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THE IMPACT OF BRAND IMAGE ON PASSION OF POST-GRADUATE STUDENTS IN PUBLIC UNIVERSITIES

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ABSTRACT
This study examines the extent to which brand image influences the passion of post graduate students in public universities in south south Nigeria. The population of this study is drawn from postgraduate students from four federal universities in South-south namely; University of Port Harcourt, University of Calabar, University of Benin and University of Uyo. These schools have a population of 34,984 postgraduate students. The choice of these institutions is firstly because they are federal universities with higher allocation unlike state universities secondly, because these universities are the only federal universities that offer postgraduate programs. This data was gotten from school website and direct interaction with post graduate admission office of these universities. For this study, the sample size was determined through the use of Krejcie and Morgan (1970) table. For a finite population of 34,984, a sample of 379 was derived. Our findings reveals that brand image has a very strong influence on passion of post graduate students with regression estimate of over 9.42. the study also has a p-value of 0.000 which is also less than alpha of 0.05. in all, the null hypothesis was rejected and the alternate was accepted. The study further recommends that in setting up committees within the university, at least a representative member from the department of marketing should be nominated because while other members are making suggestions along the line of operation, the marketer present would raise concerns and contributions on customers reception to committee outcomes.

KEYWORDS: brand image, passion, universities, south-south, post-graduate

INTRODUCTION
Brand image is an integral component of brand equity as it conveys the worth of the brand to the consumers. Kotler (2001) defined image as "the set of beliefs, ideas, and impression that a person holds regarding an object". Therefore, it is about the mental representation of the brand based on individual consumer’s beliefs, ideas and impression. It is perceived differently by both consumers and organization. The way consumers or the target audience of the brand views or interprets is known as perceived image while the other is the desired image, which is the way company wants to position its brand matching the consumer’s perceived image. When organizations make assumptions about the perceived image it is known as presumed image. These levels of image can be contradicting because managers may not exactly know what is going on in the mind of the consumer. This gap is filled by the research on the construct in various disciplines which guides the practitioners and opens new horizon to understand their consumers. Ever since the introduction of construct "brand image", it has been defined in multiple ways. Every definition is based on its conceptualization on various aspects. For instance, Dobni and Zinkhan (1990) defined "brand image as being largely a subjective and perceptual phenomenon that is formed through consumer interpretation, whether reasoned or emotional." It is about how consumers perceive. So it can largely vary depending on the mental representations of respective consumer.

According to Aaker (1991) brand image is referred to as "a set of associations, usually organized in some meaningful way" and in the same context Keller (1993, p. 109) defines it as "perceptions about a brand as reflected by the brand associations held in consumer memory". Both of these definitions lead to the fact that there are various abstract features that may reside in the consumer’s mind about the brand, either
objective or subjective. According to the definition of Lee & Back, (2008), "Brand image is the reasoned and emotional perceptions of consumers attached to specific brands". One thing that each of the definition conveys is that it is automatically formed depending on what consumers take meaning of the brand and each brand can have as many images as its consumers. Gardner and Levy (1955) were credited with the introduction of the construct in 1950s, and described its social and psychological nature. The construct had its roots in the discipline of psychology that is why it captured its place in the consumer behavior research. It is based on different psychological variants which describes the consumer behavior (Gardner & Levy, 1955). With the development in the concept in its era of 1960s and early 1970s, it was researched and conceptualized on the basis of social psychological construct “attitude”. Bird et al, 1970 defined it as “an attitude about a given brand” (Bird, Channon, and Ehrenberg 1970). It soon found to be playing vital role in marketing manager and captured the attention of marketing managers when empirical research supported its importance during purchase decisions (Doyle et al, 2008.). Gensch (1978) in his research on brand image, found a significant relationship between brand image and brand preference. Then in 1980s, attitude-based image research dominated in the research, and created more hype in linking the brand image with the consumer behaviour and marketing management (Zamanou, et al 1994). The concept of semiotics was applied in 1988 by Noth. From this perspective, "objects of the marketplace are claimed to form semiotic systems, and commodities are studied as signs whose meaning is the consumer's brand image". Researchers continued to work in the same direction in 1990s, and brand image became the key component of brand equity (Jahangir, et al 2009 p.3).

Images are the interpretation of their beliefs and values. Fishbein and Ajzen (1975) gave the classification of human beliefs as (i) descriptive, (ii) informational and (iii) inferential. Descriptive beliefs are drawn from direct experiences consumer have with the product. Informational are the ones that are predisposed by outside stimuli and sources such as society, ads and communities. Inferential beliefs are the ones that are the result of interpretations on the basis of past experiences with the product. Discussed levels of beliefs held understanding the diversity of images that can be formed on the basis of these beliefs. While conducting his research on hospital brand image, Kim (2008) explained that “brand image is not absolute; it is relative to brand images of competing brand”. He described that brand image is also formed on the basis of direct experience with the brand. In addition, brand image acquires a strategic function for the marketers. They can manage the marketing activities in creating positive brand image and differentiate it from the competitors (Javalgi et al., 1992).

On the other hand, Passion is often cited as a component of love (Sirohi, et al 1998). Along with passion comes idealisation and adoration of the beloved. The passionate component of emotional attachment is responsible for the intensity of emotionality that comes with love however it does not reflect the intensity of love as such. Passion rather circumscribes the desire and (physical) attraction that is evoked by the object of love. Hence, passion can be understood as an important component of love, although not equivalent to love. Authors agree that love also implies a feeling of connectedness and intimacy (Thomas et al., 2005). Person-object relationships, therefore, are also very close and trustful, which necessitates that both partners are highly committed and dedicated to this relationship.

Passion refers to the drives that lead to romance, physical attraction, sexual consummation and related phenomena in loving relationships. The passion component includes within its purview those sources of motivational and other forms of arousal that lead to the experience of intimacy in a loving relationship. It includes what Hatfield and Walster (1981) refer to as ‘a state of intense longing for union with the other’. In a loving relationship, sexual needs may well predominate in this experience. However, other needs, such as those for self-esteem, nurturance, association, dominance, compliance and self-actualisation, may also contribute to the experiencing of passion.

Past research on passion supported the conceptualisation of the two types of passion. Using the Passion Scale, a bi-dimensional measure of the two types of passion, Varela et al. (2001) showed that the more people report high levels of passion, either obsessive or harmonious, the more they spend time on their activity, the more they value it and the more they perceive it as a passion. Furthermore, obsessive passion has been shown to be more invasive in people’s life than harmonious passion. For example, people with a more obsessive passion perceive their activity as occupying a greater part of their identity and experience more conflicts with other life domains. When asked to evaluate the relative importance of the passionate activity and other life domains, (e.g., family, friends, or work), people with a more obsessive passion are more inclined to value their activity above all other domains.

Types of passion includes obsessive and a harmonious passion, which reflect the more passive and active forms of passion found in philosophers’ work.
(Roberts, 2006). Varela et al. (2001) hypothesise that the two types of passion result from the way the activity is internalised in a person’s identity. In line with Self-Determination Theory, it is proposed that activities can be internalised in either a controlled or an autonomous way. A controlled internalisation refers to an activity that is internalised as tied to various contingencies, such as the person’s perception of competence, desire for excitement, or sense of acceptance. This type of internalisation is hypothesised to result in a more obsessive and passive form of passion, where activity engagement feels mandatory and even compulsory. Obsessive passion is thus characterised by an internal pressure that pushes the person to engage in the activity. The individual feels compelled to do his or her activity because doing so may quench an uncontrollable thirst for the activity or satisfy various internal demands such as the maintenance of one’s value or sense of self-worth. As such, the activity tends to be overly valued, to be favoured above all other aspects of the person’s life and to take disproportionate space in the person’s identity (Reynolds & Beatty, 1999).

An activity may also be internalised within a context of choice and exploration, referred to as an autonomous form of internalisation. This form of internalisation is hypothesised to result in a more active and harmonious type of passion, which is characterised by a sense of deep interest, but also of volition. Harmonious passion refers to a motivational force that leads people to choose to engage in the activity and to personally endorse the importance of their activity engagement. The activity is valued, but not overly so, which allows people to engage in other life projects. Although the activity occupies a significant space in the person’s identity, it is not overpowering, such that activity engagement remains under the person’s wilful control and is in harmony with other aspects of the person’s life.

RESEARCH HYPOTHESIS
H0 Brand Image does not have any effect on the passion of customers in public universities in south-south, Nigeria

THEORETICAL FRAMEWORK
Impression Management Theory
Impression Management (IM) is the study of how people attempt to manage or control the perceptions others form of them (Bozeman & Kacmar, 1997). The goal of impression management is to steer others’ opinion or impression with the use of controlling information in either a personal or social situation (Highhouse, Brooks, & Gregarus, 2009). In addition to IM being used in an individual setting, IM theory can also be applied at a macro-organizational level (Avery & McKay, 2006). Organizations use IM tactics to manage their image and cultivate a positive relationship with constituencies outside the organization.

According to Bozeman and Kacmar (1997), IM theory was first introduced by Goffman in his

Fig. 1. Operational Framework
Amos Version 21 output
dramaturgical model of social life in the late 1950s. Since then, many scholarly discussions about IM have been based on Goffman’s framework. A typical IM model contains two key players: an “actor” who engages in “performances” or “IM behaviors” and an “audience” who interacts with “actors” under certain “environmental settings.” IM behaviors can be categorized into two primary categories: assertive strategies, which an actor uses to establish a given desirable identity, and defensive/protective strategies, which are excuses and justifications to repair damaged identities (Drory & Zaidman, 2007).

Organizational impression management is “any action purposefully designed and carried out to influence an audience’s perceptions of an organization” (Elsbach & Sutton, 1992). Organizations undertake impression management activities to positively shape public perception of who they are, what services they provide, how well they provide them (particularly in contrast to competing companies), and the good they do...with the overarching goal to shape and communicate a positive identity and preclude a negative one.

