Eisenberg, et. al. (2014) emphasize that identifying specific aspects of peer social norms that influence adolescent substance use may assist international prevention efforts. Descriptive social norms in the school context as a particularly important area to address in adolescent substance use prevention efforts.

Similarly, McCormick, et. al. (2014) conclude that a wide body of research has documented the relationship between social norms and individual behaviors. There is growing evidence that academic behaviors in early adolescence—when most children begin middle school—may be subject to normative influence as well. However, the structure and composition of peer relationships within middle schools have yet to be fully incorporated into current conceptualizations of academic norms. A social network approach that considers the structure of students' friendship networks can be a useful framework for informing understanding of middle school academic norms. This article integrates research and theory on social norms and social networks to introduce a model to improve understanding of academic norms in middle schools. Implications for future research are discussed.

METHODOLOGY

The research method used in this study was descriptive research design using questionnaires to analyze the impact of stakeholder's perception on the Laguna State Polytechnic University's Implementation of Discipline, Safety and Security Measures. Descriptive studies are usually the best methods for collecting information to demonstrate relationships and describe the world as it exists. Descriptive research aims to accurately and systematically describe a population, situation or phenomenon. It can answer *what, when, where, when* and *how* questions, but not *why* questions. To determine cause and effect, experimental research is required. A descriptive research design can use a wide variety of quantitative and qualitative methods to investigate one or more variables. Unlike in experimental research, the researcher does not control or manipulate any of the variables, but only observes and measures them. (McCombes, 2019).

The researcher gathered data from self-administered questionnaires. Similarly, content analysis of the collected documentary material was done. Data gathering on the instruments to produce a reliable and valid statistics was done that helped in the attainment of such purpose.

RESULTS AND DISCUSSIONS

The major findings of the study followed the order in accordance with the statement of the problem namely (1) What is the status of the Laguna State Polytechnic University's Security Policies and Procedures in terms of its; Miscellaneous Rules and Regulation, Norms and Decorum, and Disciplinary Measures (2) What is the status of the Laguna State Polytechnic University's practices for Security Risk Management in terms of its; Approach, Responsibilities, and Resources (3) What is the status

of the Laguna State Polytechnic University's Security Measures in terms of its; Preparedness, Efficiency, and Effectiveness (4) Is there a significant difference between the Faculty/Personnel, Students, and Visitors perception on the Laguna State Polytechnic University's Discipline, Safety and Security Measures?

The researcher used purposive sampling, in which the objective was to select typical or representative subject, the skills and judgment of the selected respondent were deliberately utilized. The questionnaire was given to the matrix of the target population that was represented in four (4) campuses of Laguna State Polytechnic University.

Table 1. Status of LSPU Security Policies and Procedures in terms of Miscellaneous Rules and Regulation Status of LSPU Security Policies and Procedures in terms of Miscellaneous Rules and Regulations

Indicative Statement	Faculty/ Personnel			Student			Client			GM	R
	M	SD	R	M	SD	R	M	SD	R		
Provides guidelines of the security policies and procedures.	4.35	0.76	SA	4.13	0.78	A	4.51	0.69	SA	4.33	SA
Explains the security policies and procedures.	4.12	0.86	A	3.16	0.86	A	4.31	0.83	SA	3.86	A
Encourages faculty, personnel, students, and clients to form the security policies and procedures.	4.18	0.90	A	4.06	0.83	A	4.48	0.72	SA	4.24	SA
Utilizes necessary resources in implementing the security policies and procedures.	4.14	0.84	A	4.06	0.89	A	4.38	0.69	SA	4.19	A
5. Regular updates when deemed necessary	4.06	0.99	A	3.87	0.96	A	4.46	0.79	SA	4.13	A
Overall Mean	4.18	S		4.02	S		4.43	VS		4.21	VS

Legend:

Scale	Range	Remark	Verbal Interpretation
5	*4.20-5.00*	*Strongly Agree*	*Very Satisfactory*
4	*3.40-4.19*	*Agree*	*Satisfactory*
3	*2.60-3.39*	*Neutral*	*Moderate Satisfactory*
2	*1.80-2.59*	*Disagree*	*Fairly Satisfactory*
1	*1.00-1.79*	*Strongly Disagree*	*Not Satisfactory*

Table 1 shows the status of LSPU security policies and procedures in terms of miscellaneous rules and regulation. It could be gleaned from the table that respondents strongly agree that the LSPU Security Management provides guidelines of the security policies and procedures *(M=4.33)* and encourages faculty, personnel, students and clients to form the same *(M=4.24).* On the other hand, respondents agree that the security policies and procedures are explained (M=3.86), utilize necessary resources in its implementation *(M=4.19),* and updates policies when necessary *(M=4.13).*

The overall mean of 4.21 indicates that the LSPU Policies and Procedures as to Miscellaneous Rules and Regulation is very satisfactory.

Kwayu (2014) states that school rules and regulations need to be emphasized and given enough awareness so as to create harmony and cooperation among students and lead more students to become good citizens. School rules and regulations need to be emphasized and further studies are required to critically assess the content of school rules and recommend the best content that can produce quality citizenry.

Table 2. Status of LSPU Security Policies and Procedures in terms of Norms and Decorum

Indicative Statement	Faculty/ Personnel			Student			Client			GM	R
	M	SD	R	M	SD	R	M	SD	R		
1. Prioritizes the safety of the faculty, personnel, students, and clients inside the University.	4.32	0.83	SA	4.08	0.92	A	4.53	0.72	SA	4.31	SA
2. Conducts public consultation regularly.	3.89	1.08	A	3.83	0.98	A	4.19	0.81	A	3.97	A
3. Participates to all orientation/sessions conducted.	4.06	0.99	A	3.89	0.87	A	4.25	0.78	SA	4.02	A
4. Provides Student Handbook.	4.32	0.83	SA	4.08	0.92	A	4.53	0.72	SA	4.31	SA
5. Shows restriction in the implementation of security policies and procedure	3.89	1.08	A	3.83	0.98	A	4.19	0.81	A	3.97	A
Overall Mean	4.10	S		3.95	S		4.34	VS		4.13	S

Legend:

Scale	Range	Remark	Verbal Interpretation
5	4.20-5.00	*Strongly Agree*	*Very Satisfactory*
4	3.40-4.19	*Agree*	*Satisfactory*
3	2.60-3.39	*Neutral*	*Moderate Satisfactory*
2	1.80-2.59	*Disagree*	*Fairly Satisfactory*
1	1.00-1.79	*Strongly Disagree*	*Not Satisfactory*

Table 2 shows the status of LSPU Policies and Procedures in terms of Norms and Decorum. It could be gleaned from the table that respondents strongly agree that the LSPU Security Management prioritizes the safety of the faculty, personnel, students, and clients inside the university *(M=4.31)*, and provides students handbook *(M=4.31)*. On the other hand, respondents agree that they conduct public consultation regularly (M=3.97), participates to all orientation/sessions conducted (M=4.02), and shows restriction in the implementation of security policies and procedures (M=3.97).

The overall mean of 4.13 indicates that the LSPU Policies and Procedures as to Norms and Decorum is Satisfactory.

The study of Melson (2012) supports the findings for it states that early intervention in schools to tackle alcohol problems is a widespread practice, despite patchy evidence of effectiveness. The 'Social norms' approach emerges from studies showing overestimation of 'others' consumption/approval of alcohol use amongst students. To correct such misperceptions of drinking norms, 'true' norms are fed-back in order to modify perceptions, thus relieving possible social pressure to conform to the misperceived norms.

Table 3. Status of LSPU Security Policies and Procedures in terms of Disciplinary Measures Status of LSPU Security Policies and Procedures in terms of Disciplinary Measures

Indicative Statement	Faculty/ Personnel			Student			Client			GM	R
	M	SD	R	M	SD	R	M	SD	R		
1. Implements the content of the Student Handbook.	4.19	0.91	SA	3.88	1.02	A	4.51	0.77	SA	4.19	A
2. Disseminates the Student Handbook.	4.24	0.87	SA	3.94	0.98	A	4.51	0.67	SA	4.23	SA
3. Question people who enter the property without authorization.	4.06	0.99	A	3.87	0.96	A	4.46	0.79	SA	4.13	A
4. Identify potential treats	4.32	0.83	SA	4.08	0.92	A	4.53	0.72	SA	4.31	SA
5. Ensure the safety of people within the school premises.	3.89	1.08	A	3.83	0.98	A	4.19	0.81	A	3.7	A
Overall Mean	4.14	S		3.92	S		4.44	VS		4.16	S

Legend:

Scale	*Range*	*Remark*	*Verbal Interpretation*
5	*4.20-5.00*	*Strongly Agree*	*Very Satisfactory*
4	*3.40-4.19*	*Agree*	*Satisfactory*
3	*2.60-3.39*	*Neutral*	*Moderate Satisfactory*
2	*1.80-2.59*	*Disagree*	*Fairly Satisfactory*
1	*1.00-1.79*	*Strongly Disagree*	*Not Satisfactory*

Table 3 shows the status of LSPU Policies and Procedures in terms of Disciplinary Measures. It could be gleaned from the table that respondents strongly agree that the LSPU Security Management disseminates the student handbook *(M=4.23)*, and identify potential threats *(M=4.31)*. On the other hand, respondents agree that the LSPU Security Management implements the content of the handbook *(M= 4.19)*, question people who enter the property without authorization *(M=4.13)*, and ensure the safety of the people within the school premises *(M=3.7)*.

The overall mean of 4.14 indicates that the LSPU Policies and Procedures as to Disciplinary Measures is satisfactory.

Venter (2016) mentions that in general, urban schools across the nation rely on suspensions, reprimands, withholding of privileges, and/or expulsion as the means of discipline. Unfortunately, these reactive procedures only help a small number of children learn to "comply with general expectations" and are insufficient for many students who exhibit more challenging behavior problems.

Table 4. Status of LSPU Implementation for Security Risk Management in terms of Approach

Indicative Statement	Faculty/ Personnel			Student			Client			GM	R
	M	SD	R	M	SD	R	M	SD	R		
1. Identifies possible risk and threats.	4.13	0.88	A	3.97	0.78	A	4.40	0.68	SA	4.16	A
2. Identifies possible counter measures.	4.13	0.88	A	3.82	0.82	A	4.33	0.65	SA	4.09	A
3. Identifies vulnerability to the information resources.	4.11	0.91	A	3.93	0.82	A	4.37	0.65	SA	4.13	A
4.Recommend corrective measures	4.32	0.83	A	4.08	0.92	A	4.53	0.72	SA	4.31	SA
5.Communication among stakeholders should be clear and open	3.89	1.08	A	3.83	0.98	A	4.19	0.81	A	3.97	A
Overall Mean	4.12	S		3.93	S		4.36	VS		4.13	S

Legend:

Scale	Range	Remark	Verbal Interpretation
5	4.20-5.00	Strongly Agree	Very Satisfactory
4	3.40-4.19	Agree	Satisfactory
3	2.60-3.39	Neutral	Moderate Satisfactory
2	1.80-2.59	Disagree	Fairly Satisfactory
1	1.00-1.79	Strongly Disagree	Not Satisfactory

Table 4 shows the status of LSPU Practices for Security Risk Management in terms of Approach. It could be gleaned from the table that respondents strongly agree that the LSPU Security Management recommended corrective measures *(M=4.31).* On the other hand, respondents agree that LSPU Security Management identifies possible risk and threats *(M=4.16)*, identifies possible counter measures *(M=4.09)*, identifies vulnerability to the information resources *(M=4.13)*, and communication among stakeholders should be clear and open *(M=3.97).*

The overall mean of 4.13 indicates that the LSPU Practices for Security Risk Management as to Approach is satisfactory.

Students sometimes feel reluctant to report crimes on campus because they are uncertain of how the campus security personnel will handle the information. In order to prevent any negativity regarding the handling of crime, some will choose not to report crimes. Dangerous situations in campus are oftentimes an indicator of a lack of supportive safety culture. An open proactive approach to identifying and mitigating risk is crucial to building a safety culture in which members' perceptions are positive. Beard, (2010).

In addition to administration-based initiatives, students should also take an active role in participation and promotion of the safety of their communities. Many higher education leaders believe college campuses should encourage their student to become more community-oriented in order to promote and foster a society as becoming more involved in celebrating the dignity of each fellow individual person. Administrators should create more programs that involve the engagement of students with one another to help foster relationships and social acceptance. A campus culture that has been shown to promote the overall good in the community can be a contributing factor to the safety climate of a university campus. Zuckerman, (2010).

Table 5. Status of LSPU Implementation for Security Risk Management in terms of Responsibilities

Indicative Statement	Faculty/Personnel			Student			Client			GM	R
	M	SD	R	M	SD	R	M	SD	R		
1. Provides a risk management framework.	4.02	0.90	A	3.83	0.83	A	4.36	0.63	SA	4.07	A
2. Explains the responsibility of the risk management framework.	4.00	0.93	A	3.98	0.88	A	4.30	0.76	SA	4.09	A
3. Implements plans to the risk and threats.	4.38	0.85	SA	3.91	0.85	A	4.40	0.75	SA	4.23	SA
4. Provides Standard Operating Procedure.	4.13	0.93	A	3.88	0.97	A	4.37	0.67	SA	4.12	A
5. Advise every one of security and safety precautions that should be taken.	4.06	1.01	A	3.94	0.94	A	4.29	0.69	SA	4.09	A
Overall Mean	4.12	S		3.91	S		4.34	VS		4.12	S

Legend:

Scale	Range	Remark	Verbal Interpretation
5	4.20-5.00	Strongly Agree	Very Satisfactory
4	3.40-4.19	Agree	Satisfactory
3	2.60-3.39	Neutral	Moderate Satisfactory
2	1.80-2.59	Disagree	Fairly Satisfactory
1	1.00-1.79	Strongly Disagree	Not Satisfactory

Table 5 shows Practices for Security Risk Management in terms of Responsibilities. It could be gleaned from the table that respondents strongly agree that the LSPU Security Management implement plans to the risk and threats *(M=4.23)*. On the other hand, respondents agree that they provide risk management framework *(M=4.07)*, explains the responsibility of the risk management framework *(M=4.09)*, provides standard operating procedure *(M=4.12)*, and advise everyone of security and safety precautions that should be taken *(M=4.09)*.