It is in an organization’s best interest to undertake such activity because effective organizational impression management has been linked to talent acquisition and employee retention (Highhouse, et al, 2009), competitive advantage (Fuller, Barnett, Hester, Relyea, & Frey, 2007), and even shareholder value (Enyia, 2016). For example, in investigating organization impression management, Sitzia et al (2006) found evidence that CEOs’ use of proactive performance claims can affect investor perceptions and firm value. This section overviews salient impression management literature, discusses Jones and Suh (2000) taxonomy of impression management strategies, and suggests its potential in understanding how top executives can construct and negotiate organizational identity through the use of deliberate impression management tactics in weblog discourse.

This study theoretically is focused on impression management by organizations (i.e. tertiary institutions) towards stakeholders. Therefore the term organization will be used, instead of the individual, when impression management is described.

**METHODOLOGY**

In this study, the research design adopted was quasi-experimental research design. The population of this study is drawn from postgraduate students from four federal universities in South-south namely; University of Port Harcourt, University of Calabar, University of Benin and University of Uyo. These schools have a population of 34,984 postgraduate students. The choice of these institutions is firstly because they are federal universities with higher allocation unlike state universities secondly, because these universities are the only federal universities that offer postgraduate programs. This data was gotten from school website and direct interaction with post graduate admission office of these universities. For this study, the sample size was determined through the use of Krejcie and Morgan (1970) table. For a finite population of 34,984, a sample of 379 was derived. Structural Equation Model (SEM) was used in the test of hypothesis.

**DATA ANALYSES AND FINDINGS**
Table 1. Regression Weights: (Group number 1 - Default model)

<table>
<thead>
<tr>
<th>Label</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passion &lt;--- Brand Image</td>
<td>.016</td>
<td>.003</td>
<td>6.290</td>
<td>***</td>
<td>W9</td>
</tr>
<tr>
<td>BI_5 &lt;--- Brand Image</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI_4 &lt;--- Brand Image</td>
<td>.126</td>
<td>.002</td>
<td>54.998</td>
<td>***</td>
<td>W1</td>
</tr>
<tr>
<td>BI_3 &lt;--- Brand Image</td>
<td>.108</td>
<td>.003</td>
<td>41.893</td>
<td>***</td>
<td>W2</td>
</tr>
<tr>
<td>BI_2 &lt;--- Brand Image</td>
<td>.094</td>
<td>.002</td>
<td>40.954</td>
<td>***</td>
<td>W3</td>
</tr>
<tr>
<td>BI_1 &lt;--- Brand Image</td>
<td>.098</td>
<td>.003</td>
<td>36.001</td>
<td>***</td>
<td>W4</td>
</tr>
<tr>
<td>P_1 &lt;--- Passion</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P_2 &lt;--- Passion</td>
<td>3.734</td>
<td>.603</td>
<td>6.187</td>
<td>***</td>
<td>W5</td>
</tr>
<tr>
<td>P_3 &lt;--- Passion</td>
<td>3.737</td>
<td>.598</td>
<td>6.244</td>
<td>***</td>
<td>W6</td>
</tr>
<tr>
<td>P_4 &lt;--- Passion</td>
<td>3.669</td>
<td>.598</td>
<td>6.138</td>
<td>***</td>
<td>W7</td>
</tr>
<tr>
<td>P_5 &lt;--- Passion</td>
<td>3.179</td>
<td>.513</td>
<td>6.195</td>
<td>***</td>
<td>W8</td>
</tr>
</tbody>
</table>

From our test output, we realize that when Brand_Image goes up by 1, Passion goes up by 0.016. The regression weight estimate, .016, has a standard error of about .003. Dividing the regression weight estimate by the estimate of its standard error gives $z = 0.016/0.003 = 6.290$.

In other words, the regression weight estimate is 6.29 standard errors above zero.

The probability of getting a critical ratio as large as 6.29 in absolute value is less than 0.001. In other words, the regression weight for Brand Image in the prediction of Passion is significantly different from zero at the 0.001 level (two-tailed).

With a p-value less than 0.05, we therefore reject the stated null hypothesis.

Table 2. Standardized Regression Weights: (Group number 1 - Default model)

<table>
<thead>
<tr>
<th>Label</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passion &lt;--- Brand Image</td>
<td>.942</td>
</tr>
<tr>
<td>BI_5 &lt;--- Brand Image</td>
<td>.983</td>
</tr>
<tr>
<td>BI_4 &lt;--- Brand Image</td>
<td>.953</td>
</tr>
<tr>
<td>BI_3 &lt;--- Brand Image</td>
<td>.923</td>
</tr>
<tr>
<td>BI_2 &lt;--- Brand Image</td>
<td>.920</td>
</tr>
<tr>
<td>BI_1 &lt;--- Brand Image</td>
<td>.900</td>
</tr>
<tr>
<td>P_1 &lt;--- Passion</td>
<td>.349</td>
</tr>
<tr>
<td>P_2 &lt;--- Passion</td>
<td>.855</td>
</tr>
<tr>
<td>P_3 &lt;--- Passion</td>
<td>.902</td>
</tr>
<tr>
<td>P_4 &lt;--- Passion</td>
<td>.819</td>
</tr>
<tr>
<td>P_5 &lt;--- Passion</td>
<td>.861</td>
</tr>
</tbody>
</table>

When Brand Image goes up by 1 standard deviation, Passion goes up by 0.942 standard deviations. This indicates that brand image influences passion of customers in public universities by 94.2%.

Table 3. CMIN

<table>
<thead>
<tr>
<th>Model</th>
<th>NPAR</th>
<th>CMIN</th>
<th>DF</th>
<th>P</th>
<th>CMIN/DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>31</td>
<td>3225.569</td>
<td>46</td>
<td>.000</td>
<td>70.121</td>
</tr>
<tr>
<td>Saturated model</td>
<td>77</td>
<td>.000</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence model</td>
<td>22</td>
<td>1954.380</td>
<td>55</td>
<td>.000</td>
<td>35.534</td>
</tr>
</tbody>
</table>

The Default model model has a discrepancy of 3225.569. Assuming that the Default model model is correct, the probability of getting a discrepancy as large as 3225.569 is .000.
For the Default model model, the discrepancy divided by degrees of freedom is 3225.569 / 46 = 70.121.

The Independence model model on the other hand has a discrepancy of 1954.380. Assuming that the Independence model model is correct, the probability of getting a discrepancy as large as 1954.380 is .000. For the Independence model model, the discrepancy divided by degrees of freedom is 1954.380 / 55 = 35.534.

<table>
<thead>
<tr>
<th>Model</th>
<th>RMSEA</th>
<th>LO 90</th>
<th>HI 90</th>
<th>PCLOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>.476</td>
<td>.462</td>
<td>.490</td>
<td>.000</td>
</tr>
<tr>
<td>Independence model</td>
<td>.336</td>
<td>.324</td>
<td>.349</td>
<td>.000</td>
</tr>
</tbody>
</table>

RMSEA = .476 for the Default model model. With approximately 90 percent confidence, the population RMSEA for the Default model model is between .462 and .490.

PCLOSE = .000 for the Default model model. Under the hypothesis of "close fit" (i.e., that RMSEA is no greater than .05 in the population), the probability of getting a sample RMSEA as large as .476 is .000.

RMSEA = .336 for the Independence model model. With approximately 95 percent confidence, the population RMSEA for the Independence model model is between .324 and .349.

CONCLUSION

Our findings reveals that brand image can actually bring about passion of customers in Nigerian public universities to a very large extent. This is evident in the results generated from our structural equation model. On the overall, it reveals that brand image can bring about the passion of customers within public universities. In other words, when brand image goes up by one, passion of customers in response goes up by 0.016. However, with a standard error of about 0.003, this produces a z value of 6.29. This ultimately has revealed that brand image significantly predicts customer passion.

Recommendations

i. University management should ensure that the marketing department is effectively utilized. There is no way one would talk about branding without mentioning the custodians of branding domiciled within marketing department. The school administration should also make a conscious effort in visiting the department of marketing to obtain more ideas on several areas that corporate branding can bring about the emotional attachment of customers.

ii. In setting up committees within the university, at least a representative member from the department of marketing should be nominated because while other members are making suggestions along the line of operation, the marketer present would raise concerns and contributions on customers reception to committee outcomes.

iii. University management should ensure that its reputation is protected in all their activities ranging from academic to non-academic. They should understand that whatever is being done within the university signals information to people far and wide and this can make or destroy the institution.

iv. In setting up committees, competent people should be appointed so that whatever be the outcome of their decision would add value to the university.

REFERENCES


E-MARKETING IN INDIA-A BRIEF STUDY

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ABSTRACT
E-Marketing is the use of information in the process of creating, communicating, and delivering value of customers and for managing customer’s relationships in ways that benefit the organization. E-marketing is referred to those strategies and techniques which utilized online ways to reach target customers. There are millions of Internet users that daily access different websites using a variety of tools like computers, laptops, tablet and smart or android phone devices, and the number of internet users are increasing very rapidly. So every business seems to be jumping on the internet marketing bandwagon. The internet is most powerful tool that can put any business on solid footing with market leaders companies. There are many free as well as economical way on internet to promote your business.

In this context, the present paper makes an attempt to study the theoretical framework of E-Marketing, to analyze the benefits of E-Marketing and to know the present scenario of E-Marketing in India.

KEY WORDS: E-Marketing, Customer Service

INTRODUCTION
There are many aspects that lead to the success of any business in the industry. Marketing is one such significant aspect that makes a business grow. Nowadays, due to the trend of internet shopping, companies are adopting marketing strategies, according to how potential consumers use the internet. E-marketing or electronic marketing refers to the application of marketing principles and techniques via electronic media such as email, the internet, cell phones, etc. E-marketing strategy consists of the steps taken and procedures followed for marketing a brand through the web. E-marketing helps the business to reach a real edge in today’s highly competitive market place. As more and more consumers use email as a primary medium for communication, it will become a critical component of marketing efforts. Taking the time to reach the right customers, provide the best information, inspire a response, and tracking the success can make email one of the most cost effective tools in the marketing arsenal.

DEFINITION OF E-MARKETING
Judy Strauss defines e-marketing as follows: E-Marketing is the application of a broad range of information technology for-

- To create more customer value through more effective segmentation, targeting, differentiation and positioning strategies.
- Planning more efficiently and executing the conception, distribution, promotion and pricing of goods, services and ideas: and
- Creating exchanges that satisfy individual consumer and organizational customers objectives

OBJECTIVES OF THE STUDY
1. To study the theoretical framework of E-Marketing
2. To analyze the benefits of E-Marketing
3. To know the present scenario of E-Marketing in India.

E-MARKETING TOOLS
- A company can distribute through the internet
- A company can use the internet as a way of building and maintaining a customer relationship
- The money collection part of a transaction could be done online e.g. electricity and telephone bills.
leads can be generated by attracting potential customers to sign-up for short periods of time, before signing up for the long-term.

- The internet could be used for advertising e.g. Google ad words.

- The web can be used as a way of collecting direct response e.g. as part of a voting system for a game show.

**COMPONENTS OF E-MARKETING**

- **Search Engine Optimization**

  A Study conducted shows that around 90% of Americans use the Internet daily, with over 2/3rd of purchases being researched on the internet. Search Engine Optimization (SEO) is a procedure that relates to attracting internet traffic to your website as much as possible. SEO is crucial for online marketing success of your business. It includes optimizing your website in such a way that your site would be ranked on the initial pages of the search, so that the web users can visit your website for the contents they are in search of things. This is done using keyword phrases that the users generally put in the internet search engines for searching a particular product or service.

- **E-Mail Marketing Strategy**

  Another important component of an effective e-marketing strategy is e-mail marketing which is all about sending information of the product and services to the potential customer using email. This is a proven effective method of using online marketing as an efficient tool for business generation. It is also a very good business marketing technique for building good business relations with potential customers, as well as prospective clients.

- **Online Advertising**

  Online advertising is a marketing method that has a very substantial return on investment (ROI) value. It consists of placing advertisements of products and services on the company websites, which are ranking on the first pages of the search engine, and sites which are getting a considerable amount of traffic from internet users. Internet affiliate marketing is a very good example of online advertising, which relates to paying your company’s product advertiser as per the sales generation.

- **Online Newsletters**

  You can even thing of online newsletters as a decent way to pass on product information for promoting your product and services. Business generally issue online newsletters to regular customers for getting them know what new introductory offers are available and which new products are likely to be launched. Unlike e-mail marketing, these online newsletters are issued at regular time intervals.

- **Media News Rooms**

  A media news room is a facility on the web that includes most of the company blogs and information which can be accessed by social media. If the company information reaches the social media, it takes no time for the information and news to be transferred to the general public. The information in media news rooms is usually available to journalists and bloggers, who are visitors searching for specific news and facts of the products and not just general information.

**FUNCTIONS OF E-MARKETING**

The 7 functions of the E-marketing stay at the base of any E-marketing strategy and they have a moderating character. They are:

- **Personalization**

  The fundamental concept of personalization as a part of e-marketing mix lies in the need of recognizing, identifying a certain customer in order to establish relations. It is crucial to be able to identify the customers on individual level and gather all possible information about them, with the purpose of knowing their market and be able to develop customized, personalized products and services.

- **Privacy**

  When the company gathers and store information about their customers and potential customers a crucial issue arises: that of the way this information will be used, and by whom. A major task to do when implementing an E-marketing strategy is that of creating and developing a policy upon access procedures to the collected information.

- **Customer service**

  Customer service is one of the necessary and required activities among the support functions needed in transactional situations.

- **Community**

  The customers/clients of a business can be seen as part of a community where they interact (either independent or influenced by the marketer) - therefore developing a community is a task to be performed by any business even though it is not always seen as essential.

- **Site**

  E-marketing interactions take place on a digital media- the internet. But such interactions and relations also need a proper location to be available at any moment and from any place a digital location for digital interactions.

- **Security**

  The marketers have to keep in mind the security during transactions performed on their website. When they have to take all possible precautions that third parties will not be able to access any part of a
developing transaction and also the security of data collected and stored about customers and visitors.

- **Sales promotion**
  Sales promotion is widely used traditional marketing. This function counts on the marketer’s ability to think creatively. A marketer needs to continuously keep up with the latest internet technologies and applications so that he can fully exploit them.

**BENEFITS OF E-MARKETING**

- E-Marketing increases benefits
- E-Marketing decreases benefits
- E-Marketing increase revenue

**E-Marketing increases benefits**

- Online mass customization is possible. Different products and message can be reached to different stakeholders.
- Personalization is possible by giving stakeholders relevant information
- Convenience in shipping
- There is self-service ordering and tracking
- The benefit of one-stop shopping is available

**E-Marketing decreases benefits:** cost of distribution of messages (e-mail), distribution channel for digital products, transaction processing, knowledge acquisition etc., are less supply chain becomes efficient. The cost of customer service is also less.

**E-Marketing increases revenue**

- Increased revenue is available from online transactions through advertising and subscription sales.
- E-Marketing ads value to product or service thereby, commanding higher prices for them.
- It enlarges customer base by reaching out to new markets. A strong customer relationship is built. As a result, customers spend more which means more revenue for the e-marketer.
- E-Marketing gives business of any size access to the mass market at an affordable price and unlike TV or print advertising, it allows truly personalized marketing. Specific benefits of e-marketing include:
  1. **Global reach** - a website can reach anyone in the world who has internet access. This allows you to find new markets and compete globally for only a small investment
  2. **Lower cost** - a properly planned and effectively targeted e-marketing campaign can reach the right customers at a much lower cost than traditional marketing methods.
  3. **Track-able, measureable results** - e-marketing methods make it easier to establish how effective your campaign has been. You can obtain detailed information about customers’ responses to your advertising.
  4. **24-hour marketing** - with a website your customers can find about your products even if your office is closed.
  5. **Personalization** - if your customer database is linked to your website, then whenever someone visits the site, you can greet them with targeted offers. The more they buy from you, the more you can refine your customer profile and market effectively to them.
  6. **One-to-one marketing** - e-marketing lets you reach people who want to know about your products and services instantly. For example, many people take mobile phones and PDAs wherever they go. Combine this with the personalized aspect of e-marketing and you can create very powerful, targeted campaigns.
  7. **More interesting campaigns** - e-marketing lets you create interactive campaigns using music, graphics and videos. You could send your customers a game or a quiz- whatever you think will interest them.
  8. **Better conversion rate** - if you have a website, then your customers are only ever a few clicks away from completing a purchase. Unlike other media which require people to get up and make a phone call, post a letter or go to a shop, e-marketing is seamless.

**E-MARKETING IN INDIA**

Although, India has come out of infancy stage of e-marketing and progressing rapidly but still it is far behind the developed countries like USA, Canada and UK. There are several factors which have impacts on status of e-marketing in India. Majority of the Indian population lives in villages where the literacy level is low and the infrastructure required for e-marketing is inadequate. The instances of cyber crimes are growing at increasing rate in the field of e-marketing. In the absence of adequate legal protection people hesitate to indulge in online marketing. The cultural scenario of India is entirely different from those countries where e-marketing has become common practice. India is multilingual and multicultural country. Around two dozen languages are spoken in India. The multilingual characteristic of India hinders the growth of e-marketing. High initial investment in setting of infrastructures of e-marketing also counts towards the progress of e-marketing. However in the light of advancement of technology factors discussed above are diluting and it is expected that India will soon catch up with advanced countries in this front.
CONCLUSION

Internet marketing seems to be a very popular trend now a days to individuals who have opted for conducting an online business. Analyzing the marketing strategy and putting these in right combination to make the marketing efforts effective is what entails a successful business on the net. An e-marketing effort supports the customer base almost round the clock. Most of the marketing efforts that cater to the organized sector are open 24 hours and 7 days a week. Moreover, the reach is global and customers feel convenient to shop/communicate anytime they want to. Internet as a virtual marketplace is still not very acceptable to orthodox buyers who prefer physical interaction and physical review of goods/services before buying them. Building up the trust that interactions in the virtual world are real and honest is an ongoing process and it would require that some more time to achieve this dependence on internet marketers.

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SPEAKING AND LISTENING SKILLS AT SECONDARY LEVEL IN UNDERDEVELOPED COUNTRY-BANGLADESH: DRAWBACKS OF SYLLABUS DESIGN AND EVALUATION SYSTEM

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ABSTRACT
This research focuses on the current condition of teaching and learning speaking and listening skills at secondary level of education in Dhaka City of Bangladesh and find out the reasons behind their extreme weakness in those skills. Since CLT has introduced a long time earlier in Bangladesh, special emphasis is given only in writing skill in the curriculum as well as teaching method. As a result, most of the students cannot utter a single sentence after knowing almost all grammar of English language. Even they hardly have the practice of listening. To find out the exact reasons behind the problem and give probable solutions the researcher will collect data from the students, teachers through questionnaire and interview and observe the class by both qualitative and quantitative methods.

KEY WORDS: Speaking, Listening, Secondary level, English Language, CLT.

INTRODUCTION
It almost 14 years of introducing CLT (Communicative Language Teaching) in Bangladesh. And 40 years of teaching English language as a second language from the primary level as a major subject. But still now most of the students and teachers are not comfortable in speaking and listening skills in the classrooms in the context of Bangladesh. The situation in Dhaka is a little bit different. Here teachers are more qualified, and students also belong to educated family. Their classrooms are also well-furnished and digitalized. Even they have number of language club and extracurricular activities to improve their skills in English. Still then they have lacking in speaking and listening skills. Because their syllabus and evaluation system only emphasized in writing and reading skills.

English has progressively become the medium in each space of correspondence, both in nearby and worldwide settings. Thus, the interest for using English successfully is vital in each nation. Teaching and learning English, aside from mother tongue, is hence urgent for communicative purposes to adapt to the developing neighbourhood, national and worldwide demands for English abilities. English is a foreign language in Bangladesh, and is utilized in academic purpose, development of career, higher study and more. To cope with the advanced world, English has been taught as a second language from the primary level.[1]

The process of acquiring and learning English takes time as it involves some challenges and certain set of skills. These are divided into productive and receptive according to the common framework. Receptive abilities include listening and reading. They play a vital role in understanding the content, textbooks, works or documents. Productive skills include oral presentation, written studies and reports. These are important skills for a student because it encourages them to be more participative. Therefore, focus should be given to these skills so that they are properly trained.