The overall mean of 4.12 indicates that the LSPU Implementation for Security Risk Management as to Responsibilities is satisfactory.

Mangena (2010) points out that Schools in this day and age are compelled to market and transform themselves into winning, compelling and powerful brands. In the past. schools enjoyed the geographic and racial monopoly over parents and learner choice of a school. With the advent of the democratic dispensation the survival of a school needs a scientific and commercial praxis of concepts like branding. Branding itself holds a host of benefits for all the stakeholders in a school.

Table 6. Status of LSPU Implementation for Security Risk Management in terms of Resources

Indicative Statement	Faculty/ Personnel			Student			Client			GM	R
	M	SD	R	M	SD	R	M	SD	R		
1. Provides adequate security personnel/forces.	4.22	0.84	SA	3.84	A	A	4.38	0.65	SA	4.14	A
2. Provides adequate surveillance equipment.	4.16	0.84	A	3.88	A	A	4.30	0.68	SA	4.11	A
3. Provides adequate communication equipment.	4.13	0.85	A	3.91	A	A	4.33	0.69	SA	4.12	A
4. Has enough resources to manage risk on a continuing basis	4.32	0.83	SA	4.08	A	A	4.53	0.72	SA	4.31	SA
5. Recognize information resources as essential organizational asset	3.89	1.08	A	3.83	A	A	4.19	0.81	A	3.97	A
Overall Mean	4.14	S		3.91	S		4.35	VS		4.13	S

Legend:

Scale	Range	Remark	Verbal Interpretation
5	4.20-5.00	Strongly Agree	Very Satisfactory
4	3.40-4.19	Agree	Satisfactory
3	2.60-3.39	Neutral	Moderate Satisfactory
2	1.80-2.59	Disagree	Fairly Satisfactory
1	1.00-1.79	Strongly Disagree	Not Satisfactory

Table 6 shows Practices for Security Risk Management in terms of Resources. It could be gleaned from the table that respondents strongly agree that the LSPU Security Management has enough resources to manage risk on a continuing basis *(M=4.31)*. On the other hand, respondents agree that LSPU Security Management provide adequate security personnel/forces *(M=4.14)*, provides adequate surveillance equipment *(M=4.11)*, provides adequate communication equipment *(M=4.12)*, and recognize information resources as essential organizational asset *(M=3.97)*.

The overall mean of 4.13 indicates that the LSPU Implementation for Security Risk Management as to Resources is satisfactory.

As the need for a more reliable facility in security management, funding is one key element that will dictate the preparedness of each institution. The better the allotment of funds provided, the better the equipment and facilities. Likewise, the better training for each security personnel the better the quality of service of each security personnel could provide. As some researches also demonstrated on the effect of certain variables had on students' overall perception of campus safety as the study of the variables included student demographics, the presence and type of security

personnel, and the rurality of the campus setting. Patton, (2010).

A lack of budgetary resources was cited as a barrier for improving campus safety. Although administrators indicated that there were plans to improve, the effect of this commitment to campus safety appears to have had an effect on the students who were attending the campus. Patton, et. al. (2016).

Bodalina (2013) asserts that the educators agree that the governing body effectively manage and effectively procure resources for the school. There was only partial agreement that the Provincial Education Department provides physical resources adequately. It was found that governing bodies and school management teams needed to be provided with

continual training by the Provincial Education Department. Furthermore, it appears that whilst structures and processes are established to manage physical resources, there is need to constantly appraise and review their functionality. In order to promote effective management of physical resources, a fully functional asset management committee must be established at all schools that would meet regularly to assess the functionality of all structures and processes in line with the asset management policy. There is also an acute need for the Provincial Education Department to build storerooms with improved security in order to preserve the assets at all public schools by factoring into their provincial budgets.

Table 7. Status of LSPU Implementation of Security Measures in terms of Preparedness

Indicative Statement	Faculty/ Personnel			Student			Client			GM	R
	M	SD	R	M	SD	R	M	SD	R		
Creates an Emergency Response Team.	4.06	1.01	A	3.94	0.94	A	4.29	0.69	SA	4.09	A
Aware on the LSPU Emergency Procedure/Plan.	4.08	1.03	A	3.88	0.86	A	4.33	0.74	SA	4.09	A
Makes tools and equipment readily available for Emergency Response Team.	4.09	0.99	A	3.95	0.90	A	4.36	0.73	SA	4.13	A
Utilizes necessary resources in implementing risk management framework.	4.03	0.95	A	3.83	0.89	A	4.24	0.77	SA	4.03	A
5. Carry out problems in the most immediate action in a short span of time.	4.06	1.01	A	3.94	0.94	A	4.29	0.69	SA	4.09	A
Overall Mean	4.06	S		3.91	S		4.30	VS		4.09	S

Legend:

Scale	*Range*	*Remark*	*Verbal Interpretation*
5	*4.20-5.00*	*Strongly Agree*	*Very Satisfactory*
4	*3.40-4.19*	*Agree*	*Satisfactory*
3	*2.60-3.39*	*Neutral*	*Moderate Satisfactory*
2	*1.80-2.59*	*Disagree*	*Fairly Satisfactory*
1	*1.00-1.79*	*Strongly Disagree*	*Not Satisfactory*

Table 7 shows status of LSPU Security Measures in terms of Preparedness. It could be gleaned from the table that respondents agree that the LSPU Security Management creates emergency response team *(M=4.09)*, aware on the LSPU emergency procedure/plan *(M=4.09)*, makes tools and equipment readily available for emergency response team (*M=4.13)*, utilizes necessary resources in implementing risk management framework *(M=4.03)*, and carry out

problems in the most immediate action in a short span of time *(M=4.09)*.

The overall mean of 4.13 indicates that the LSPU Implementation of Security Measures as to preparedness is satisfactory.

Van Jaarsveld, (2011) stresses that the needs of school security have changed over the years from an emphasis on protecting school property (vandalism, fire or theft), to the safety of the scholars and the educators.

Currently school security requires well-developed security and safety plans, as well as undertaking proper risk assessment and threat analysis exercises.

Table 8. Status of LSPU Implementation of Security Measures in terms of Efficiency

Indicative Statement	Faculty/ Personnel			Student			Client			GM	R
	M	SD	R	M	SD	R	M	SD	R		
1. Provides Emergency Procedure/Plan	4.02	1.03	A	3.89	0.91	A	4.39	0.77	SA	4.1	A
2. Provides hazard free facilities.	4.02	1.05	A	3.83	1.00	A	4.42	0.69	SA	4.09	A
3. Provides a sufficient Emergency Tools and Equipment.	3.98	1.07	A	3.89	1.00	A	4.37	0.79	SA	4.09	A
4. Provides a sufficient Emergency Response Team.	4.05	1.05	A	3.84	0.99	A	4.41	0.73	SA	4.1	A
5. Has security guards who are always on the alert when needs arises	4.06	1.01	A	3.94	0.94	A	4.29	0.69	SA	4.09	A
Overall Mean	4.03	S		3.88	S		4.38	VS		4.09	S

Legend:
Scale	Range	Remark	Verbal Interpretation
5	4.20-5.00	Strongly Agree	Very Satisfactory
4	3.40-4.19	Agree	Satisfactory
3	2.60-3.39	Neutral	Moderate Satisfactory
2	1.80-2.59	Disagree	Fairly Satisfactory
1	1.00-1.79	Strongly Disagree	Not Satisfactory

Table 8 shows status of LSPU Security Measures in terms of Efficiency. It could be gleaned from the table that respondents agree that the LSPU Security Management provides emergency procedure/plan *(M=4.1)*, provides hazard free facilities *(M=4.09)*, provides a sufficient emergency tools and equipment *(M=4.09)*, provides a sufficient emergency response team *(M=4.1)*, and has security guards who are always in alert when need arises *(M=4.09)*.

The overall mean of 4.09 indicates that the LSPU Implementation of Security Measures as to efficiency is satisfactory.

The overall appearance of a campus can speaks volumes about how safe a campus really is. The perception of safety may not always be accurately displayed in public reports which are made available to all for viewing due to the fear of reporting or the fear of publicity, but there are many other ways beyond public reporting to assess the campus choice. Trust, (2013).

Although the perceptions of campus safety a student or parent may have are not necessarily and indicator of the level of danger, which is present, it is imperative that campus administrators realize the importance of students feeling safe as well as actually being safe. Fear of the perceived threat of danger can ultimately have an adverse effect on students' emotional health which will limit their personal and educational success. Trust, (2013).

Table 9. Status of LSPU Implementation of Security Measures in terms of Effectiveness

Indicative Statement	Faculty/Personnel			Student			Client			GM	R
	M	SD	R	M	SD	R	M	SD	R		
1. Conducts a regular Emergency Drills/Exercises.	4.16	0.84	A	3.98	0.88	A	4.43	0.67	SA	4.19	A
2. Conducts building audit security.	3.98	1.07	A	3.89	0.91	A	4.49	0.66	SA	4.12	A
3. Security guards are posted accordingly to places that needs close monitoring	4.02	1.03	A	3.89	0.91	A	4.39	0.77	SA	4.1	A
4. CCTVs are placed in strategic areas	4.02	1.05	A	3.83	1.00	A	4.42	0.69	SA	4.09	A
5. Sensitive information are well kept	3.98	1.07	A	3.89	1.00	A	4.37	0.79	SA	4.08	A
Overall Mean	4.03	S		3.90	S		4.42	VS		4.11	S

Legend:

Scale	Range	Remark	Verbal Interpretation
5	4.20-5.00	Strongly Agree	Very Satisfactory
4	3.40-4.19	Agree	Satisfactory
3	2.60-3.39	Neutral	Moderate Satisfactory
2	1.80-2.59	Disagree	Fairly Satisfactory
1	1.00-1.79	Strongly Disagree	Not Satisfactory

Table 9 shows status of LSPU Implementation of Security Measures in terms of Effectiveness. It could be gleaned from the table that respondents agree that the LSPU Security Management conducts a regular emergency drills/exercises *(M=4.19)*, conducts building audit security *(M=4.12)*, security guards are posted accordingly to places that needs close monitoring *(M=4.1)*, cctvs are placed in strategic areas *(M=4.09)*, and sensitive information are well kept *(M=4.08)*.

The overall mean of 4.11 indicates that the LSPU Implementation of Security Measures as to effectiveness is satisfactory.

Bott (2015) states that organizations today face a myriad of security risks given their increased use of information technology. New solutions to improve information security within organizations large and small need to be researched and analyzed. Review of relevant literature has determined that although organizations are managing security from the top down, there is a lack of security management at the project level and that most project managers and their teams rely on the organizational security measures to keep information secure. The concept of managing security risks at the project level is not well defined and there exists no concrete and widely accepted framework for it.

Table 10. Significant Difference in the Assessment by Three Groups of Respondents

Indicator	Group Mean			F	p	Analysis
	Faculty/Personnel	Student	Client			
Security Policies and Procedures *Miscellaneous Rules and Regulations* *Norms and Decorum*	4.18b	4.02b	4.43a	10.54	<.01	Significant
Disciplinary Measures	4.10b	3.94b	4.34a	7.43	<.01	Significant
	4.14b	3.92b	4.44a	15.22	<.01	Significant
Security Risk Management Practices *Approach*	4.12b	3.39b	4.36a	11.71	<.01	Significant
Responsibilities	4.05b	3.91b	4.34a	10.94	<.01	Significant

Resources	4.14*a*	3.91*b*	4.35*a*	12.00	<.01	Significant
Security Measures						
Preparedness	4.06*ab*	3.91*b*	4.30*a*	7.33	<.01	Significant
Efficiency	4.03*b*	3.88*b*	4.38*a*	11.40	<.01	Significant
Effectiveness	4.03*b*	3.90*b*	4.42*a*	14.14	<.01	Significant

Means that do not share a letter are significantly different.

Table 10 reveals that all indicators of Security Policies and Procedures namely: Miscellaneous Rules and Regulations, Norms and Decorum, and Disciplinary Measures are all significant, although respondents from Faculty/Personnel, and Students are significantly different to client. Indicators of Security Risk Management Practices namely: Approach, Responsibilities, and Resources are all significant, although respondents from Faculty/Personnel and Students are significantly different to client. Indicators of Security Measures namely: Preparedness, Efficiency, and Effectiveness are all significant, although respondents from Faculty/Personnel and Students are significantly different to client.

Table 11. Significant Relation between Security Policies/Procedures, Risk Management Practices and Security Measures in Terms of Preparedness

Indicator	r	Interpretation	*p*	Analysis
Security Policies and Procedures				
Miscellaneous Rules and Regulations	.732	Strong	<.01	Significant
Norms and Decorum	.691	Strong	<.01	Significant
Disciplinary Measures	.730	Strong	<.01	Significant
Security Risk Management Practices				
Approach	.761	Strong	<.01	Significant
Responsibilities	.837	Very Strong	<.01	Significant
Resources	.810	Very Strong	<.01	Significant

Table 11 reveals that all indicators of security policies/procedures, security risk management practices are significantly related to its security measures the first four indicators show strong relationship as follow: Security Policies and Procedures Miscellaneous Rules and Regulations (r= .732, p= <.01), Norms and Decorum (r= .691, p= <.01), Disciplinary Measures (r= .730, p= <.01), Security Risk Management Practices Approach (r= .761, p= <.01) and the last two indicators shows very strong relationship as follows: Security Risk Management Practices Responsibilities (r= .837, p= <.01) and Resources (r= .810, p= <.01). Significance is clearly manifested by p values that are all <.01 significance level.

On the other hand, of the six indicators of security policies and procedures and security risk management practices responsibilities and resources got very strong interpretation/remarks. It means that respondents perceived it as the most highly rated indicator as far as preparedness is concern.