Most of the difficulties are found in the process of learning and teaching speaking and listening skills, according to the experiences of many teachers as well as foreign language learners. On the other hand,
different methods, strategies and techniques were developed to promote both educators and students the teaching and learning process of these skills. Thus, the main purpose of this study is to find out the obstacles both for the students and teachers and to identify the techniques of teaching these skills as practiced in the modern world as well as in our country. [2]

There are four basic language learning skills in communicative method, such as: listening, speaking, reading and writing. When speaking about using English at any educational level, whether it is primary, secondary, intermediate or tertiary, it involves teaching the four language skills which give equal value to each of these skills. Secondary education in Bangladesh is one of the most important educational fields. English is taught at this stage, but there is no appropriate focus on the ability to speak and listen to the learner. Although speaking and listening are the two-common means of communication, primary, secondary and higher secondary education planners put less emphasis on these skills. As a result, students were unable to use English effectively in their practical life. This present study explores approaches in secondary education system to the teaching of speaking and listening skills.

**Research questions**

a) How is the syllabus designed to improve speaking skill and listening skill?
b) How are the speaking and the listening skills tested in the examination?
c) Is English for Today appropriately designed to improve four skills simultaneously?
d) What obstacles do the teachers face while teaching speaking and listening skills?
e) What obstacles do the students face while learning speaking and listening skills?

**BACKGROUND**

Sinha and Alam (2009) also worked in listening skills in tertiary level. They investigated that in Bangladesh ELT (English Language Teaching) is followed by CLT (Communicative Language Teaching), but the listening skill is less emphasized. Still students having problem with phonetics. They can speak but they cannot understand the lecture when it is more furnished. They pointed out that the reason behind this weakness is less focus on listening. So, they suggested to add some materials with the designed course to enrich students listening skill.

Shurovi (2014) worked in the lack of speaking and listening skill in higher secondary level in Bangladesh. She pointed that after 14 years of introducing CLT in Bangladesh, the practice of speaking and listening English in the class is hardly found. Most of the students cannot utter a sentence correctly not because of grammatical mistakes rather they are so shy to speak in front of other people. Besides after visiting four colleges in Dhaka city she found that in most of the college even 50% teachers did not speak in English in the class.

Rahman (2014) conducted a research on difficulties students and teacher face in listening skill at secondary level. He found in the CLT based classroom only focus is given in reading, writing and speaking skills. He visited some well renowned schools in Dhaka and found that though examination system only care for writing and reading skills but most of the teachers are comfortable in speaking English in the classes but most of the students cannot understand the complete lecture.

Brunfaut and Green (2014) conducted a research on English Listening and Speaking Assessment in higher secondary level. They found out that the teaching methods of teachers and assessment process of students are still have some loop hops. And the education ministry should change the system. In Bangladesh a student started learning English from the primary level of education. So, they ought to be as comfortable as their mother tongue but because of the learning method they are still lagging. Most of the students can write and have good command in grammar but still they cannot utter a sentence correctly.
PROBLEM STATEMENT
According to Secondary Examination’s result in Dhaka Board, the defense administrated schools are in the topmost ranks. Even after getting highest GPA in English they face a great problem in speaking and listening skills. So, the researcher will find out the loop in the syllabus and evaluation system in the examination. So that in future after getting A+ in English, a student can confidently deal with the four skills simultaneously.

RESEARCH OBJECTIVES
The research aims at exploring the current status of speaking and listening skills in English of the secondary level students. So, the paper denotes the following objectives:

a) To investigate how the curriculum and syllabus are designed to develop these two skills
b) To find out the barriers students’ face in dealing with English speaking and listening tasks in the classroom

c) To know about the perspective by the teachers while teaching English speaking and listening skills.

METHODOLOGY
The researcher has followed a mixed methodology to do the research, and she has also used some data from secondary sources, like, articles or theoretical book etc. As she has worked on the secondary level in Bangladesh, so she has chosen students of class 9 and 10, because they are matured enough to do response towards the research question from the schools of Cantonment.

Research design
The Both qualitative as well as quantitative method is being used in this paper to get an overall idea. John Cresswell once said, “Mixed methods research is a research design (or methodology) in which the researcher collects, analyzes and mixes (integrates or connects) both quantitative and qualitative data in a single study or a multiphase program of inquiry”. To get an overall idea and complete idea of a research
mixed method is by far believed to be one of the best. Apart from qualitative and quantitative approach, mixed method is becoming increasing popular among researchers due to its efficiency and research friendliness (Jonson, Onwuegbuzie, & Turner, 2007, p.119).

Research sample
Firstly, the researcher chose 2 schools based on the performance in Public examination situated at Cantonment area. She selected 20 students of class 9 (because the students of class 10 were busy with their test examinations) from the selected school. Based on the group of science and business studies. She selected 20 students from each school from every group based on their performance by the help of their class teacher. She also conducted her questionnaires on 4 English teachers from the selected schools. (2 from each school).

Research instruments
The research used questionnaire both for students and teachers regarding their teaching process focusing on the development speaking and listening skills. A research question may be a clear, focused, concise, complicated and controversial question around that you center your analysis. You should raise an issue regarding a problem that you simply are genuinely interested in. A checklist while observing the class. A checklist is a list of all the things that the researcher needs to do, information that she wants to find out, or things that she needs to take somewhere, which she makes in order to ensure that she does not forget anything. She observed two classes of the selected schools, while the English class was going on.

Research procedure
The researcher went through the direct field work using survey and observation method. She included 13 questions in the questionnaire and 14 questions for the teachers. She also included 4 sectors in the checklist regarding the teaching method, physical facilities, congenial atmosphere, and invisible problem.

RESULT AND DISCUSSION
To get an acceptable result both quantitative and qualitative measures have been taken. Appropriate questionnaires were of which some were open ended and some were close ended. Open ended questions were mainly designed to get qualitative data. On the contrary close ended question were prepared to get quantitative data. The questionnaires are attached in appendix-1, appendix-2, appendix-3, and appendix-4.

FIGURES

![Figure: 1(Source: Survey November 2019)](image-url)
Figure 1: (Source: Survey November 2019)

Figure 2: (Source: Survey November 2019)

Figure 3: (Source: Survey November 2019)
Figure :5 (Source: Survey November 2019)

Figure : 6 (Source: Survey November 2019)
### TABLE 1: Survey result

<table>
<thead>
<tr>
<th>SN</th>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Speaking and Listening English are important skills in learning English Language.</td>
<td>75%</td>
</tr>
<tr>
<td>2</td>
<td>Teacher teach students Speaking and listening skills in classroom by following EFT books</td>
<td>50%</td>
</tr>
<tr>
<td>3</td>
<td>Teacher takes his/her class in English and interacts with students in English.</td>
<td>50%</td>
</tr>
<tr>
<td>4</td>
<td>Proficiency test on basic Speaking and Listening skills are tested in the examination.</td>
<td>25%</td>
</tr>
<tr>
<td>5</td>
<td>Our exam system is not authentic to test four skills.</td>
<td>25%</td>
</tr>
<tr>
<td>6</td>
<td>Use Teachers' Guide to teach speaking and listening passage to the students.</td>
<td>50%</td>
</tr>
<tr>
<td>7</td>
<td>Percentage of using English as a media of communication in the classroom.</td>
<td>25%</td>
</tr>
<tr>
<td>8</td>
<td>Conduct pair and group work to engage students in different tasks and activities from EFT.</td>
<td>50%</td>
</tr>
<tr>
<td>9</td>
<td>Use techniques like visual aids, miming/acting/reciting, and explanation in English etc. to teach vocabulary and pronunciation.</td>
<td>25%</td>
</tr>
<tr>
<td>10</td>
<td>Percentage of code switching and code mixing in the classroom?</td>
<td>25%</td>
</tr>
<tr>
<td>11</td>
<td>Teacher motivates students to watch English Movie, TED Talk, Interview, English Speech, and BBC News and provides materials to improve their skills.</td>
<td>25%</td>
</tr>
<tr>
<td>12</td>
<td>Students are keen to learn speaking and listening skills.</td>
<td>25%</td>
</tr>
<tr>
<td>13</td>
<td>Teacher arranges English debate, Olympiad, Conversation, Impromptu speech, Storytelling and others in the classroom.</td>
<td>25%</td>
</tr>
</tbody>
</table>

### TABLE 2: Survey result

<table>
<thead>
<tr>
<th>SN</th>
<th>Statement</th>
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</tr>
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<td>25%</td>
</tr>
</tbody>
</table>
Result from Teachers’ questionnaire survey are shown in the above table. All the parameters are shown in terms of percentage.

1. Speaking and Listening English are important skills in learning English Language.[4]

   Figure 1 shows 75% of teachers strongly agreed and 25% were agreed with the view that Speaking and Listening English are important skills in learning English Language.

2. Teacher teach students Speaking and listening skills in classroom by following EFT books.

   According to the Figure 2, 50% of teachers were positive and 25% were negative and 25% didn’t have an opinion regarding the view that Teacher teach students following EFT books.

3. Percentage of using English as a media of communication in the classroom.

   Figure 3 shows 50% teachers use English always, 25% teachers sometimes and 25% rarely.

4. Speaking and Listening English part should be included in exam

   Figure 4 shows 53% had a strong positive view, 33% had an affirmative view, 7% didn’t comment, 7% totally disagreed.

5. Difficulties face in the classroom

   Figure 5 shows 86% were practicing through listening different programs, 53% were through practicing with people, 40% were through speaking in front of mirror.

6. Teacher present vocabularies before reading passage/playing CD in the class

   Figure 6 shows 46% strongly agree, 40% agree, 7% neutral, 7% disagree.

   Group and task based activity plays a vital role in learning. But inspite of acknowledging that there is very little room for doing so due to limited class time and other constraints. Most of classes include rigorous grammar and text book based learning. After completing those sessions, there are very few minutes left to move to group and other peer based activities.

   Speaking related activities plays an important role in developing student’s English ability. But there seems to be a shortage of speaking based activities such as drills, games, watching movies together and reviewing it. Apart from these students may also be introduced to practical spoken such as dining out at a restaurant or to order tickets. Teacher also agree that drilling activities plays an important role in developing student’s speaking ability. On top of that they also agree that group based activity helps a student to rectify his pronunciation.

   Listening is also another important attribute but few teachers seem to have implemented innovative teaching methods. Listening requires innovative teaching skills. Otherwise it may become mundane and boring for the students. Students have allegedly reported that they were not given a chance to proper utilize their listening skills. Moreover, there is not enough scope for them to practice in the class. To implement proper listening environment it is required for a student to actively participate in question answer session in the classroom independently rather than going with the flow with the rest of the student groups.

   Creativity plays an important role in students learning process. Teachers also agree to the point that creative learning is essential for a student’s development. But when enquired about this students reported that they didn’t get proper access to innovative and creative props. Moreover, most of lack proper training on creative studies. It is suggested that they should undergo proper creative training so that they can teach their students better.

   Acquisition is often believed to be better than learning. Same goes for language acquisition as well. Acquiring a language requires communication. So, it is far better to acquire English language rather than learning it. But it is very unfortunate to see that students are memorizing the language rather than learning it. Parents also play an important in the learning process. Parents are often seen encouraging their children to do better in the exam rather than becoming a fluent speaker or writer in English. Concerned authorities should also come forward and approve the usage of new and innovative tools for the teachers so that students get a chance to learn better [5]

**CONCLUSION**

In the era of globalization, English is the only way of communication around the world. As it is needed for every sphere of life, in Bangladesh, English is taught as a major subject from primary to higher secondary level. But unfortunately students are still lag behind to communicate in English especially in speaking and listening skills. Communicative method is following at secondary level to develop reading, writing, listening and speaking since a long period of time. But those skills are not acquired due to proper planning, implementation and monitoring.

Undoubtedly, speaking English needs more emphasis as oral communication is the utmost priority for any kind of communication. But in the perspective of Bangladesh, no emphasis is given in speaking and listening skills, moreover the curriculum is designed based on reading and writing. As a result students feel
embarrassed while speaking and most of the time they cannot make any complex sentence. If the curriculum is designed in that way so that the lesson will be interesting, interactive and unique then students will motivated and their participation will increase drastically. To remove their shyness and fear on English, student’s participation in the class should be increased, lesson should be entertaining and up to date. Teachers should modify and updates the method and techniques to make the lesson effective to the students. Based on the findings it can be said that to improve students’ skills in speaking and listening class room should be furnished with digital equipment, students’ participation in the class room should be encouraged, teachers’ role should be turned to a helper rather than instructor. Most of the class time should be given for practice or interactive discussion. Students can speak courageously only when they will win the fear of speaking and get enough time for practicing. Teachers can make lesson plan based on internet sources so that student can listen the correct pronunciation again and again. Besides teacher can suggest them many sources so that they can practice while they were in the home.

**RECOMMENDATIONS**

To Based on the findings some recommendations are given below so that our education system and curriculum design can be modified and updated.

**a) Implementation of CLT method in the English Learning Classroom**

Teachers should conduct their class through CLT method and techniques. Class room activities like group discussion, pair works, role paly, debate, impromptu speech, and storytelling should be encouraged.

**b) Learners’ active participation and motivation**

Teachers should encourage and ensure all the students participation in the class room. Teacher should use warm language to motivate the students and share their stories when they were students so that students can take their mistake easily and get motivation to participate in the classroom activities.

**c) Students’ centered classroom**

Most of the time in the class should be allocated for the students. According to the researchers 80% time should be given for practice while 20% time will be allocated for teachers’ instruction. But in Bangladesh most of the classrooms are teachers’ centered where teachers give instruction most of the time and students are bound to listen to the instruction whether they understood or not.

**d) Teachers’ role turns to a motivator and helper rather than an instructor**

According to CLT method teachers should act like a motivator or a helper rather than an instructor. Students will practice in the class room individually or in a group and teachers will guide them or assist them if they ask for any assistance. As a result students will get the chance to correct themselves.

**e) Assessments and Evolution**

Unfortunately in Bangladesh one’s ability in language learning is assessed and evaluated through writing test while speaking and listening skills should be the prime concern. All the four skills; Listening, Reading, Writing and Speaking should be evaluated equally in the examination.

**f) Technologically enriched classroom**

Classroom should be furnished with necessary technological equipment, such as; audio visual class room, internet connectivity, microphone and speakers and so on so that teachers can access any materials needed for their lesson.

**REFERENCES**


4. "Listening Is A Critical Receptive Skill English
ROLE OF OCCUPATIONAL THERAPY IN RESTORING FINE MOTOR SKILLS IN POST STROKE PATIENTS – AN ANALYTICAL REVIEW

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ABSTRACT
The occupational therapy has a decisive role in restoring fine motor skills in post stroke patients. The purpose of this study was to compile all the information pertaining to the assessment and treatment performed by occupational therapist. This study amass the complete personification of occupational therapy from the need of theoretical basis to the practical treatment aspects. The study covers the basic idea of stroke and complications arose in the normal movements and leads towards the complete functional aspects of the motor function of human hand. The position of occupational therapy in a rehabilitation team and a detailed knowledge of areas of occupational therapy related to fine motor skills helps to grab the evaluation process used and treatment protocols prescribed to restore fine motor skills after stroke. It helps to gain a detailed know-how of tools and instruments used for assessment and techniques used in the treatment of stroke that focuses on fine motor skills. This study reveals that occupational therapy as its specialty in hand rehabilitation has a wide range of assessments, treatment and management protocols to pursue the treatment of a variety of areas of hand rehabilitation including fine motor skills after an event of stroke.

KEYWORDS: fine motor skills, occupational therapy, stroke, hand functions.

INTRODUCTION
Stroke is the third biggest cause of disability and second biggest cause of death in the world. [Global Health Estimates. Geneva: World Health Organization; 2012]. Stroke is a condition occurring due to sudden death of certain cells of brain due to lack of oxygen when the blood flow is lost or hindered due to blockage or rupture of the arteries of the brain. This condition is called Cerebro Vascular Accident (CVA); i.e. a condition when there occurs a lack of blood supply leading to scarcity of oxygen ultimately causing the death of certain cells of the brain.

Fine motor skills is the ability to control movements of fingers and thumb through specialised movements through the coordinated function of nervous system and small muscles of hand. Alterations in fine motor skills can be caused due to loss of muscle strength, loss of muscle co-ordination, sensory alterations, cognitive disabilities, etc. leading to tremors uncontrolled movements of the wrist, fingers and the thumb thus patients are not able to
perform the required activities as expected and to the maximum level of functionality. Fine motor skills deficits due to stroke drastically affect the overall quality of life by limiting patients’ performance in daily activities, their interaction in society and ability to return to profession.

Occupational Therapy is an art and science that works with a holistic approach with the patients with some disability or health issues that limit them to perform their role in Activities of Daily Living (ADL), family, society, job or business and recreational issues and help them to attain the maximum level of independence.

SIGNIFICANCE OF THE STUDY
This study focuses on providing a comprehensive knowledge about the working and specialized skillful treatment process in occupational therapy for restoration of fine motor skills in the patients recovering from stroke. This study will help all from a layman to a technical person including occupational therapist as it covers all the theoretical and practical aspects of the treatment of fine motor skills in occupational therapy.

BACKGROUND
Cause of Stroke
On the basis of causes of stroke there are two types of stroke:

Ischemic stroke – caused due to lack of oxygen to the cells of the brain. This kind of condition may be a result of narrowing or blockage of blood vessels severely reducing the blood flow to certain parts of the brain.

Hemorrhagic stroke - caused due to rupture or leakage of the arteries of the brain. This condition is generally a result of traumatic brain injuries, high blood pressure, bulges at weak areas in the blood vessel walls (aneurysm), over doses of blood thinners (anticoagulants), deposition of proteins on blood vessel walls leading to their weakening (cerebral amyloid angiopathy).

Stroke leads to many physical, mental and psychological effects like loss of muscle movements (paralysis), speech disorders including dysphagia, cognitive disabilities and memory dysfunctions, psychological stress and emotional discomfort, behavior alterations and loss of self-care abilities. Out of the above listed complications the one which is the most disastrous which makes the patient dependent on others is loss of fine motor skills.

Hand Functions
Hand Functions are particularly those actions which lead to successful performance of different activities needed to achieve daily routine functions may be single handed or with both hands together. Hand functions are done to achieve four basic actions viz. reach, grip, manipulation/shift and release.

Reach: Action of moving the different joints of upper limb to move the hand towards a certain object to pick or grab it. This action may involve the movement of all or some of the joints and respective muscles.

Grip: The action of holding an object in different positions in hand is referred to as grip. It includes different type grasps and grips.

Manipulation/Shift: Placement or change of position of an object in some other position or shapes and sizes in the hand is called manipulation. Its needs specialised movements of fingers and thumb and a good cognitive level for the manipulation of an object in hand. Shift is referred to the change of place of the object in hand from one place to another.

Release: Leaving of an object already in the hand to a required place is called release. This action is done by extending all the fingers and thumb to either full extension or only to the degrees required.

The actions needed for the hand functions are divided into two main categories namely Grasp and Grip and further divided as spherical grasp, cylindrical grasp, hook grasp, lumbrical grasp.
Grasp
Action of holding an object into the whole hand with the help of most of the parts of hand including fingers, thumb and palm. Grasp is mainly of four types:
Spherical Grasp: It involves the action of all the fingers and thumb in such a way that they make a spherical enclosure that can hold spherical objects like ball, compact disc or a big round lid of a container.

Cylindrical Grasp: This grip helps to hold cylindrical objects like pipes, tree branches, etc. All the fingers and the thumb flex to full to hold the object.
Hook Grasp: This grasp looks similar to cylindrical grasp with a free thumb an helps to hold wires and thin cylindrical objects like bucket handles, etc. This grasp needs more power than the cylindrical grasp.
Lumbrical Grasp: Lumbrical grasp is generally used for holding plates and trays in both the hands simultaneously thus it is also called as plate grasp. The fingers are slightly flexed with palm of the hand in water holding position along with the thumb in opposition and touching the object held.