Table 12. Significant Relation between the Implementation of Security Policies/Procedures, Risk Management Practices and Security Measures in Terms of Efficiency

Indicator	r	Interpretation	*p*	Analysis
Security Policies and Procedures				
Miscellaneous Rules and Regulations	.720	Strong	<.01	Significant
Norms and Decorum	.702	Strong	<.01	Significant
Disciplinary Measures	.724	Strong	<.01	Significant
Security Risk Management Practices	.761	Strong	<.01	Significant
Approach	.832	Very Strong	<.01	Significant
Responsibilities	.816	Very Strong	<.01	Significant
Resources				

Table 12 reveals that all indicators of security policies/procedures, risk management practices are significantly related to its security measures. The first four indicators show strong Security Policies/Procedures Miscellaneous Rules and Regulations (r= .720, p= <.01), Norms and Decorum (r=.702, p= <.01), Disciplinary Measures (r=.724, p= <.01) Security Risk Management Practices Approach (r=.761, p= <.01). The last two indicators shows very strong relationship as follows: Security Risk Management Practices Responsibilities (r= .832, p=

<.01), and Resources (r= .810, p= <.01). Significance is clearly manifested by p values that are all <.01 significance level.

The six indicators of security policies and procedures and security risk management practices responsibilities and resources got very strong interpretation/remarks, which means that respondents perceived it as the most highly rated indicator as far as efficiency is concerned.

Table 13. Significant Relation between the Implementation of Security Policies/Procedures, Risk Management Practices and Security Measures in Terms of Effectiveness

Indicator	r	Interpretation	*p*	Analysis
Security Policies and Procedures				
Miscellaneous Rules and Regulations				
Norms and Decorum	.729	Strong	<.01	Significant
Disciplinary Measures				
	.715	Strong	<.01	Significant
	.731	Strong	<.01	Significant
Security Risk Management Practices				
Approach				
Responsibilities	.771	Strong	<.01	Significant
Resources	.822	Very Strong	<.01	Significant
	.819	Very Strong	<.01	Significant

Table 13 reveals all indicators of security policies/procedures, risk management practices are significantly related to its security measures. The first four indicators show strong Security Policies/Procedures Miscellaneous Rules and Regulations (r= .729, p= <.01), Norms and Decorum (r= .715, p= <.01), Disciplinary Measures (r= .731, p= <.01) Security Risk Management Practices Approach (r= .771, p= <.01). The last two indicators shows very

strong relationship as follows: Security Risk Management Practices Responsibilities (r= .822, p= <.01), and Resources (r= .819, p= <.01). Significance is clearly manifested by p values that are all <.01 significance level.

Meanwhile, of the six indicators of security policies and procedures and security risk management practices responsibilities and resources got very strong interpretation/remarks, which means that respondents

perceived it as the most highly rated indicator as far as effectiveness is concern.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the study, the following conclusions were drawn.

The null hypothesis indicating that there are no significant differences on the ratings given by the three (3) groups of respondents regarding the status of LSPU as to Policies and Procedures, Practices for Security Risk Management, and Security Measures is hereby rejected.

The null hypothesis indicating that there is no significant relationship between the LSPU Policies and Procedures, LSPU Practices for Security Risk Management, and LSPU Security Measures is hereby rejected.

The University's Officials and Administrators may allocate time and effort to explain thoroughly to its stakeholders the Laguna State Polytechnic University's Security Policies and Procedures, Security Risk Management, and Security Measures to be able to provide a safe learning and working environment to everyone inside and outside the University.

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THE FORMATION OF LEGAL RELATIONS ON ALIMONY AND MAINTENANCE AND THEIR SIMILARITIES AND DIFFERENCES

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ABSTRACT
In the article have been analyzed the process of the formation of legal relations on alimony and maintenance and their similarities and differences by the helping scientific literatures and law documents as well.
KEY WORDS: *legal relations, alimony, maintenance, financial support, Roman private law, family.*

INTRODUCTION

The care of close relatives for each other and the financial support of each other have long been considered one of the most important moral values of this society. Relationships are also based primarily on the unconditional care of loved ones and ensuring their material well-being. Even in the days of ancient Roman private law, moral relations between relatives in a straight line, that is, mutual support materially and spiritually, had a stable legal obligation and the corresponding right to mutual support of relatives ("alimony").

At the same time, the legal forms of providing material support to the disabled and the provision of appropriate benefits are not limited to the obligation to provide only relatives or other family members [1, p.85-99]. In some cases, for objective reasons, all members of the family became materially needy and it was difficult to get rid of it without outside help.

METHODS

For hundreds of years, the legislation of many countries has formed a system of measures to treat needy citizens, raise children deprived of parental care [2], prevent delinquency among them, fight poverty, and implement these measures only for individuals, sponsors, close and distant relatives. at the expense of funds, but also through the appropriate social protection provided by the state. The right of family members to receive alimony is interpreted from a family-legal point of view as a subjective right. Such a narrow approach to the understanding of the right to benefits does not allow to solve social problems aimed at the formation of practical mechanisms for the material security of the lives of disabled people. Therefore, the law on alimony should be approached more broadly from an intersectoral legal perspective.

RESULTS AND DISCUSSIONS

In addition, in the legal regulation of alimony relations, it is expedient to interpret it on the basis of international human rights instruments as an integral part of human rights and freedoms recognized by the international community as a whole. The right to security derives from the fundamental human rights and freedoms established at the international level, in particular the right to life, the right to development, and the right to social security. The main international legal documents of general and special nature (UN Declaration on Social Development and Development of 1969, Declaration of Development of 1968, Social Charter of Europe of 1996, Convention on the Rights of the Child of 1989) show that a state is first and foremost obliged to create an economic system that operates normally for the subsistence of its people. For the life and development of every human being is impossible

without the provision of the means necessary for his survival. [3]

According to the doctrine of the "social state of law" [4, p.192], for the life and development of its members in society who, due to temporary or permanent illness or age and other objective reasons, do not have sufficient funds, as well as the ability to earn and support themselves adequate conditions must be created and guaranteed. Such members of society include people with disabilities, people of retirement age, pregnant women, mothers raising young children, and minors. According to the law, this category of citizens has the right to maintenance - the right to a legally guaranteed marriage at the expense of other persons.

The principle of self-sufficiency applies to the socially active part of the working age population. The main sources of income for the livelihoods of such individuals are their wages, income from entrepreneurial activities and participation in civil affairs. Legal mechanisms for the exercise of the right to security are formed by the state through various forms, means and methods of regulating social relations related to the material security of disabled citizens. Due to their specificity, these social relations can be grouped into species, groups, and the purpose of their legal regulation is directly related to the fairness and legitimacy of material support.

Initially, social relations in this area can be divided into two main types.

First: It includes relations that guarantee the level of the able-bodied population, the income generation of the working population and the ability to not only provide for themselves but also to help others. In this case, depending on the subject and legal nature of these relations, it is appropriate to apply the rules of labor and tax law.

Second: Recognition of the relationship to ensure the livelihood of citizens who are directly disabled and entitled to benefits. In the regulation of social relations, which is recognized as this type, various sources of funding and various legal forms can be used to provide financial assistance to the disabled. Funds for the livelihood of disabled citizens may be provided by certain individuals or borrowed from individuals and legal entities, as well as donated by certain individuals or donated by various foundations.

Subsistence, ie the provision of funds by one person for the marriage of another person, can be carried out not only on the basis of an obligation directly provided by law, but also on the basis of a civil law contract, for example, the Umirbad security contract. Full or partial security may apply in the absence of a legal guarantee in a relationship that does not have an appropriate legal form. In this case, the person providing the security does not assume the relevant legal obligation. For example, during the actual upbringing of the child.

The right to security in the broadest sense of the general law is a legal opportunity provided to incapable persons to obtain the means of subsistence necessary at the expense of other persons. Within the framework of sectoral specificity, the form, conditions, procedure and subjective structure of the legal relationship, as well as the specific features of this relationship, as well as the mechanisms for exercising the right to security are determined. In the exercise of this right, there is a problem of interdependence of different branches of law.

In cases where the exercise of the right to security arising under the law or contract provides for the provision of material assistance to a particular individual at the expense of another person, the construction of the obligation and the relevant sectoral methods of establishing legal relations for financial assistance. In particular, in civil law, a security obligation arising from a law (e.g., an obligation to compensate for the loss of a breadwinner) or a contract (an obligation to provide for a lifetime) is unilateral or bilateral.

Despite the fact that the state has a wide range of obligations for the social support of disabled people, international legal instruments and national legislation include the idea that the obligation to provide disabled people should be exercised primarily by family members. Therefore, the main role in solving the problem of financial support of disabled citizens is given to the Family Law, which is based on blood relations, relationships between spouses, parents and children. Alimony obligations of family members are one of the sectoral legal forms of security and one of the most common types of family legal relations.

Alimony obligations provide for the provision of benefits to incapable citizens at the expense of the property of persons who have a family relationship with this citizen on the basis of marriage, kinship, adoption. In establishing these legal relations, the legislature takes into account a wide range of circumstances related to the level of material well-being of both parties and the specificity of family life. The amount of support provided by family members is usually higher than the amount of assistance that can be allocated from various general social funds. However, the leading role of the alimony institution in the legal mechanism of financial support of disabled family members should be supported by other branches of law.

In particular, it is the duty of labor and child rights not only to provide for the needs of incapacitated citizens, but also to provide incomes for disabled members of the family to the extent that they can provide material support to minors in the first place.

According to a common view in family law, alimony obligations are an independent legal relationship that arises on the basis of legal facts provided by law. Such legal facts include an agreement between the parties to pay alimony or a court decision. Based on these legal facts, one member of the family undertakes to provide for another member. The other party acquires the right to demand that it be provided. It is in this sense that experts interpret alimony obligations as a type of civil legal relationship [5, p.336]. An analysis of the norms set out in the Family Code shows that although the terms "maintenance" and "alimony" have been used as a means of mutual financial support for family members, there is no clear boundary between them. Nevertheless, there is a situation in a number of literatures to interpret alimony as a type of provision. In this case, in contrast to the voluntary provision of alimony, alimony is determined by a court decision [6, p.36].

Continuing these considerations, it can be noted that the concept of maintenance has a broader legal meaning than the concept of alimony. Such a breadth is not only related to the methods of formation of these tools (voluntary and mandatory), but also differs in its content and scope. This may include the joint obligations of the husband and wife to provide financial support for their children until they reach adulthood.

For example, according to Article 90 § 4 of the Family Code, minors are entitled to receive maintenance from their parents. In addition, the norm stipulates that minors may receive a variety of social assistance, and this provision is used for the upbringing and education of children. The Family Code also stipulates that expenses for children must be covered jointly by the couple.

Alimony obligations, as a form of maintenance, are limited in family law. Another noteworthy aspect is that Section V of the Family Code, entitled "Alimony Obligations of Family Members and Other Persons," deals with Articles 96-97 of this section. In this case, the legislature provides for the recovery of alimony in the event of voluntary non-performance of the obligation to provide alimony (part 2 of Article 96 of the Family Code).

The mixed and confusing use of the concepts of alimony and maintenance in family law leads to different approaches to the interpretation of these concepts. For example, Article 97.1 of the Family Code stipulates the obligation of parents to "pay alimony" and "provide" for their minor children, while Part 2 provides for the equality of parental obligations in providing for them. It appears that the payment of alimony is a general obligation imposed on the parent, which is understood as the parent's property obligation to the minor child. At the same time, the provision of support is voluntary,

mutual agreement and joint participation in the upbringing of children.

The concepts of maintenance and alimony, in contrast, are also implied in property obligations between spouses and ex-spouses. In particular, Chapter XV of the Family Code stipulates that spouses provide for each other in the form of financial assistance or alimony (Article 117 of the Family Code). Based on these analyzes, two different concepts of alimony can be substantiated on the basis of the provisions on alimony established in the Family Code.

The first concept is based on the idea that the concepts of "obligation to provide" and "alimony obligation" are similar in family law regulation, so the legal relationship of family members on maintenance can be expressed as alimony obligations. At the same time, this aspect is not the basis for distinguishing between the concepts of "supply" and "alimony". Because the provision of security is not limited beyond the scope of alimony obligations or legal relationship. Certain financial assistance is also allowed outside the scope of alimony obligations. In particular, it is possible to provide material support through various gifts, payment of debt obligations, utility payments, delivery of food products, payment for training courses for children or other household expenses.

According to the second concept, the provision of alimony under a alimony agreement or a court decision can be described by the term "alimony". However, from a legal point of view, the term "alimony" can be defined as "alimony" in cases where "alimony obligations' are assessed as a stage in the development of legal relations for the provision of security and are not interpreted as an independent family-legal relationship arising from a notarized alimony agreement or court decision [7, p.24]. In this case, the subjective right to maintenance usually arises when there are conditions established by law for persons who are able to work and need financial assistance from other family members.

The alimony agreement or court decision determines the provision in each life situation taken separately and defines its characteristics. In general, the procedure for exercising the right of family members to maintenance and fulfillment of the obligation to provide support by other family members is determined by these documents. Furthermore, in this case, no new subjective right to security arises as a result of the conclusion of an agreement on the payment of alimony or a court decision. Because from the point of view of subjective protection, each of these documents can be enforced.

It should be noted that the obligation to provide does not always mean that there is a separate legal relationship between family members for the provision of security, because the obligation to

provide may, by its nature, be part of a relatively complex family-legal relationship. For example, parental legal relationships usually include the obligation of parents to provide for minor children.

Under the first concept, the appropriateness of recognition, "obligation to provide" and "obligation to alimony" operate as concepts that are completely similar in the mechanism of family law regulation. "Alimony obligations" arise in cases provided for by law in the event of family legal relations, in which one party provides the other. The other party, in turn, has the right to demand alimony. Such a right arises in the form of an independent, unilateral legal relationship or in the context of another relationship in family law. From the point of view of family law regulation, provision is the legal form of the subjective right of family members to alimony, while the provision of support is the satisfaction of the needs of one subject of family law at the expense of another.

At this point, it is necessary to distinguish the concept of "supply' from the concept of "financial support". Because financial support can be manifested mainly in actions such as reimbursement of expenses, implementation of voluntary spending expenses between close relatives. This also differs from the provision in the form of alimony. Zero alimony is expressed in the form of a fixed amount and payment within a specified period. Therefore, the concept of supply can be interpreted as a broader concept than the concept of alimony.

CONCLUSION

In conclusion, it should be noted that the concepts of "maintenance" and "alimony" in family law should be differentiated, and in their interpretation, it is necessary to distinguish between the obligation of mutual support of family members from the obligation of alimony. At the same time, it would be expedient to improve the provisions of the Family Code on alimony obligations, using the correct and appropriate legal terms.