Grip
Action of holding an object with the help of fingers and thumb instead of the whole hand is referred to grip. Grasp is mainly of four types:
Opponance Grip: This is also known as pad to pad grip as the finger pads are used to hold the object. Generally index finger and sometimes the middle finger is used to make an opponance grip along with the pad of thumb.
Pincer Grip: This is also known as tip to tip grip as the tips of the fingers are used to hold the object. The index finger tip and the thumb tip come closer to each other and hold the object. This type of grip is used generally to pick up small objects like pin, marbles, peas, etc.
Lateral Grip: This is a grip can be used to hold a key, a paper or to count currency notes. The thumb pad comes in contact with the lateral aspect of the distal phalanx of the index finger.
Tripod Grip: This is a specialised grip formed by touching the thumb tip to the index finger tip and combined touching with the lateral aspect of the tip of the middle finger. The objects are held in between the apparatus made by this combination. This grip is also called as three-jaw-chuck grip as it involves the tips of the three fingers.

Occupational Therapy
Occupational Therapy – A Part of Rehabilitation Team
A rehabilitation team working on a stroke patient comprises of physiatrists, physiotherapists, occupational therapists, prosthetist and orthoptist, speech therapist and many more, all having a different and complimentary role in the treatment. Out of these professionals first three i.e. physiatrist, physiotherapist and occupational therapist has the most important role in hand rehabilitation of a stroke patient and the occupational therapist plays the most conclusive role as he leads to patient towards the ultimate goal of rehabilitation that is establishment of the patient in his daily routine life amongst the family and the society.
An occupational therapist helps a patient to restore functional activities pertaining to activities of daily living including family, community, school, work, leisure and entertainment, etc. [University of Rochester Medical Center].
# Activities of Daily Living (ADL)

ADL is referred to those activities which are performed routinely on daily basis or very frequently by all for e.g. activities related to personal hygiene, home care, job or work, studies, etc. These ADL are divided in two categories Basic Activities of Daily Living (B-ADL) and Instrumental Activities of Daily Living (I-ADL). The B-ADL includes those activities which does not need any technical knowledge like or least of it for e.g. dressing, operating light switches, telephoning, etc. On the other hand I-ADL are those which need some to a lot of skills and knowledge like shopping, child care, handling medicines, using stove/oven etc.

## Areas of Occupational Therapy Treatment

A person has to perform some roles or some responsibilities in his life through which he establish himself in the family or society. But once he has encountered some disease especially any long lasting

<table>
<thead>
<tr>
<th>Basic ADL</th>
<th>Instrumental ADL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MOBILITY</strong></td>
<td><strong>HOME MANAGEMENT</strong></td>
</tr>
<tr>
<td>Bed Mobility</td>
<td>Shopping</td>
</tr>
<tr>
<td>Wheelchair Mobility</td>
<td>Meal planning</td>
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<tr>
<td>Transfers</td>
<td>Cleaning</td>
</tr>
<tr>
<td>Ambulation</td>
<td>Laundry</td>
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<td><strong>SELF-CARE</strong></td>
<td><strong>COMMUNITY LIVING SKILLS</strong></td>
</tr>
<tr>
<td>Dressing</td>
<td>Money/financial management</td>
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<tr>
<td>Self-feeding</td>
<td>Use of public transport</td>
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<tr>
<td>Toileting</td>
<td>Driving</td>
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<tr>
<td>Bathing</td>
<td>Shopping</td>
</tr>
<tr>
<td>Grooming</td>
<td>Access to recreational activities</td>
</tr>
<tr>
<td><strong>COMMUNICATION</strong></td>
<td><strong>HEALTH MANAGEMENT</strong></td>
</tr>
<tr>
<td>Writing</td>
<td>Handling medication</td>
</tr>
<tr>
<td>Typing</td>
<td>Knowing health risks</td>
</tr>
<tr>
<td>Telephoning</td>
<td>Making medical appointments</td>
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<tr>
<td>Use special communication devices</td>
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<td><strong>ENVIRONMENTAL HARDWARE</strong></td>
<td><strong>SAFETY MANAGEMENT</strong></td>
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<td>Keys</td>
<td>Fire safety awareness</td>
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<td>Faucets</td>
<td>Ability to call emergency numbers</td>
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<tr>
<td>Light switches</td>
<td>Response to fire calls</td>
</tr>
<tr>
<td>Windows/doors</td>
<td>Identification of dangerous situations</td>
</tr>
<tr>
<td>Refrigerator</td>
<td><strong>ENVIRONMENTAL HARDWARE</strong></td>
</tr>
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<td>Vacuum cleaner</td>
</tr>
<tr>
<td></td>
<td>Can opener</td>
</tr>
<tr>
<td></td>
<td>Stove/oven operation</td>
</tr>
</tbody>
</table>

Source: Occupational Therapy - Practice Skills for Physical Dysfunction - Lorraine Williams Pedretti - 4th Ed.
one like stroke, he find himself/herself lagging behind in their roles may be being an employee, a father/mother, a student, a son/daughter, a wife/husband or may any other role in his family or society. This kind of issues (especially stroke as a topic of this paper) grabs a person in physical, mental, psychological and financial agony which starts a vicious cycle of some unpleasant experiences which he had never encountered before.

There are three main domains which are known as ‘Areas of Occupational Therapy’ viz. self-care, work and leisure/entertainment in which every human being performs all the activities which are a part of three areas and work out to accomplish all the roles expected from them. Self-care includes the activities like bathing, brushing, clothing, toileting, etc. which a person perform to maintain himself for example person hygiene. Work include activities like earning money, studying, playing, home making, taking care of family members etc. e.g. a father may has to take care of the financial needs of his family, a mother has to take care of her children, a student has a work to study, play, enhance his physical and mental skills, etc.

Occupational Therapy professionals (called Occupational Therapists) work in three main areas i.e. through specialised techniques to treat underlying issues and to produce expected and sometimes miraculous results. **Frames of Reference (FOR)** Frames of reference act as guides to the Occupational therapists for evaluation, diagnosis and treatment of various types of conditions. Occupationally every patient is different and has different problems and expectations according to their past roles and present condition. There are total of eleven frames of reference used by occupational therapist namely:

- Biomechanical Frame of Reference
- Rehabilitation Frame of Reference
- Neurodevelopmental Frame of Reference
- Developmental Frame of Reference
- Psychodynamic Frame of Reference
- Behavioral Frame of Reference

Out of these, first two FORs viz. Biomechanical FOR and Rehabilitative FOR are used in the treatment of hand in stroke patients. Although here we have to take only fine motor skills thus only Biomechanical FOR will be discussed which is used in the evaluation and treatment of fine motor movements in stroke patients.

**Biomechanical FOR**

This FOR is used in the cases in which impairments in biomechanical body structures and functions that includes limited range of motion, decreased strength, structural instability and poor endurance lead to limitations in varies activities performed. This approach works on the basis that occupational performance of a person can be re-established by working on that limit activity performance [Hagedorn-1997, Trombly – 1995a]. For an occupational therapist who is using this FOR to treat a stroke patient must have a good knowledge of the prognosis, pathology, precautions and about wound healing that can affect the treatment process. This helps in setting realistic and safe goals. Apart from that applied physical sciences that includes kinesiology and exercise physiology also helps to understand the biomechanics of the human body (Kielhofner - 1997).

Biomechanical FOR, on the treatment aspect includes adjunctive modalities like passive stretching which prepares the patient for occupational performance. Also enabling activities like peg boards, which are though not purposeful but practice of component skills needed for occupational performance can is done (Pedretti & Early - 2001). Transitional activities help to ensure gains in
biomechanical function during some spontaneous improvement in ADL.

To assess the amount of remediation of impairment which is required to reach the activity goals is determined by the use of activity analysis focusing on biomechanical aspects of the task (Pedretti - 2001). Treatment techniques like static orthotics prevent deformity by proper positioning of the joint and thus increase joint stability. Passive ROM can be increased by using dynamic orthotics (Coppard Lynn - 2001) and a variety of stretching exercises (Zemke -1995).

In stroke cases edema is another issues interferes with the smooth movements of the hand and fingers can be reduced through compressive wraps, elevation, active exercises and specialised massage. Activities eliciting the maximum contraction from the weak muscles improves strength of muscles. Stronger muscles should be made to work against resistance to enhance strength and the weak muscles must be assisted to help patient move (Kasch & Nickerson - 2001). Also activities which let the muscles work at the maximal contraction for longer time periods improve muscle endurance (Zemke -1995).

### Evaluation and Assessment in Occupational Therapy

Occupational therapists sets aims and objectives according to the condition in a particular disease. In the cases of stroke the objectives are:

- **Evaluation of functional capacity** – it is important to know the activities which were performed by the patient before the event of stroke and the residual capabilities after stroke. This includes muscle strength, joint range of motion, cutaneous sensations of hand, and even mental and psychological and financial conditions of the patient. This helps the therapist to set long term goals during the treatment process.
- **Identification of areas & role compromised** – it helps to enlist and prioritise the components of the treatment process. It is based on survey methods and mainly subjective that includes family, friends, neighbors and even co-workers.
- **Activities of Daily Living Evaluation** - Identification of activities performed in daily routine and then assessment of those activities.

<table>
<thead>
<tr>
<th>Component</th>
<th>Instrument / Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscle Strength</td>
<td>Manual muscle testing</td>
</tr>
<tr>
<td></td>
<td>Grip strength</td>
</tr>
<tr>
<td></td>
<td>Pinch strength</td>
</tr>
<tr>
<td>Range Of Motion (ROM)</td>
<td>Goniometer</td>
</tr>
<tr>
<td>Coordination</td>
<td>Box &amp; Block Test</td>
</tr>
<tr>
<td></td>
<td>Nine hole peg test</td>
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<td></td>
<td>Finger nose test</td>
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<td></td>
<td>Rapid alternate movement test</td>
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<tr>
<td>Tone</td>
<td>Modified Ashworth Scale</td>
</tr>
<tr>
<td>Pain</td>
<td>Visual analogue scale</td>
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<tr>
<td>Sensation</td>
<td>Monofilaments</td>
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<tr>
<td></td>
<td>Temperature tubes</td>
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<tr>
<td></td>
<td>Weighted boxes, etc</td>
</tr>
<tr>
<td>Edema</td>
<td>Circumference</td>
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<tr>
<td></td>
<td>Volume</td>
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<tr>
<td>Motor Function</td>
<td>Fugal Meyer assessment</td>
</tr>
<tr>
<td></td>
<td>Functional use of daily activities</td>
</tr>
</tbody>
</table>

*Source: In Evidence-Based Occupational Therapy Toolkit for Assessment and Treatment of the Upper Extremity Post Stroke*
through activity analysis methods helps to know the required constraints of certain activities and compare them with the residual capacities of the patient in order to design a treatment plan. For e.g. locking a door needs to grip the key and then turning it on the direction needed the patient needs an adequate lateral pinch strength and range of motion in the joints involved, proper tactile sensation, good coordination in the muscles of thumb and fingers, without any pain and other issues like edema. This kind of evaluation for every activity is done and with precise accuracy. [Role of occupational therapy after stroke - Tennille J Rowland, Deirdre M Cooke, Louise A Gustafsson]

- Home Assessment – at the time of discharge from the hospital, the occupational therapist assesses the need of home assessment that includes the risk of falls, environmental barriers, impairments specific to the home environment and other needs of the patient and the care givers. This evaluation is needed to assess the capabilities of the patient and environmental constraints specific to the home environment. For e.g. patient’s ability to plan and prepare meal will need consonance between the physical and mental status and the environment in the kitchen specifically. Similarly safe bed to toilet transfer and other similar activities are needed to the checked to set proper treatments later.

- Apart from the above gross assessments, other required assessments are also done which are listed in the table.

<table>
<thead>
<tr>
<th>Techniques used in Occupational Therapy to improve fine motor skills in stroke patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitates learning of skills – during the treatment process the patient is made to learn new activities and re-learn the activities which were performed by the patient before the condition. This method of learning is based on the neuroplasticity of the brain that states that “Neuroplasticity is the ability of the brain to undergo functional and structural changes in response to new experiences.” [Klein JA, Jones TA]</td>
</tr>
<tr>
<td>Training of Activities of Daily Living – after stroke it becomes very difficult for a patient to perform all the ADL due to many reasons like lack of muscle strength, altered sensation, imbalance of coordination, cognitive issues like memory and recall, etc. Training of ADL helps the patient to attain capabilities prior to event.</td>
</tr>
<tr>
<td>Disability prevention – in most of the cases of stroke disabilities like limb deformities, pain, cognitive and perceptual disabilities, etc. occur due to decrease muscle power, spastic or flail muscles, hypo sensitivity of tactile sensations (like touch and temperature), etc. Proper and continuous occupational therapy intervention helps in prevention of these disabilities.</td>
</tr>
<tr>
<td>Restore or reinforce functional capacity – as it is seen that the stroke survivors experience decreased performance in many areas occupational therapists help them to regain functional abilities and learn some new methods to perform activities in order to re-establish them in lost roles.</td>
</tr>
<tr>
<td>Recommendation and training of Adaptive Devices – adaptive devices are objects or gadgets that compensate the disability after a stroke event. They are available in variety of range from simple reacher or utensil handles to complex devices like staircase lifts or motorised wheel chairs. Occupational therapist identifies the need and prescribe a proper adaptive device.</td>
</tr>
</tbody>
</table>

**Treatment Specifications**

The assessment matrix discussed above for evaluation contains some specific domains where occupational therapists focus. These domains are muscle strength, range of motion (ROM), coordination, tone, pain, sensation, edema, muscle endurance and motor functions. These domains are touched individually and in relation to each other as well. Specific treatment is prescribed and a plan is set including short term goals and long term goals. These goals are decided according to the previous activities done by the patient and the current condition of the hand and fingers. The main aim of these goals is to increase joint range of motion and muscle strength, improve sensation and coordination, enhance muscle endurance balance tone, and reduce pain and edema resulting in improved motor functions. Short term goals generally include picking up of small objects like beads, improve grips on pipes and handles, manipulate big and small objects in hand, etc. and long term goals will include operation of locks and keys, currency note counting, operate computers, prepare meal for the family, etc.

Although many activities can be designed to treat a particular issue but most of the activities can be used to address more than one issue. For example selection and sorting activity can be used to improve pinch, grasp, enhance muscle coordination, teach colours, shapes, improve cognition and perception, etc. To fulfill the treatment objectives of occupational therapy treatment for fine motor skills in stroke patients exercises and activities prescribed for their specific purpose are used. The following are some examples of the activities being used to address the corresponding issues.
CONCLUSION

Stroke is one of the deadliest and most dangerous disease projecting numbers as third biggest cause of disability and second biggest cause of death throughout the world. It is a condition occurring due to sudden death of certain cells of brain due to lack of oxygen when the blood flow is lost or hindered due to blockage or rupture of the arteries of the brain. On the basis of causes of stroke there are two types of stroke: ischemic stroke and hemorrhagic stroke. Stroke leads to many physical, mental and psychological effects out of which loss of fine motor skills is the most disastrous consequence making the patient dependent on others. Fine motor skills is the ability to control movements of fingers and thumb through specialised movements through the coordinated function of nervous system and small muscles of hand. Alterations in fine motor skills can be caused due to loss of muscle strength, loss of muscle co-ordination, sensory alterations, cognitive disabilities, etc. leading to tremors uncontrolled movements of the wrist, fingers and the thumb thus patients are not able to perform the required activities as expected and to the maximum level of functionality.

Hand Functions are particularly those actions which lead to successful performance of different activities needed to achieve daily routine functions may be single handed or with both hands.
together. Hand functions are done to achieve four basic actions viz. reach, grip, manipulation/shift and release. The actions needed for the hand functions are divided into two main categories namely Grasp and Grip and further divided as spherical grasp, cylindrical grasp, hook grasp, lumbrical grasp and opponance grip, pincer/tip to tip grip and lateral grip.

A rehabilitation team working on a stroke patient comprises of physiatrists, physiotherapists, occupational therapists, prosthetist and orthotist, speech therapist and many more, all having a different and complimentary role in the treatment. The occupational therapist plays the most conclusive role as he leads to patient towards the ultimate goal of rehabilitation that is establishment of the patient in his daily routine life amongst the family and the society.

Activities of Daily Living (ADL) is referred to those activities which are performed routinely on daily basis or very frequently for e.g. activities related to personal hygiene, home care, job or work, studies, etc. These ADL are divided in two categories Basic Activities of Daily Living (B-ADL) which includes activities like dressing, operating light switches, telephoning, etc. and Instrumental Activities of Daily Living (IADL) including activities like shopping, child care, handling medicines, etc.

There are three main domains to work for occupational therapists known as ‘Areas of Occupational Therapy’ viz. self-care, work and leisure/entertainment. Self-care includes the activities like bathing, brushing, clothing, toileting, etc. which a person perform to maintain himself for example person hygiene. Work include activities like earning money, studying, playing, home making, taking care of family members etc.

Frames of reference (FOR) act as guides to the Occupational therapists for evaluation, diagnosis and treatment of various types of conditions. There are total of eleven frames of reference used by occupational therapist out of which Biomechanical FOR is used in the treatment of fine motor movements in stroke patients. The evaluation of fine motor skills in a stroke patient in occupational therapy is done for functional capacity, areas and roles compromised, activities of daily living and home assessment. Also functional aspects of muscle strength, joint range of motion, coordination, tone, pain, sensation, edema and motor functions are also evaluated with the help of different instruments and tools.

The treatment process includes facilitation of learning skills, ADL training, disability prevention, restoration and reinforcement of functional capacities and recommendation and training of adaptive devices. The treatment specifications include passive stretching, active mobilization, enabling activities, sensory integration, compressive garments, specialised massage, ADL training, etc. As the treatment plans in occupational therapy is mostly activity based, the therapists use two types of activities, the purposeful like folding clothes, polishing shoes, donning on and off clothes, counting money, cleaning room, etc. and non-purposeful activities like selection and sorting, bearing, lacing, stacking, etc.

Occupational therapy as its specialty in hand rehabilitation has a wide range in its treatment protocol to pursue the treatment of a variety of areas of hand rehabilitation including fine motor skills after an event of stroke. The occupational therapist provides activity based treatment plans that help to regain motor function through a multidisciplinary approach focusing on training in a wide variety of aspects including muscle strength, range of motion, endurance, sensation, etc. to train the patient perform best in his activities of daily living. In turn the patient finds himself available to the family and society to work around in all the three occupational areas of self-care, work and leisure. Occupational therapy make use of different approaches called frames of reference for different types of treatments out of which biomechanical frame of reference is used as a base approach to improve fine motor skills. Occupational therapy plays a decisive role in the rehabilitation team to provide an opportunity to plan a proper treatment procedure for a stroke patient ultimately enhancing the restoration of fine motor skills with the help of a number of activities.

REFERENCES
SAFE AND SOUND INFORMATION CONTRIBUTION WITHIN MULTI CLOUD SURROUNDINGS BASED ON CRYPTOGRAPHY

Indu Maurya
Research Scholar

ABSTRACT

Information respectability and information privacy are 2 significant prerequisites for open cloud climate. Cloud computing has arisen as a long-envisioned vision of the utility figuring worldview which gives dependable and versatile framework to clients to distantly accumulate access information. This study incorporate plan and created Secure Information contribution Plan for dynamic gatherings in multi cloud climate. In this, clients ready to impart information to others in the gathering with no uncovering attributes protection to the cloud. What's more, the capacity overhead and the enciphering deciphering calculation moment is limited even different gatherings are mentioned for the document access. This study predominantly center on center got cloud storage administrations for example Cryptography to permit cryptographic strategies designed for getting information and calculation in a cloud. Cryptography in cloud computing is another safe help with respect to safety and protection in cloud.

KEYWORDS: Cloud Computing, Enciphering and Deciphering.