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OVERVIEW OF CURRICULUM CHANGE: A BRIEF DISCUSSION

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ABSTRACT

The purpose of this research paper is to study the overview of curriculum change and its various aspects. The curriculum is the co-operation of the programs that are adopted and consciously materialized in the school to develop the personality of the student and change the behaviour. Human life is changeable. With the advancement of science and technology, knowledge is spreading, and society is changing. So, the curriculum should change accordingly. The investigator has adopted the qualitative research approach and theoretically descriptive method for this study. The researcher tries to investigate various aspects of curriculum change: types and approaches of curriculum change, factors of curriculum change, needs of curriculum change, principles of the process of implementing a new curriculum, plan and, resource for effective curriculum change, the role of teachers in curriculum change and, challenges in implementing curriculum change.

KEYWORDS: *Curriculum, Curriculum Change, Curriculum Implementation*

INTRODUCTION

The curriculum is one of the four most important components of education. The teaching-learning process continues based on the curriculum. Curriculum refers to all the experiences that students gain through classrooms, workshops, playgrounds, and interactions with teachers. In this sense, the curriculum throughout the school life touches on all aspects of the student's life and makes a cohesive personality. The word "curriculum" comes from the Latin word "currere". The etymological meaning of the word "currere" is "racecourse". In the field of education, students try to reach the desired goal of education according to their needs and abilities with the help of curriculum, just as they must reach a destination or goal as soon as possible according to their ability by taking a path on the racetrack.

Human life is changeable. With the advancement of science and technology, knowledge is spreading, and society is changing. With that change, many changes are coming in the life and livelihood of the people. And the curriculum is also changing in keeping with it. That is, an important feature of the curriculum is that it is subject to change.

Curriculum change is a learning process for teachers and their schools. A good understanding of change and a clear conception of the curriculum are necessary conditions for improved implementation of the new curriculum into practice. Policymakers, education leaders, and teachers need to know more about the drivers of successful curriculum change in schools. Therefore, learning about educational change and its key features should become integral elements of any serious curriculum reform process. (Pasi Sahlberg).

The literature on curriculum changes in tertiary education focuses mainly on larger-scale transformations that fall outside of our scale. Much of the academic discussion is concerned with the changes in teaching culture and philosophy that accompany a wholesale move away from traditional (subject-based, knowledge-centered, teaching focused) approaches, when institutions turn to alternative (student-based, competence-centered, learning-focused) approaches that stress the educator's role as a facilitator of learning, rather than a transmitter of knowledge (Bocock 1994, Huba & Freed 2000, Jones 2002, Merton, Clark, Richardson & Froyd 2001).

OBJECTIVES OF THE STUDY

This research study aimed to explore the overview of the curriculum change and its various aspects. More specifically, this study sought to answer the following objectives:

a) To explore the meaning and definition of curriculum change & the types of curriculum changes.

b) To know the approaches of curriculum changes & importance of curriculum change.

c) To determine the principles of the process of implementing a new curriculum & the plans and resources for effective curriculum change.

d) To identify the roles of teacher for curriculum change & the challenges in implementing curriculum change.

RELATED STUDIES

Gruba, P. et al (2004) explored a research article entitled "What drives curriculum change?". In this article, they focused on different types of curriculum change, the processes of change, and mainly various factors influencing changes.

Wootton & Selwa (1970) published a research paper titled "Curriculum: a changing concept". Where they mainly focused on the emerging trends of curriculum change. They proposed some trends, that were an interdisciplinary emphasis in the curriculum is growing, the subject-matter is being restructured, individual curriculum programming is increasing, attention is being given to clarification of objectives by using behavioral objectives.

Yin Cheong Cheng (1994) explored curriculum change in his article "Effectiveness of curriculum change in school: an organizational perspective". The researcher developed an organizational model for understanding and managing effective curriculum change in school. And provided a comprehensive conceptual framework to plan and manage curriculum change and teacher competence development.

STATEMENT OF THE PROBLEM

The present study was driven out to explore the curriculum change and its various aspects. After studying the various research paper, the researcher found the research gap and selected the problem as **"Overview of Curriculum Change: A Brief Discussion."**

METHODOLOGY

The study is qualitative in nature because the data collection and presentation are fully dependent on previously published documents like a research paper, book, etc., and various websites.

ANALYSIS THE OBJECTIVES
MEANING AND DEFINITION OF CURRICULUM CHANGE

Curriculum revision or curriculum change means making the curriculum different in some way, to give it a new position or direction. This often means alteration to its philosophy by way of its aims and objectives, reviewing the content included, revising its methods, and re-thinking its evaluator procedures.

Hancock, Dyk & Jones (2012) define curriculum change as the transformation of the curriculum schemes for example its design, goals and content.

According to Dziwa (2013), curriculum change is not a matter of supply of appropriate technical information rather it involves changing attitudes, values, skills and relationship.

Hoyle (1972) defines curriculum change as a generic term embracing a whole family of concepts (i.e., innovation, development, and renewal) which are used in relation to curriculum. He rightly argues that the curriculumis continually changing to suit the needs of changing society and changing knowledge and learners.

Ewell (1997) Suggests:

"That most Curriculum changes are implemented piecemeal and, in fact, "without a deep understanding about what collegiate learning really means and the specific circumstances and strategies those are likely to promote it."

TYPES OF CURRICULUM CHANGE

McNeil (2009) identified several types of curriculum change according to its complexity.

I. Substitution

Substitution occurs when a new element substitutes the other which is already present, such as, teachers are required to substitute a new textbook for an old one. Undoubtedly, this kind of change is the easiest to do by teachers and in fact, it is the most common type of change occurs in schools.

II. Alteration

Alteration exists when new content, items, materials, or procedures are added up into existing materials and programmes. The changes usually are minor, and thus, schools usually can adopt it instantly.

III. Perturbations

Perturbations are changes that may at first interrupt the existing programme but later it can be attuned accordingly by teachers to the on-going programme within a short time span, for instance, teachers need to change their class schedules. The changes may affect the time allocated for teaching other subject or it may affect other teachers' class schedules but it could be adjusted shortly.

IV.   Restructuring

Restructuring occurs when the changes modify the whole school system, such as schools introduce a new curriculum to their teachers and pupils. The changes demand the teachers adopt new concepts of the teaching role, new curriculum content, and new textbooks.

V.   Value-orientation

Value-orientation changes take place when teachers or school staff are sought to adopt the new fundamental philosophies or curriculum orientations. The changes could occur if only they are willing to accept the new values otherwise the changes will be short-lived. (Sulaiman, T. Ayub, & Sulaiman, 2015) Gruba, P et. al. (2004) identified the following curriculum change

1. Introduction of a whole new degree program or specialized stream at the undergraduate level.
2. Introduction of a whole new (course-work) degree program at the postgraduate level.
3. Introduction of a new subject, or deletion of an existing subject.
4. Change to or within a first-year or other core subject, such as a change to the first language taught to undergraduate students.
5. Change to or within an elective subject, such as a change in the choice of AI language used in a third-year subject.

APPROACHES OF CURRICULUM CHANGE

The traditional approaches to curriculum change may be classified under three categories: (1) the administrative approach; (2) the grass-roots approach; and (3) the demonstration approach. Each of these is briefly discussed in the following:

1) The Administrative Approach:

In administrative approach, the administrator or head of the school makes the first move when he realises the need for curriculum change and sets up machinery to make the needed revisions. He arranges for faculty meetings in which the need for curriculum improvement is presented. Then a steering committee is appointed consisting of administrative officers and teachers. This committee formulates general plans, develops guiding principle and prepares a statement of general objectives covering the entire school system. These formulations become the curriculum development manual. In addition, the steering committee works out plans for training teachers in curriculum work, determines the number and kinds of consultants to be employed and the kinds of activities best calculated to familiarise teachers with the theory and practice of curriculum building and provides for the setting up of "production committees" consisting largely of teachers to prepare new courses of study in keeping with the objectives and guiding principles laid down by the steering committee. When the courses of study are completed, these are reviewed either by the steering committee or by a committee created especially for that purpose. Finally, the courses of study are tried out and installed.

2) The Grassroot Approach:

In its most comprehensive form, the grass-roots approach is community-wide. It embraces not only teachers but also students, parents and other members of the community. It is based on certain general propositions. One such proposition is that if teachers share (or take part) in shaping the goals to be attained, in selecting, defining and solving the problems to be encountered and in judging and evaluating the results, their involvement in curriculum change will be most nearly assured. The grass-roots procedure begins with individual schools in each neighborhood. Each school is encouraged to work at a unit in the development of a new program. Perhaps the most important feature of this procedure is that the teachers, administrator, students and parents of a particular locality can work face-to-face on their common problems. In this approach the function of the central administration is to provide stimulating leadership, free time, materials and whatever the various schools may need. Commonly used techniques in this approach are the workshops and work-conference. The grass-roots approach also makes wide use of consultants as well as of bulletins and study guides issued by the central administration on such topics as child development, community needs and resources, social and economic conditions and innovations in curriculum theory and practice.

3) The Demonstration Approach:

The purpose of this approach is to introduce changes in the regular program on a small scale, thereby holding the disturbance of the faculty and community to a minimum. Since this approach discovers the consequences of a pro- posed change on a small scale before making the changes in the whole school it reflects the sort of caution associated with an experimental attitude. There are two forms of this approach. The first is an experimental unit within a school. A separate faculty and administration are deliberately set up to operate the experimental project. The purpose of this separate unit is to develop new programs, methods and materials in the hope that the whole school will be influenced by them. The second form of this approach is the same as the first in purpose, but the lines separating the experimental project from the rest of the school are not as clearly drawn or not drawn at all. There is no experimental faculty designated as such, nor is the project under a separate administration. A few teachers who are dissatisfied with the regular program and who are, therefore, most enthusiastic for curriculum change are given the opportunity and the encouragement to make innovations. A first step in this approach is for the administrative staff to identify those teachers who wish to improve the existing

program. These teachers are then provided with enough free time, leader-ship and materials to develop a new program at the level of classroom practice. If successful these developments will, hopefully, influence other teachers to re-examine their own programs and to modify them.

WHY CURRICULUM CHANGES ARE IMPORTANT?

I. Advancement of Knowledge:
Knowledge is constantly changing. Knowledge is constantly being improved. A lot of theory is now being discovered that would not have been acknowledged in the past. Students should have an idea about this new information. So, with this improvement in knowledge comes a need to change the curriculum.

II. Progression of Technology:
Along with the knowledge, technology is also improving. In the field of education, the use of various techniques in the teaching-learning process has changed. As an example, we can say, the use of ICT. So, the curriculum should change with that.

III. The changing needs, interests, and abilities of learners:
There is a huge difference between the needs of the students of the present 21st century and the needs of the students of the past. Similarly, their interests, abilities have changed. As at present it is necessary to know computer knowledge. So, it has become essential to have computer knowledge in the curriculum. Which was not so important before.

IV. Reconstruct curriculum according to teaching methods:
At present, the teaching method is child centered. Education is given the highest importance to the child. At present, a variety of new teaching methods are used like- collaborative learning, spaced learning, flipped classroom, self-learning, cross-over learning, etc. The curriculum is changed according to teaching in these methods. That is also one of the reasons for the change in the curriculum.

V. Globalization:
Globalization is the process of interaction and integration among people, companies, and governments worldwide. (Wikipedia) In this way, there is an opportunity to see exactly how the curriculum is taught in different countries. Then we can compare them in our interest. And if they are more useful after making comparisons like this, we can use them. In this way, the curriculum can be changed.

VI. Curriculum Research:
Curriculum research is done to improve the curriculum. As a result of this research, many new outcomes are being discovered. The curriculum needs to be redesigned based on all these research outcomes.

PRINCIPLES OF THE PROCESS OF IMPLEMENTING A NEW CURRICULUM

Pasi Sahlberg describes seven principles that are used in process of implementing a new curriculum. Which are discussed bellow

I. Making sense of why a new curriculum is necessary:
The moral purpose of the change is the key factor in building a commitment to raising the quality and closing the gap in student achievement.

II. Understanding the change process:
Implementing a new curriculum requires changes on many fronts. Understanding the complexity and internal dynamics of the change process is conditional for the sustainable implementation of curriculum reforms.

III. Capacity-building:
Capacity is one of the key conditions for the successful implementation of curriculum reforms. Capacity-building involves policies, strategies, resources, and other actions that are aiming at increasing the collective power of people.

IV. Developing cultures of learning:
Successful curriculum change involves learning during implementation. A powerful factor of change is learning from one's peers, especially those who are further along in implementing a new curriculum.

V. Developing cultures of evaluation:
Cultures of evaluation must be embedded in the cultures of learning.

VI. Developing leadership for change:
Good leadership is one of the key conditions for successful curriculum change. Leadership, to be productive and sustainable must spread throughout the school.

VII. Utilizing the ideas that already exist in schools:
Schools are full of good ideas about how to improve teaching and help pupils learn. Many curricula re-form ignore this reality (Aho, Pitkänen & Sahlberg, 2006).

PLAN AND RESOURCE FOR EFFECTIVE CURRICULUM CHANGE

Dr Cheryl A Jones and Mike Anderson (2001) proposed the following plan and resource for effective curriculum change:

I. Be realistic about the timescales and resources needed for effective change, taking into consideration people's readiness and capacity for change.

II. Look for pioneers and innovators who can motivate others.

III. Allow for degrees of participation at the planning stage.

IV. Define what is non-negotiable and leave room for choices to be made.

V. Encourage more efficient working. Set deadlines by which certain outcomes should be agreed.

VI. Eliminate casualties of curriculum development by carrying out effective planning, re-training, and staff development.

VII. Include a communication strand in the plan that promotes openness rather than secrets.

ROLE OF TEACHERS

I. As a social reformer:
The teacher is a social reformer. He played an important role in the betterment of society. He took the responsibility of changing the curriculum in different ways according to the needs of society. The teacher will make sure that the subject is included in the curriculum considering the needs and requirements of a society.

II. Understand their students:
The teachers are equal to the guardian of the students. He understands students' needs, abilities, attitudes, etc. In the teaching-learning process, students interact directly with the teacher. And it is through the curriculum that the teacher interacts with the student. So the teacher plays an important role in shaping the curriculum according to the needs of the students.

III. As an implementor:
It needs to be implemented after the curriculum changes. If the changed curriculum is not implemented, it has no worth. The teacher is responsible for the implementation of the curriculum. He can implement the curriculum appropriately. In this way, he helps to change the curriculum.

IV. As a curriculum evaluator:
The first step in curriculum change is curriculum evaluation. The curriculum is evaluated to see if there are any current curriculum errors. This is how it is understood whether the curriculum needs to be changed. The teacher is in charge of evaluating the curriculum. They consider different aspects of it.

CHALLENGES IN IMPLEMENTING CURRICULUM CHANGE

I. Lack of adequate infrastructure:
One of the major obstacles in implementing the changed curriculum is the lack of proper infrastructure. Infrastructure is an important element in the implementation of any curriculum. For example, if there is no ICT infrastructure, it is not possible to conduct ICT enable curriculum.

II. Training of Teacher:
In the field of education, teachers have the main responsibility of implementing the curriculum. They need to be trained to introduce something new in the curriculum. At present, there is not much in-service training system for teachers. So, teacher training in

implementing the changed curriculum becomes a challenge.

III. Attitudinal Issue:
Negative attitudes to curriculum change are a big problem. Because people usually like to cling to old things. So, you can't accept change a lot of the time. Sometimes parents have attitudinal issues towards a changed curriculum. Parents are often reluctant to teach their children such content.

IV. Financial Issue:
And finally, the main problem with curriculum change is the financial issue. Money is needed at every level of implementation of the changed curriculum. A developing country like India can't implement curriculum changes due to insufficient funding.

CONCLUSION
Curriculum change is a learning process for teachers and their schools. A good understanding of change and a clear conception of the curriculum are necessary conditions for the improved implementation of the new curriculum into practice. Furthermore, as the conception of learning is becoming more studied and considered as an important factor changing education, exploring and rethinking what learning deserves more attention in the future curriculum development efforts. The key message of this presentation can be crystallized to three conclusions. (Pasi Sahlberg)

The curriculum is always changing. Curriculum changes are helping modern education become more advanced and appropriate. This requires a more comprehensive understanding of curriculum change.

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TEACHING ENGLISH IDIOMS AS A FOREIGN LANGUAGE

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ABSTRACT
The aim of the present paper is to show some strategy for the teaching of idioms to learners of English foreign language. English idioms do not mean what they literally mean; however, mass media, textbooks and everyday language represent rich sources of idiomatic expressions. To overcome this difficulty, some strategies have been suggested; besides introducing English idioms in story contexts and with visuals, activities, such as group talk and role-play, can act as a key to increasing students' motivation and involvement in learning English idioms. However, emphasis is given to cultural substitution in which the meaning is given priority over the form in favour of preserving the cultural flavor of the target language.

DISCUSSION

A language is a living substance, which evolves under the influence of different factors. Being very flexible English language constantly enriches its vocabulary with the words invented by the language speakers, making it more colorful with new idiomatic expressions, and at times refills its stocks with the borrowings and neologisms. English just amazes by its extraordinary linguistic diversity.

English is one of the most idiomatic languages in the world, containing thousands of idiomatic expressions that are rife in everyday speech, the media and literature. English is a language with a vast idiomatic basis, which makes its learning very exciting and intriguing. The main function of idioms is to paraphrase what is going on, and what is being said.

Idiom is defined as an expression that does not mean what it literally says. The meaning idioms convey is non-compositional. It implies that you cannot understand the meaning of the whole phrase putting the meanings of each word together. If you look at the individual words, it may not even make sense grammatically. Idiom has the meaning only as a unit.

Professor Koonin defined idiom "as a stable combination of words with a fully or partially figurative meaning." This definition emphasizes two inherent and very important features of the idiomatic expressions.(2.p282)

Idioms have lexical and grammatical stability. It implies that they are fixed in their form, hence any substitutions and rearranging in their structure can lead to complete loss of their primary meaning. Idiomatic expressions are integral units. It literally means that idioms possess indivisible completeness, so all the components are bound within one idiom.

The idioms have the important role in learning and teaching English language. Knowing idioms you can express your opinion fluently. Your ideas become colorfully with the help of idioms.

Teaching English idioms as a foreign language in Uzbek classes it required a good knowledge of idioms and methodology. You should give more interesting games and activities for involving pupil's attention. We are offering you some more activities for learning idioms.

The first activity is *"Who knows idioms better".* The goal of this game is to increase pupil's attention to learning idioms. Before beginning the activity the teacher shows the slides or cards with three kinds of sentences. Ex. *a) I often do my homework in the evening. Sometimes I'm sleepy and don't understand what I read*

b) I decided to paint my room and I bought black, white and brown color paints. But I didn't know painting, and my friend advised me to paint with white color, because it is the symbol of peace

c) My friend has been suffering from a bad toothache for a long time, as he is afraid to go to the dentist

After that, from the group two pupils goes to the blackboard and chooses from the cards on the table one card without preparation should find an idiom. *The devil is not so black as is painted*

Other pupils should find the idiom. Who will find the idiom first will take a score, which of the pupils gain a lot of scores will worn. For example:

Any possession that is useless, unwanted, or costs a lot of money – white elephant

Somebody who appears to be harmless but is really dangerous – wolf in sheep's clothing

A bleak, harsh, terrible existence without much happiness or freedom – dog's life

The second activity is as following: group divided into two groups. Teacher writes one sentence on the blackboard and students should find an idiom and translate it, that student which translates the sentence correctly gets the one point. For example:

I begged and cried to go to the party, but Dad said I was crying crocodile tears

Come quick! Your brother has gone bananas

The project has finally been given the green light

Pamela suddenly turned white and fainted

The third activity is intended for fastening idioms has already known for the students. The student stands back to the blackboard. The teacher writes an idiom on the blackboard, and the students' tries to explain in English, what does that idiom means.

For example: there is one idiom on the blackboard «to break the news». The student explains this sentence to their friend in this way: to make something known, to tell someone some important news. The student which stands on the blackboard should guess the meaning of idiom according to the description of the comrades: «to break the news» – янгиликларни айтмоқ. Here are the examples for this game.

(Apple of my eye, in the nutshell, buy a pig in a poke, red tape, as white as a sheet, he shakes like a leaf from cold, fly into a passion, monkey business, top banana).

The fourth activity is the student chooses a card with idiom and without preparation gives its description. Other students try to guess idiom under the description. The one, who will guess by first, receives point.

Here the examples:

1) Something sudden, unexpected and shocking – bolt from the Blue

2) Right away, at once, without delay, willing any moment – at the Drop of Hat

3) To deal with a problem in a direct and confident way – take the bull by the horns

4) Used for emphasizing that something happens very rarely or hardly ever – once in a blue moon

5) To wear white clothers – be dressed in white

6) The last of a series of events that makes an already difficult situation intolerable – the last straw that broke the camel's back

7) To suspect that something is wrong – smell rat

The fifth activity is as following. The teacher prepares the list of common English proverbs. Put them on the board. Prepare slips of paper/cards bearing one proverb each. The teacher will need to explain at least some of the proverbs, since proverbs are often highly condensed, and sometimes the meaning may not be immediately clear, e.g. *The project has finally been given the green light.*

Students work in pairs. Each pair is given one proverb to work with. Allow 15 minutes for pairs to discuss their proverb and to rehearse a short dramatization to show the meaning of it. Each pair performs its dramatization for the whole class. The class has to work out which of the proverbs listed on the board is being presented.

In the following activity the students divided into three groups and for each group will be given texts. Students must read the texts and fill the blanks with words; the gaps can be completed with the same words. They can use a dictionary to check meanings and translate the texts into Uzbek. When they finish they must exchange the papers with other group. The students of the first group will check up the second group's translation and read them loudly, analyze in the class. If the translation of the text is correct that group gets point. Here we give some examples of the texts:

1. A manager is talking to an employee:

I personally think you've _____ the wrong horse and you've got your _____ to the wall, but I'll _____ you up as long as you don't _____ down. Just don't do anything behind my _____, or do anything else that is likely to get my _____ up, otherwise I'll transfer you to one of our offices in the _____ of beyond.

2. A lawyer is talking to a client:

I'll say this to your _____: you're _____ some serious charges. On the _____ of it, however, there isn't any evidence that you committed the crime, and there is no judge on the _____ of the earth who would find you guilty. The prosecution will have to _____ up to it: there's no way you're going to _____ the music over this.

3. A doctor is talking to a patient:

I can't _____ down the seriousness of your illness. I don't want to _____ on your emotions and pretend to _____ God. However, we might be able to _____ for time before you need an operation, so I'm going to recommend a course of medication. The medicine I'm going to recommend is actually illegal in this country, but I know how to _____ the system

and get you some, as long as you're prepared to _____ ball with me on this.(1.p72)

In conclusion teaching and learning idioms is always interesting for pupils, students and even for teachers. Moreover, the students learn better when they are provided with activities because they can interact with fun. It is effective to teach English language when they are provided with various activities to practice and use English idioms in different contexts. Idiomatic expressions pervade English with a peculiar flavor and give it astounding variety, bright character and color. They help pupils to understand English culture, penetrate into customs and lifestyle of English people, and make a deeper insight into English history.

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ESSENCE OF WATER CONSERVATION FOR SUSTAINABLE DEVELOPMENT

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ABSTRACT

Water Conservation is emergent need of the hour considering the changes in the ecosystem and also important for sustainable development. According to report published in newspaper, around 163 Million Indians are deprived of clean drinking water, twenty one percent of the communicable diseases are linked to unsafe drinking water and approximately 500 children die because of diarrhea in India everyday. More than half the rivers are polluted and have been classified as unsafe by modern standards. Water bodies like India-Ganga, Yamuna and Sabarmati have been serverly polluted by organic and inorganic waste. Water wastages figures in metropolitan and urban area have been in the range of 50% to 20%. On the average , this much amount of water is sufficient enough to provide drinking water to the 30% population of India. In view of the aforesaid discussion, it is essential to identify the main causes of water wastage and look for appropriate solutions to overcome this problem. The present study has been conducted to highlight the reasons of water wastage and suggest appropriate mechanism for dealing with the same. Various statistical measures have been employed to highlight the problem and drawing meaningful interpretations.

KEY WORDS: *Water Conservation, Sustainable development, wastage. Wilcoxon Signed Rank test*

INTRODUCTION

The situation of water scarcity in India is clearly visible and cause of concern for all living beings. According to the report, *Composite Water Management Index*, prepared by Niti Aayog, critical groundwater resources have depleted at an alarming rate and 600 million people in India have got exposed to "high to extreme water stress."

The efforts of conservation have not resulted in any material positive outcome. Another report prepared by a government-aided body highlighted shrinking annual per capita water availability in this South Asian country and underlined the need for sustainable conservation of water, endorsing much of what water activists have campaigned for a long time. The Niti Aayog report has estimated that by 2030, 40 percent of India's population will be deprived of access to clean drinking water. And India's capital New Delhi, along with 19 other cities, including metropolitan cities Bangalore and Chennai, which are also major financial hubs, would run out of groundwater supply in the next few years. These estimations made by NITI Aayog are sufficient enough for all of us to change our attitude towards water consumption and conservation.

RESEARCH METHODOLOGY

In order to examine the perception and views of general public with regard to reasons of wastage of water and measuring the change in their attitude with regard to usage and preservation of water, a questionnaire was designed containing questions addressing to following issues :

1. Water availability – A major challenge towards human society.
2. Main reasons of wastage of water
3. Steps required for preservation and conservation of water
4. Change in their attitude towards water conservation after getting awareness about water problem in future.
5. Appropriate channel for spreading awareness regarding water problem.

The questionnaire, created using google form, was circulated through mail and information was

obtained from 60 respondents. Based on the responses, meaning interpretation was drawn. In order to assess the change in attitude with regard to water preservation of respondents after being acquainted with the gravity of threatening situation, Wilcox Signed rank test (Non parametric test) was employed to assess if the campaign of water problem had significant impact on their behavior or not.

DATA ANALYSIS AND INTERPRETATION

The demographic profile of the respondents in terms of gender, educational background and age is given below:

Gender	No. of Respondents
Male	28
Female	32
Total	**60**
Educational Background	**No. of Respondents**
Upto class XII	12
Undergraduate	28
Post Graduate and above	20
Total	**60**
Age	**No. of Respondents**
Upto 18 years	9
Between 18 to 50 years	38
50 years and above	13
Total	**60**

It can be observed that respondents are fairly equally distributed on gender basis and includes majority of respondents from adult age group and well educated segment of the society. The responses submitted by the respondents can be considered as reliable and useful. The summary of result for each of the question of the questionnaire is given below

Q1	Do you think availability of water in future would be a major challenge towards entire human society ?
Responses	*All the respondents admitted by ticking "yes" that availability of water in future would be a major challenge towards entire society.*
Q2	What according to you are main reasons of wastage of water?
Responses	a) *Keeping tap open at the time of brushing and washing clothes (14)* b) *Consuming too much water for bathing (12)* c) *Leakage in pipes and taps (18)* d) *Excessive use of water for gardening and cleaning vehicles, etc. (11)* e) *All the above to some extent (5)*
Q3	What according to you would be most useful in preservation and conservation of water ?

Responses	a) *Changing habits towards use of water. (18)* b) *Repairing leakages of pipes and taps. (8)* c) *Restricting use of water for gardening and cleaning vehicles,etc.(4)* d) *Restricting use of ground water through water pumps.(6)* e) *Increasing awareness among society towards proper use of water. (24)*
Q4.	How do you rank yourself towards awareness of proper use of water after media campaign and initiatives taken by Government?
Responses	*Respondents were asked to express their concern through a quantitative number between 0 to 10 , with '0' being the minimum and '10' being the maximum concern. The number given by respondents were analyzed using Wilcoxon Signed Rank test*.*
Q5	What among the following would be most appropriate channel for creating awareness water conservation program in the society?
Responses	a) *Advertisement in TV Channels (10)* b) *Advertisement in Radios (0)* c) *Road shows/Nukkad Nataks (2)* d) *Message through SMS (0)* e) *All the above (48)*

The statistical output , using SPSS, on the responses received for question number (4) is shown below in table 1

Ranks

		N	Mean Rank	Sum of Ranks
Rankafter – Rankbefore	Negative Ranks	0[a]	.00	.00
	Positive Ranks	50[b]	25.50	1275.00
	Ties	0[c]		
	Total	50		

a. Rankafter < Rankbefore
b. Rankafter > Rankbefore
c. Rankafter = Rankbefore

Test Statistics[a]

	Rankafter - Rankbefore
Z	-6.240[b]
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

Table 1: SPSS Output of Wilcoxon Signed Rank test

Based on the responses for various questions, it can be interpreted that the educated and adult segment of our society are well informed of the problem relating to availability of water in future. Among the various reasons which result in wastage of water, almost all reasons were considered equally responsible with leakage in pipes and taps identified as most important prominent reason followed by disproportionate use of water for brushing teeth, bathing and cleaning vehicles ,etc. To overcome these kind of problems, the views of the respondents with regard to necessary steps to be initiated was sought and majority of the respondents

recommended that a campaign so as to increase awareness among society regarding proper usage of water and the threatening consequences in future , if we continue with the same practice, to the human life can prove effective in overcoming the problem. The extent to which such campaign can bring change in attitude and behavior of respondents was examined using Wilcoxon Signed Rank test on comparing concern towards water issue before and after being aware of threatening situation of availability of water. As the p-value is 0.00 i.e. less than 0.05 , it implies that the null hypothesis that there is no significant impact is rejected and one can conclude that the campaign had significant impact on the respondents with regard to problem in water in future.

CONCLUSION OF THE STUDY

The survey study conducted on 60 respondents revealed that all the educated adult section of our society is familiar with the foreseeable problem of water in future and supports the programs for increasing awareness among all the people of society. An urgent attention and need is being felt for responsible attitude of all citizens in bringing change in their attitude towards use of water and water conservation. The responsible citizens are expected not only to display change in their behavior but also educate others with the threatening situation of water which may arise due to irresponsible behavior of some section of society. The education and awareness of the water problem through different kind of campaigns would help people in understanding the seriousness of the problem and would bring change in their behavior as proved statistically in the case of respondents. Such behavior of the society would help in achieving sustainable development goal also for which the entire world is looking forward.

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AN EMPIRICAL STUDY ON IMPACT OF USING GEOGEBRA ON ACHIEVEMENT IN MATHEMATICS

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ABSTRACT

This research paper is based on the study done by investigator to determine the impact of use of open educational resources on achievement of elementary level mathematics students. The study was experimental in nature. The data was collected from 120 students of elementary level of private schools in Delhi-NCR with ICT facilities. The objectives of the study were (a) To develop applets using Geogebra tool for teaching mathematics (b)To study the impact of using these applets on the achievement level students of mathematics. The results show that the impact of use of open educational resources on achievement of elementary level mathematics students is found to be significant at 0.01 level of significance.

KEY WORDS: *Achievement, Elementary level students, Geogebra, Open Educational Resources*

INTRODUCTION

Technology has provided a new dimension to the ever changing facet of education. With the paradigm shift in the role of the teachers the classroom scenario has also changed completely. In a class where there are learners with diverse needs the use of old chalk and talk method is strictly prohibited. Information and Communication Technology (ICT) is an exclusive tool which can be utilized in the field of education to address its various problems. In the present times with abundance of information available, we need teachers who are expert in using the technology in a judicious manner to optimize its utilization to its maximum extent. The 21st century classrooms need to be driven by the ICT integrated teaching learning resources. We need to understand the clear difference between using ICT and teaching of ICT. Simply preparing a lesson based on ICT does not mean ICT competency of a teacher. Rather the teacher needs to identify suitable technological resources and successfully integrating them in the classroom. But technology comes with a cost so how the teachers are supposed to integrate these expensive technological tools into their teaching. For this purpose open educational resources need to be widely used by the teachers.

Open Educational Resources

Open Educational Resources (OERs) are any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. OERs range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation.(UNESCO)

There are many commercial softwares available for teaching and learning Mathematics like Geometer's Sketchpad, Cabri, Matlab, etc. But teachers are unable to use them in the classroom as few of them are very expensive. However, there are softwares that could be freely used by educators in classroom teaching. The term Open Source Software (OSS) allows user to download any softwaresthat are available and suitable for the users. Softwares which are similar to OSS and related to mathematics instructions such as FreeMat,

GeoNet, JLab, Maxima, Axiom, YACAS, JsMath and others are ready to be downloaded and used in teaching and learning

One such open Educational resource is Free Open Software GeoGebra. It is discussed below:

GEOGEBRA

GeoGebra is an open educational resource. It is a dynamic mathematics software tool that brings together geometry, algebra, spreadsheets, graphing, statistics and calculus and presents them as a package. It provides multiple representations of objects. Basically, the idea is to connect geometric, algebraic, and numeric representations in an interactive way. This can be accomplished with points, vectors, lines, and conic sections. This mathematics software in which there is a provision for entering as well as manipulating equations and coordinates, and hence plot functions; work with sliders to investigate parameters; find symbolic derivatives; and use commands such as Root or Sequence.

Key features include:

- Free to use software for learning, teaching of mathematics.
- Interactive with easy-to-use interface.
- Access to an ever-expanding pool of resources.
- Allows visual experience in mathematics
  Hence, GeoGebra is a mathematical tool which covers many areas of mathematics.

Users all over the world can freely download this software from the official GeoGebra website at http://www.GeoGebra.org.

Research Objectives

The objectives of the study were

- To develop java applets using GeoGebra tool for teaching mathematics at elementary level

- To study the impact of using these applets on the achievement level students of mathematics at elementary level

METHODOLOGY

Sample

The sample of the present study consisted of 120 children (60boys and 60girls) of class VIII from three schools in Delhi NCR. Purposive sampling technique was used for choosing the schools for the study based on the availability of ICT.

Tools Used

In the investigation following tools were used for data collection:

1. Monitoring performa, adopted by the investigator
2. Self- developed achievement test

Statistical Technique

Mean Score and 't' test were used for analysis

The instructional material for this study consisted of lesson plans integrating GeoGebra for teaching two topics of mathematics of NCERT Class 8 for the experimental group and another set of plans in the convention group i.e. the control group. The Figure given below shows few snapshots taken by using GeoGebra software.

FINDINGS

The self-constructed Achievement questionnaire was administered on the 60 students each of control and experimental groups. The tool consisted of 25 questions of mathematics.

To examine the effect of use of GeoGebra on achievement of the respondents of control and experimental groups

We compare through pre and post- test the achievement of both control and experimental groups, which has been tabulated below.

Comparison of difference of mean of Pre and Post Achievement scores of both control and experimental group respondents

Groups	N	Mean	SD	t-value
Control Group	60	17.717	7.388	12.852**
Experimental Group	60	34.233	6.672	

**Significant at 0.01 level*

From the table given above it is evident that the comparisons of difference of mean of Pre and Post achievement scores of control and experimental groups on achievement test scores are 17.717 and 34.233

respectively SD is 7.388 and 6.672 respectively. The t ratio is 12.852, it signifies that the there is significant difference in the achievement score of both the control and the experimental groups after the experiment.

CONCLUSION

The results of the study indicated that there was a significant difference between the means of the students' achievement scores in mathematics. The findings showed that integration of GeoGebra for teaching acts as a booster in the traditional classroom of mathematics. Pedagogical innovations using GeoGebra is more effective than traditional pedagogical tools alone. The findings of this study are in line with the research results attained by Hennessy, Fung and Scanlon (2001), Hannafin and Foshay (2008), Ahmad Fauzi et. al. (2010) and Ahmad Tarmizi et. al. (2010) which depict that use of mathematical learning softwares has a positive effect on the students learning and understanding. It clearly demonstrates the instructional effectiveness of GeoGebra as compared to the traditional construction tools. This study gives an alternative to the teachers to utilize the free open mathematics software as a tool as an effective pedagogical tool. It is an cost effective free to us easy software.

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WEBLINK

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AWARENESS AND PREFERENCE FOR MOBILE PHONE LOANS

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ABSTRACT

Mobile phone loan now has become the new coil on catastrophe cash as it is a more flexible way to borrow emergency cash with complete avoidance of costly bank overdraft fees payday loans. Nowadays companies are providing flexible payment option with no hidden fees or repayment penalties and the credit is easily available without a credit card too. The aim of the research conducted was to gauge perception of people towards the loan offerings of various mobile phone companies. Through regression analysis the hypothesized conditions shoed great dependence of the awareness about mobile phone loans on the salary bands of people and People who want to buy Apple phones next. Thus brand image is also playing a crucial role in availing the loans offerings. The study was further conducted to analyze if there is a relation between the awareness about mobile phone loans among not earning customers with the brand of mobile Customer wants to buy and customer not having credit cards or not, and the result computed showed clear dependence on the latter aspect.

KEYWORDS- *Loans, Credit Card, Brand Image, Consumer Perception*

INTRODUCTION

In today's time Smartphone have become very vital to our daily lives because of their efficiency. The speed and communication facility is almost unparalleled. Since the inception of phones we have observed constant up-gradation from land line phones to smart phones now. Mobile phone has become a very important part of human life. Every individual chooses his phone as per its usage for him and also considering his income. Now the recent financial world is offering a lot of lending alternatives such as instalment loans i.e. EMI at 0% interest rates and short-term loans from different lenders as well the companies themselves. Credit card's EMI option is popular among buyers these days. As a new alternative for buyers some companies are also offering loans for buying smart phones which is a new concept and people are preferring it over credit card EMI due to 0% interest rate on loans on different brands and 1% PM interest rates on Apple phones.

These loan companies in market operate their business by charging a fixed percentage on the sale of different brands. Representatives of the loan companies are present at sale outlets to cater the loan needs of the customers. Thus the research bases its predictions on the survey which was done to study the awareness about the loans among different age groups and salary bands.

DATA SAMPLING AND RESEARCH METHODOLOGY

As this is a new concept and people preferences of these loans depend on their awareness of it, a survey was done on a sample size of 120 people belonging to different age groups and different salary bands.

- Sampling method was convenience sampling and scales used for the survey were ratio scale, Likert scale and nominal scale.
- Research methodology used is Regression analysis computed using SPSS tool of statistical analysis.

RESULTS AND OBSERVATIONS

The survey done on 120 people of which the larger population was between 21 to 40 years of age.

Age Group of Respondants
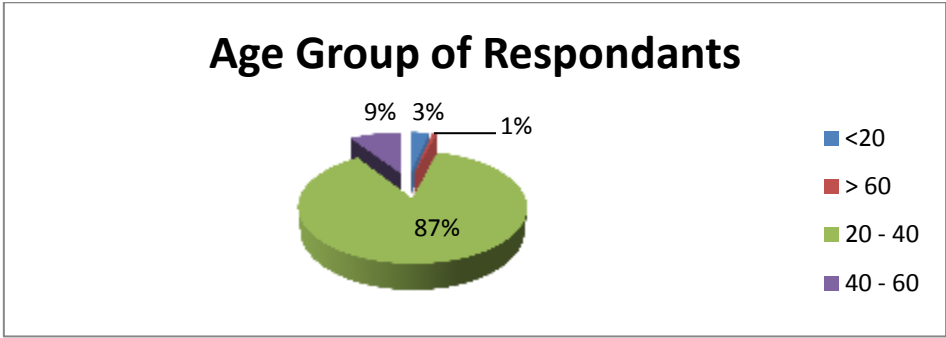
The salary group distribution of the respondents was a bit inclined towards 34% sample population falling under "Not Earning Category"

## Salary Group of Respondants
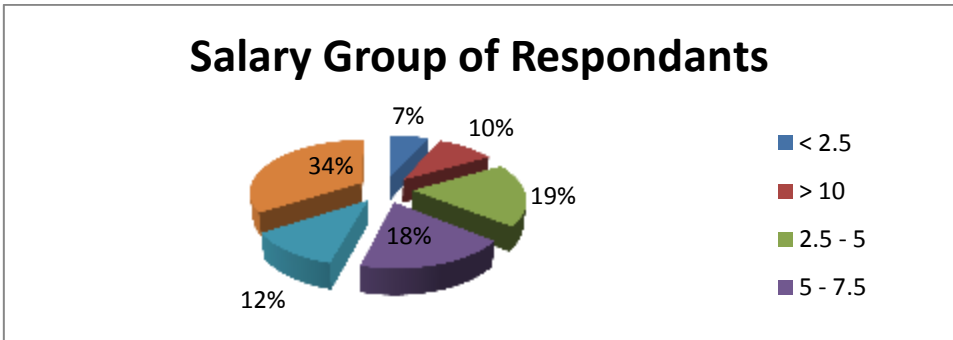
As the result of the survey 75% of the sample population was found aware about the Mobile Phone Loans.

Loan Awareness (All age Groups)
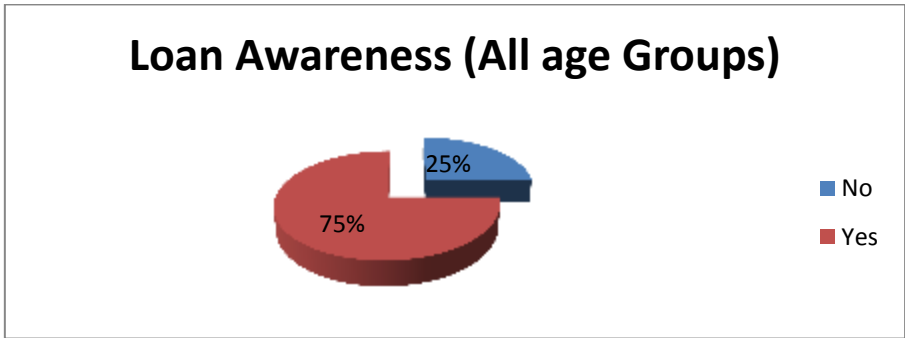
The most popular mobile among the sample population which the respondents are currently using is Xiomi followed by Samsung and Apple.

Brand of Mobile Phones Currently Using
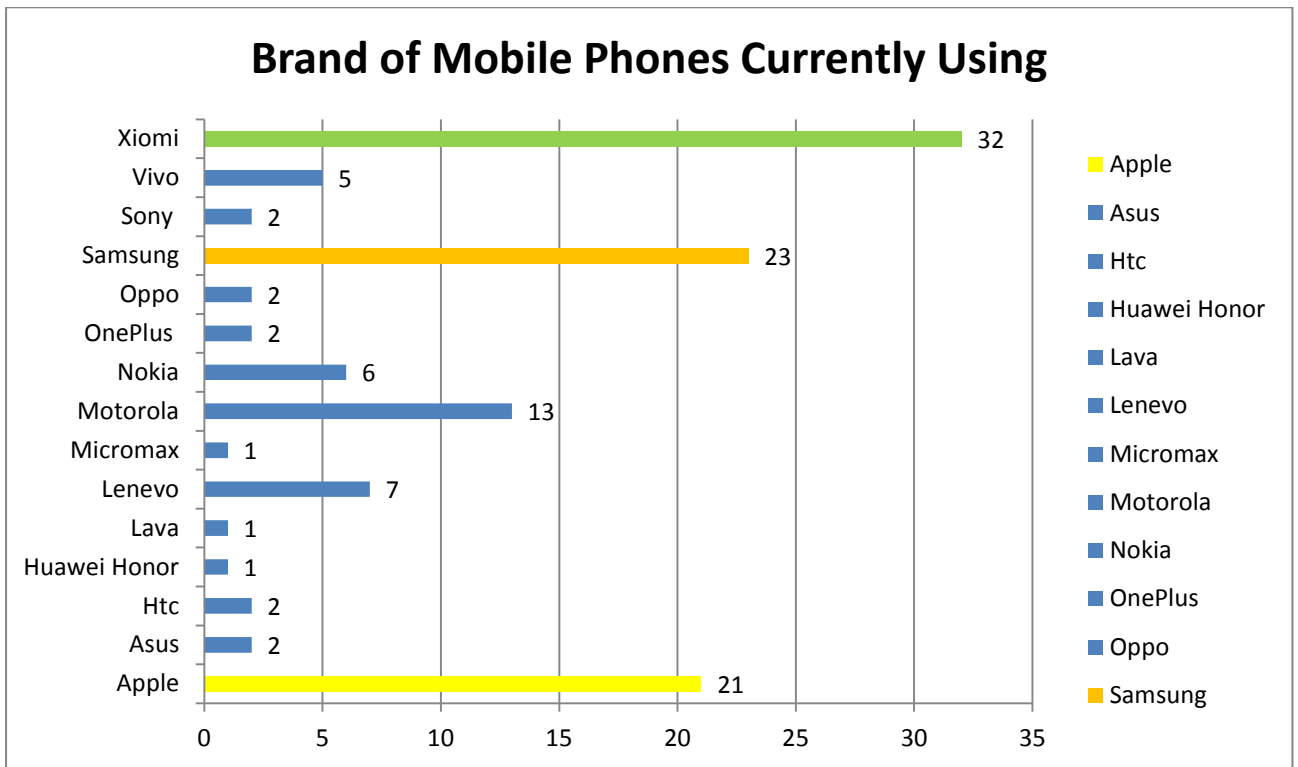
Among the respondents the mobile phones which they aspire to buy next, Apple was found to be the most popular of all followed by Samsung.

Brand of mobile phone want to buy next
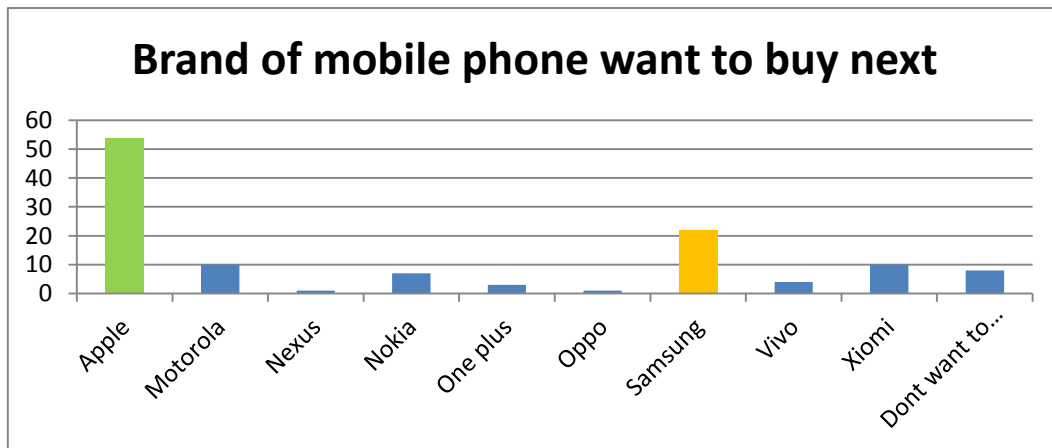
HYPOTHESIS

There are two hypothesis analyzed by this survey:

Hypothesis #1:

Ho: There is no relation between the awareness about mobile phone loans and the salary bands of people and People who want to buy Apple phones next.

H1: There is relation between the awareness about mobile phone loans and the salary bands of people and People who want to buy Apple phones next.

To study the hypothesis the sample population was divided in salary following salary groups:

- Not Earning
- Earning Less Than 2.5 Lacs per annum.
- Earning between 2.5 Lacs to 5 Lacs per annum
- Earning between 5 Lacs and 7.5 Lacs per annum
- Earning between 7.5 Lacs and 10 Lacs per annum
- Earning more than 10 Lacs per annum

SPSS was used for performing linear regression and result observed was as follows.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.989a	.977	.962	1.24639
a. Predictors: (Constant), WantToBuyApple, CountOfPeopleInDifferentSalaryGroups				

As R Square value is 0.977 which denotes that Awareness about these loans depends highly on the salary bands of people and also on people who want to buy Apple as their next phone brand.

ANOVAb						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	200.173	2	100.086	64.427	.003a
	Residual	4.660	3	1.553		
	Total	204.833	5			
a. Predictors: (Constant), WantToBuyApple, CountOfPeopleInDifferentSalaryGroups						
b. Dependent Variable: AwareAboutMobilePhoneLoans						

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.307	1.075		2.147	.121
	CountOfPeopleInDifferentSalaryGroups	.388	.114	.717	3.420	.042
	WantToBuyApple	.306	.221	.290	1.385	.260
a. Dependent Variable: AwareAboutMobilePhoneLoans						

The coefficient part of the result shows that beta for variables "Count of people in different salary groups" and count of people who "Want to buy Apple phone" comes out to be .717 and .290 respectively which shows for 1 unit change in "Count of people in different salary groups", "Awareness about mobile phone loans" changes by .717 and same changes by .290 if change is 1 unit in variable "Want to buy Apple phone". This shows the awareness is dependent highly on salary of people and also the mobile phone loan is less popular among people who want to buy Apple phone which may be due to 1% per month interest on loans for Apple phones or also due to preference for Apple among mainly high income group people who can afford the phone without the loan.

Hypothesis #2:

Ho: There is no relation between the awareness about mobile phone loans among not earning customers with the brand of mobile Customer wants to buy and customer not having credit cards.

H1: There is relation between the awareness about mobile phone loans among not earning customers with the brand of mobile Customer wants to buy and customer not having credit cards.

To study the hypothesis the sample population of not earning group was divided in brand of mobile phones they want to buy:

1. Apple
2. Motorola
3. Nokia
4. One plus
5. Oppo
6. Samsung
7. Vivo
8. Xiomi
9. Dont want to change the brand

SPSS was used for performing linear regression and result observed was as follows.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988a	.977	.953	1.07216
a. Predictors: (Constant), BrandWantToBuy, NotHavingCreditCard				

As R Square value is 0.977 which denotes that Awareness about these loans depends highly on the brands of the phones not earning people want to buy and also on non availability of credit cards with them.

ANOVAb						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	96.501	2	48.250	41.974	.023a
	Residual	2.299	2	1.150		
	Total	98.800	4			
a. Predictors: (Constant), BrandWantToBuy, NotHavingCreditCard						
b. Dependent Variable: LoanAwareness						

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.150	1.031		-.145	.898
	NotHavingCreditCard	.495	3.478	.706	.142	.900
	BrandWantToBuy	.187	3.284	.282	.057	.960
a. Dependent Variable: LoanAwareness						

The coefficient part of the result shows that beta for variables "Count of people not having Credit card" and count of people who "Want to buy Apple phone" comes out to be .706 and .282 respectively which shows for 1 unit change in "Count of people not having Credit card", "Awareness about mobile phone loans" changes by .706 and same changes by .282 if change is 1 unit in variable "Want to buy Apple phone". This shows the awareness is dependent highly on people with no credit card and also the mobile phone loan is less popular among people who want to buy Apple phone which may be due to 1% per month interest on loans for Apple phones or also due to preference for Apple among mainly high income group people who can afford the phone without the loan.

CONCLUSION

The aim of the research conducted was to gauge perception of people towards the loan offerings of various mobile phone companies. The sample for study consisted of people of different age groups and with varying salary bands. The study denotes that Awareness about these loans depends highly on the salary bands of people and also on people who want to buy Apple as their next phone brand. The regression analysis conducted shows that the awareness is dependent highly on salary of people and also the mobile phone loan is less popular among people who want to buy Apple phone which may be due to 1% per month interest on loans for Apple phones or also due to preference for Apple among mainly high income group people who can afford the phone without the loan. Also the second part of the study denotes that Awareness about these loans depends highly on the brands of the phones not earning people want to buy and also on non availability of credit cards with them. The regression analysis conducted shows the awareness is dependent highly on people with no credit card and also the mobile phone loan is less popular among people who want to buy Apple phone which may be due to 1% per month interest on loans for Apple phones or also due to preference for Apple among mainly high income group people who can afford the phone without the loan. Thus it can be inferred that this new concept of providing loans for buying commodities is gaining high interest among consumers and the preferences varies significantly depending upon the age groups of the consumers and the salary bands of the consumers.

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EVALUATION PROTOCOLS IN SCIENCE LABORATORY LEARNING THROUGH ICT TECHNOLOGIES

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ABSTRACT
Science Laboratory learning using ICT, evaluation protocol is an important part of quality of assurance and to provide feedback for teaching and learning. Virtual lab is widely used ICT technology for the last five years to asssit new faculties in sceince. In this study, we focuss the purpose of assement and raising various difficulties associated with current evaluation techniques in learning and teaching. Assessment is based on test which includes different types of questionnaire for undergraduate students (N=150). Index of learning is conducted among these students, identified reflective and non-reflective learners. From our results, it is difficult to assess student's knowledge gained from traditional or virtual classroom environment from single questionnaire protocol, especially for Visual-Verbal aspects in MCQ approach. Essay type questionnaire and Yes/No questions, the method is constrained to find solutions. We also discuss dependable factors and its percentage affecting for different questionnaire. The Cronbach's alpha value is high for descriptive type questionnaire rather than MCQ, which show internal consistency, is high for descriptive type. T-test is conducted for the variation from one type questionnaire with combination type questionnaire. Current evaluation method does not fulfill the actual goals and this will lead to even misleading the assessment criteria rather than what they gained.

INTRODUCTION

On-line platform for science learning creates a challenging enviroment amoung undergraduate students. Due to covid-19 pandemic situation, educational institutions/universities mostly prefer online learning platforms to met the requirements for graduation. Many studies conduted in the past for the enchancement in learning and education through ICT technologies [1-2]. Hence raise the question that what are the evaluation methods required for the proper, valid results in learning assesment. Oliver (2000) developed a strategy to evaluate the use of technologies in education. To understand more about learning as well as teaching, assessment protocol is essential [11]. Proper laboratory learning is an integral component in science education [9-10]. Continuous assessment helps to evaluate a learner's understanding and knowledge about the subject even if they having different abilities

[15]. Definitely ICT enabled laboratory learning like animation, simulations and videos which the experiment is described can provide deep understanding about concepts, experimental procedure and make it more interesting one to students[1,12-13]. In this study, we are not following traditional experimental laboratory, but focusing ICT enabled experiments using virtual labs and checked current assessment methods/protocols/criteria is sufficient or not in science laboratory learning.

The three main purposes for assessment include (1) decision making (action), (2) evaluation for conceptual understanding and (3) measurement of cognitive load and skills [4,5,6]. Determining student's attitude towards problems is usually difficult to evaluate [8]. An important requirement is the type of questions raised for finding a particular answer. In science learning, laboratory based assessment cannot

be generalized in one type of questionnaire hence we are opting types of questions and try to find out an effective method for the current evaluation scenario.

METHODOLOGY

This study is carried out under MHRD project in collaboration with titled Virtual Labs (http://www.vlab.co.in). Here purposive sample N=150, undergraduate science students from Mahatma Gandhi University were taken to perform four science virtual lab experiments, two each from Electronics and Mechanics Virtual labs.

The students were selected based on their academic results and they do not have experience in real lab environment. Assessment is based on test which includes different methods of questionnaire. The

1	Sensory: go through the fact Intuitive: try to understand the meaning
2	Visual: prefer for visual representation Verbal: prefer explanation with words
3	Active: prefer group work and try to figure out problems. Reflective: try to find out a solution
4	Sequential: overall understanding not into depth. Global: firstly try to understand the basics and then find solution

Here we used traditional classroom and virtual lab environment, and try to teach these experiments effectively for students. Index of learning is evaluated by using multiple choice questionnaires (MCQ), most of the students prefer Visual-Verbal learning styles (N-92), Sensory - Intuitive (N-11), Active - Reflective (N-10), Sequential - Global (N-39). Here also it is found to be difficult to prepare single type questionnaire to assess all the four aspects in learning styles.

Phase II
After teaching, allowed the students for doing real lab and virtual lab. Assessment is based on test/exam which includes different types of questionnaire. For this phase rather than learning styles, we try to evaluate the depth of knowledge gained from traditional and virtual classroom. The questionnaire is prepared covering four experiments as total 45 questions includes 20 MCQ questions (1 marks), 10 descriptive questions (5 marks), 5 essay type questions (10 marks), and 10 yes/no questions (1/2 marks). All the questions are prepared by making criteria that, to find the solution for one problem, questions are from all four different types. Example: To measure the conceptual learning about ohms law, questionnaire is prepared as follows
Eg: MCQ: What is the ratio of voltage and resistance?

Descriptive: What is ohms law?

tests were carried out after performing the experiments in Virtual environment. These assessments can be also used to measure the knowledge attained by the students from virtual environment.

This is to identify which test is most convenient for the student's evaluation and what are the drawbacks if we use one particular method like Multiple Choice Questions (MCQ). The student's performance cannot be assessed by single method, if some have ability to solve particular type of approach.

Phase I
- According to Index of learning model, the four dimensions of learning styles [14], we divided the students into four groups.

Essay: Explain ohms law using circuit diagram with examples?

Yes/No : Voltage in circuit can be calculated if current and resistance is known ?
 The questionnaire based assessment is conducted after real lab and virtual lab, each type of questions is individually tested and analyzed among students.

RESULTS AND DISCUSSIONS

From Fig 1 & 2, simulations using virtual environment allow students to control the parameters of the experiment to get maximum knowledge and can attain more about the concepts with application level. Score attained by the students increased in virtual laboratory. Most of students irrespective of their learning style, scored well (<80%) for all types of questionnaire in virtual environment. From our results shows that both real lab and virtual lab, students gained well score for descriptive and essay type questions but low marks in MCQ for the question which is asked in different type. It clearly indicates that understanding and depth of knowledge cannot assess by only using MCQ approach. Yes/ No questions are not a valid type of evaluation method for science learning.
To measure the internal consistency/ reliability of the questionnaire, we tested cronbach's alpha.
The results are shown in the table given below

Type of questionnaire	N	Sum of item variance	Standard deviation(SD)	Cronbach's alpha	SEM
MCQ	45	1.65	1.44	0.45	0.08
Descriptive	45	1.95	0.89	0.76	0.06
Essay type	45	1.55	0.75	0.58	0.09
Yes/No	45	0.24	0.4	0.01	0.1

The alpha value is high for descriptive type questionnaire rather than MCQ, which show internal consistency, is high for descriptive type. This may due to some of the facts that,

MCQ test, students are asked to answer from options given even if they can answer randomly. This type of questions will be useful only for problem solving. But broad coverage and infinite sampling can be done by using this type of questionnaire. But major drawback for this method is that teachers cannot test knowledge based on theories and depth of knowledge. There is also a possibility for the students who can guess appropriate answer to the question.

Descriptive type questions are used to understand the procedure to the problem. Step by step evaluations can be done for this type. Good explanations, writing skills, depth of knowledge can be easily understood. It is a time consuming method and students with high memory capacity can have a tendency to gain maximum scores by this questionnaire.

Essay type questions are similar to descriptive type, time consuming helps to evaluate the general idea called open ended type questions. Here learning skills cannot be calibrated especially for laboratory work. Students can answer the questions easily with a very few constraints.

Yes/No questions where students can accept or decline the answer, not a method to evaluate deep knowledge due to lack of content. Questionnaire itself is a restriction and not at all met assessment criteria.
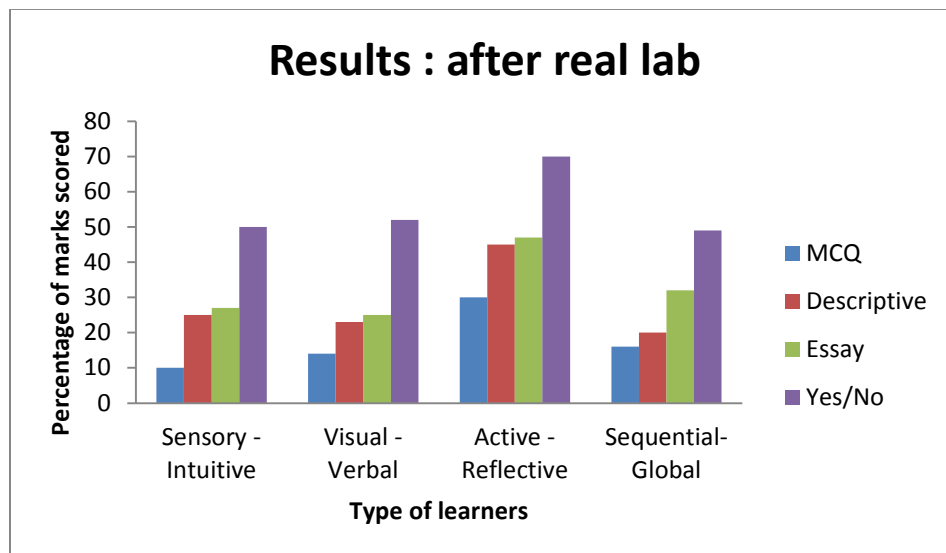

Figure 1. Results for different type questionnaire for Electronics & Mechanics after real lab
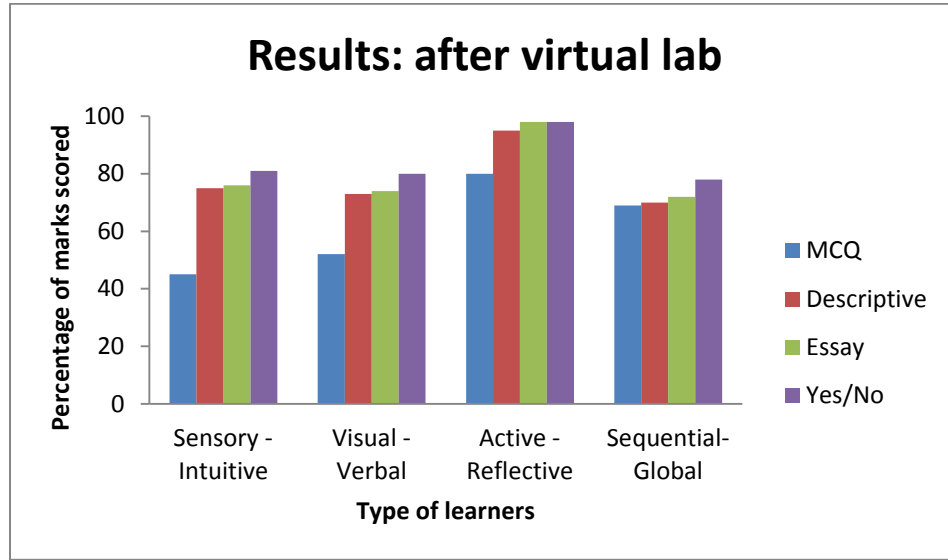
Figure 2. Results for different type questionnaire for Electronics & Mechanics after virtual lab

From instructors point of view, factors that are dependent on the evaluation of students from their academic results (Fig 3). Most interesting factors are included at which the evaluation may show difficult due to improper assessment pattern to achieve their goals.
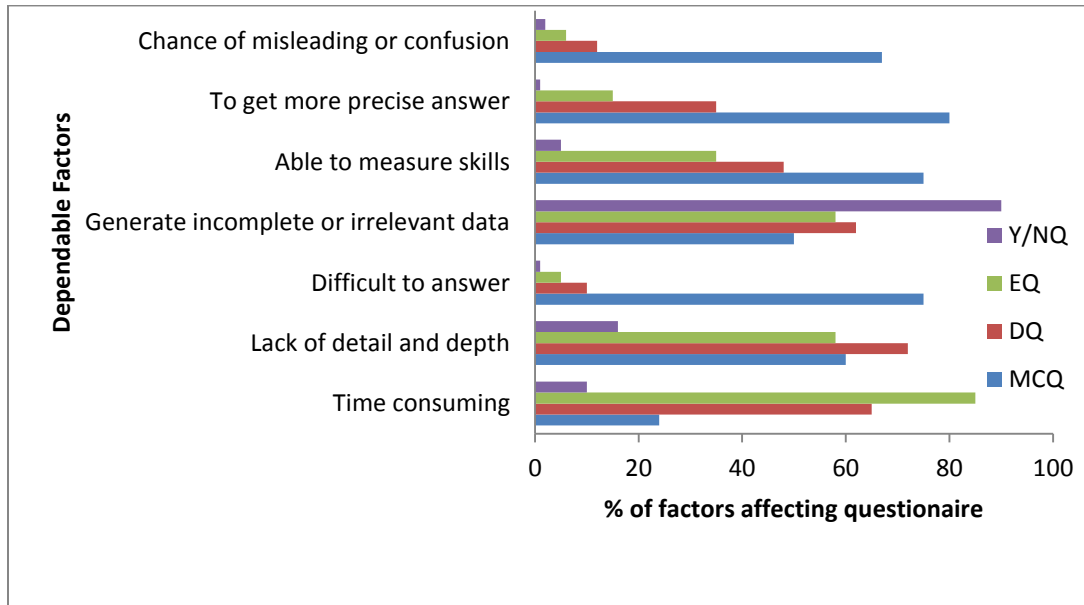

Figure 3. Dependable factors and its percentage affecting for different questionnaire

The questionnaire which includes only MCQ (mostly problem based questions), the students who have the ability to find the final answer gained scores. The descriptive questionnaire is based on problems by here we allow the students to allow step by step procedure to find final answer. Essay type questionnaire, here we allow the students to explain the problem with concepts rather simply studying the equations. Yes/No question, this method constrained for the students and there is possibility to get right answer by random selection.

We have conducted t-test which shows the variation from one type questionnaire with combination type questionnaire.

Experiment	Comparative study	Mean Scores		t value	P value
Electronics	MCQ – MCQ + Descriptive+Essay+Yes/No	5.523	8.524	-13.532	0.000
	Descriptive - MCQ + Descriptive+Essay+Yes/No	3.541	8.101	-8.353	0.000
	Essay - MCQ + Descriptive+Essay+Yes/No	3.011	7.425	-7.154	0.000
	Yes/No - Essay - MCQ + Descriptive+Essay+Yes/No	1.245	7.989	-4.899	0.000
Mechanics	MCQ – MCQ + Descriptive+Essay+Yes/No	4.985	8.243	-11.429	0.000
	Descriptive - MCQ + Descriptive+Essay+Yes/No	3.758	8.452	-7.436	0.000
	Essay - MCQ + Descriptive+Essay+Yes/No	3.622	8.128	-6.434	0.000
	Yes/No - Essay - MCQ + Descriptive+Essay+Yes/No	0.985	7.975	-4.140	0.000

Our results shows combined questionnaire can analyze and is to dig the learning knowledge of each student. Hence we suggest an evaluation protocol for the assessment in learning and teaching based on flowchart
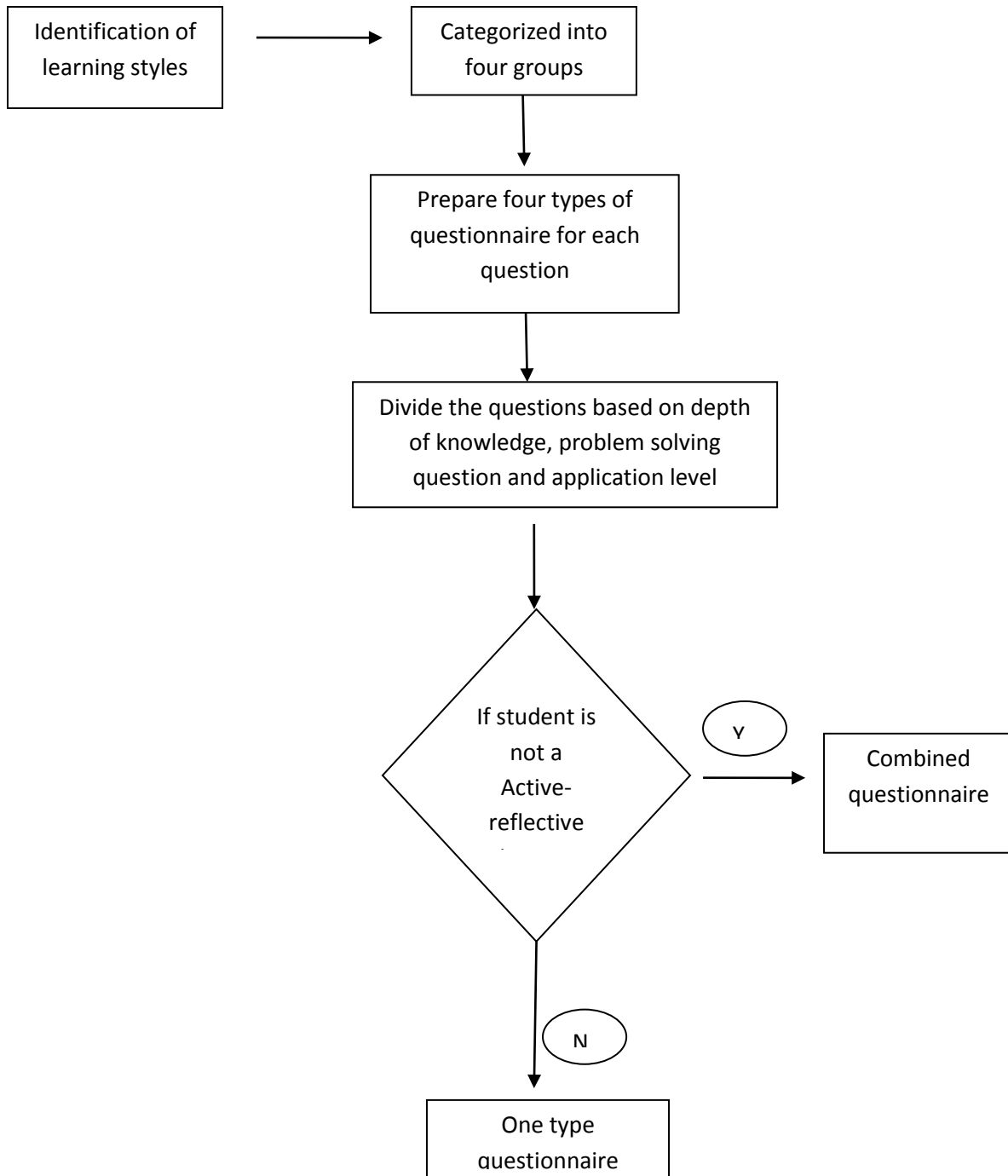
CONCLUSIONS

From our results, current evaluation method does not fulfill the actual goals due to incomplete questionnaire. This will lead to misleading the concepts behind the experiment for students rather than what they gained. Most of the evaluation used one type of questionnaire, easy to express their opinion or appears as difficult. Most of the assessment takes limited time and will be a problem if the students are at the risk. From our studies, whatever is the assessment method, questionnaire itself should be asked in different form, where students have an opportunity to answer fully by

selecting their easy type. Hence preparation of combined questionnaire in the protocol can analyze the depth of understanding knowledge among students especially no reflective learners and teachers in science related education.

Acknowledgement

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