1. INTRODUCTION

Cloud Computing is the nearly imagining change in outlook in figuring world. Consequently, confirmation and combination of the 2 clients and administrations is a huge issue for the trust and safety of the cloud computing interesting stage has carried novel protection causes to ponder. Cloud is the think about idea of figuring as an advantage, where information proprietors can distantly accumulate their information [1]. The fundamental help given by the Cloud is Information Stockpiling. Multi-Cloud information frameworks have the ability to upgrade information sharing and this perspective will be fundamentally of incredible assistance to information clients. Numerous cryptographic calculations which can be executed to protection in the cloud. 2 sorts of calculations are: Symmetric and Asymmetric Algorithms. Data Encryption Standard, Advanced Encryption Standard, 3-DES and Blowfish all are the Symmetric algorithms. RSA, Diffie-Hellman is Asymmetric. Mutually, symmetric and asymmetric calculations are utilized to encode and unscramble the information in cloud. The originally known proof of the utilization of cryptography was found in an engraving cut around nineteen hundred Before Christ. In this way cryptography is a productive method to manage such weaknesses which might actually prompt information misfortune and information burglary. The innovation upset has prompted the ascent of cloud computing, which is only putting away and overseeing information in far off workers on the Web. The issues that appear to be far in cloud computing are digital assaults, administration interruption. Subsequently, internet dependent cloud storage administrations are an efficient method to defeat the majority of these issues [2]. Thusly, this study apprehension the effort is investigates and plan of a protected information contribution procedures for cloud storage.

Figure 1: Cloud Computing
2. METHODOLOGY

The combination of at least two clouds defines Multi-cloud. It defeats the safety hazards in a solitary cloud. In Multi-cloud lessen the help inaccessibility, misfortune, and harm of information, loss of security. The assistance inaccessibility is happened when equipment crash of s/w or framework foundation. Replication of information in a few cloud frameworks are one of the genuine predominance of multi cloud [4] [5]. Consequently as one cloud framework is exposed to an assault, an additional cloud will give the information. Consequently the accessibility of information isn't influenced in this sort of cloud. At rest, the assaults and safety infringement on multi-cloud are a colossal danger to classification and ought to be forestalled. To accomplish this numerous strategies are invited and under utilize through numerous suppliers. A portion of the procedures are mystery contribution calculations, homomorphic calculations, PIR (Private Information Retrival) as well as some additional. This technique can definately likewise improve generally speaking execution by decreasing "vendor lock-in".

3. PROTECTION

Protection has consistently been the principle issue with regards to CLOUD computing and its recreation. In two notice completed by IDC in two thousand eight and nine nonstop duration protection bested the rundown. Notwithstanding, cloud is collection of innovations, stockpiling, organizing, virtualization, each full of essential security issues. For test [7], program based assaults, disavowal of administration assaults and organization interference became continue chances into cloud world. There are various particular methodologies that exist for getting the information on organization and amongst them the cryptography is a common as well as traditional way to deal with got information. Moreover the critical explanation for utilization of cryptography for protection is their ease execution and advantage to change the protection as indicated by necessitates.

4. CONCEPT OF CRYPTO CLOUD COMPUTING

Crypto cloud computing is a most recent system intended for digital asset sharing. It ensures information protection and furthermore safety. Indeed, in cloud climate, crypto cloud computing guarantees the data security as well as uprightness during entire system. Safety the executives can likewise be there carried out through approving the marks of each component included.

a) Enciphering Procedure

- Take out each character from a record and acquire its relating ASCII esteem.
- Switch the ASCII to the relating binary.
- Make sure if the binary is eight bits or else not.
- In the event that not, at that point add going before zero's to make it a eight-bit binary.
- Repeat the relating eight-bit binary.
- Take out the initial four bits as of the turned around eight-bit binary and repeal them.
- Likewise take out the last four bits and repeal them too.
- Affix the four bits binary got in stages six and seven.
- The eight bits binary acquired in the wake of affixing in stage eight, which is the ciphertext.
- Switch this eight bits binary to ASCII as well as compose the comparing character to the encoded document.
- The key is formed by accumulating ten to the ASCII in stage ten, and the comparing character is kept in touch with a different encryption key document.

b) Deciphering Procedure

- Take out every character as of the enciphered record as well as acquire its comparing ASCII esteem.
- Acquire the ASCII estimation of particular character as of the enciphered key document and take away ten from it.
- Make sure if the qualities in stages one and two are similar or else not.
- In the event that they are not same, at that point deciphering won't be carried out.
- In the event that they are same deciphering will be carried out by means of switching the enciphering calculation, for example, by changing enciphered character over to comparing ASCII furthermore afterward from ASCII incentive to eight bits binary, cracking the binary to four bits, turning around them separately as well as attaching them and the turning around the joined binary.
- The decoded character is kept in touch with a different deciphering document which ought to be same with the substance of the genuine record.

5. CONVERSATION

Security ought to be apprehension and kept up by the associations looking for cloud arrangements and the specialist contributers. Great administration, consistence, Accessibility, security, Information insurance, Business Progression and Debacle Recuperation strategies and so on are a portion of the parameters to give safety in cloud. The planned idea is protected and efficient of information contribution between various gatherings.

6. CONCLUSION

This study, guarantees safe information contribution is presented in the cloud climate. The document is divided among one client to different...
client or/and single to single client for example bunch sharing. This plan acquires security in cloud administrations are supported by means of the accompanying:
1. Solid n/w protection ought to be applied to the assistance conveyance stage.
2. Approval is given each Entrance.
3. Information Encipher.

Cryptography can be utilized help cloud information access control, cloud information trust the executives, obvious registering, cloud information approval, verification and safe information stockpiling.

REFERENCES
REVIEW GENRE IN CONTEMPORARY INTERNET DISCOURSE

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ABSTRACT

The Internet currently covers all spheres of human life: in addition to direct communication, you can buy almost any goods online (with the exception of those whose sale is limited by law), receive government services, attend educational courses, spend leisure time watching films and broadcasts, take part in a virtual tour of a museum, city or country, consult a doctor, and perform many other actions.  
 Such a breadth of spheres of life presented online implies participation in a variety of communicative situations involving the use of different speech genres.

KEYWORDS AND EXPRESSIONS: internet genre, review genre, internet communication, Russian language.

INTRODUCTION

The objective of this article is to distinguish online user reviews in a separate speech genre, implemented in the space of modern Internet discourse.  
Internet communication is an integral part of the life of modern socially active people. It is believed that Internet communication is exclusively a progressive young generation, this situation has changed radically: Internet communication is available for all ages.  
The Internet currently covers all spheres of human life: in addition to direct communication, you can buy almost any goods online (with the exception of those whose sale is limited by law), receive government services, attend educational courses, spend leisure time watching films and broadcasts, take part in a virtual tour of a museum, city or country, consult a doctor, and perform many other actions.

Such a breadth of spheres of life presented online implies participation in a variety of communicative situations involving the use of different speech genres.

DISCUSSION

The number of new speech practices and the behavioral strategies, discourses, linguistic phenomena and units generated by them is constantly increasing. The task of linguists studying the current state of Internet communication and the phenomena existing within its framework may be to fix and analyze their features in comparison with offline situations, as well as to predict the paths and dynamics of the evolution of such linguistic and speech phenomena.
The Internet environment influences the nature of linguistic processes presented at all levels of the language: both lexico-grammatical and deeper, associated with semantic, semantic and cognitive programs for the implementation of speech intentions [3].

Internet texts reflect modern trends in verbal behavior, the attitude of their authors to various social, political and social issues and, in general, help to reconstruct the general picture of the world, characteristic of a certain community that communicates online.

This approach allows not only to study and describe user content in a purely linguistic aspect, but also to consider its semiotic potential, identifying the information that such a text conveys as a cultural sign.

Features of the Internet discourse as a form of communication existence are a consequence of the use of the Internet and modern means of communication: smartphones, computers, laptops, tablets, as well as programs and applications for accessing the Internet and access to various information resources.

Separating Internet reviews into a separate speech genre, we rely on the definition of the genre by M.M. Bakhtin: a genre is a relatively stable type of utterance developed by a certain sphere of language use [1].

Choosing a genre of communication, the participant of the discourse chooses, in accordance with the situational and value-normative parameters of interaction, the types of statements he needs to carry out certain actions towards his goal in the given conditions of the communicative situation [2, p. 48].

Modern linguistic researchers classify Internet review as a virtual genre, along with the genres of forums, e-mail, chat rooms, conferences, blogs, sites, electronic libraries, online encyclopedias, Internet commentaries, etc. [3]. It is noted that "the genre of online reviews today is a combination of key features of traditional reviews and features of Internet communication" [4, p. 232].

To describe the genres of computer-mediated communication, L.Yu. Shehipitsin distinguishes, based on the work of other researchers, the following parameters:
- Pragmatic (why? who? to whom? where?);
- Media (with what? with the help of which computer program?);
- Structural and semantic (what? in what order?);
- Stylistic and linguistic (how? by what language means?) [5, p. 172].

Consideration of the studied genre according to the selected parameters makes it clear that the Internet review is an independent Internet genre. However, the genres of comment and blog posts are very similar to the reviews genre. However, while a comment and a post are practically not limited by subject matter, a review is always the author's reaction to something, feedback, a personal impression of the experience gained: an event, product, service, place, etc.

Internet reviews are a popular and widespread genre of modern Internet discourse. On the one hand, they realize the author's need for communication, information transfer, on the other, the audience's desire to know the opinion of other people about something that is relevant for her, already familiar with a product, service, event, artwork, etc. Acquaintance with the opinion of others helps to make the right choice among a wide range, save time or money. From the point of view of the author, a review is an act of expressing one's attitude to something from the surrounding reality. From the point of view of the reader, this is valuable information that contributes to making the right decision.

Of course, the genre of reviews can manifest itself in a variety of ways and requires internal systematization. The following criteria can be distinguished:

**Subject of review**
- Reviews of goods (clothes, shoes, household appliances, cosmetics, food, etc.), services, events, organizations, attractions;
- Feedback on the work of narrow specialists (teachers, doctors, hairdressers, etc.);
- Feedback on the activities of public institutions: hospitals, clinics, kindergartens, schools, etc.;
- Reviews of works of art: books, films, plays, performances, etc.;
- Reviews of tourist trips, tours, hotels, etc.;
- Reviews of restaurants and cafes: location;
- Reviews in online stores (and aggregators such as "Yandex Market");
- Reviews on specialized review sites (thematic and general);
- Reviews on Yandex and Google maps;
- Reviews on the websites of commercial firms;
- Reviews in personal blogs and profiles;
- Reviews on specialized sites and applications (Avito, Yuda, Profi, Yandex Taxi, etc.);

**Key**
- Negative;
- Positive;
- Neutral;

**Degree of author's commitment:**
- Sincere author reviews written or recorded as video or audio files without interaction with the customer;
- Copyright reviews initiated by an interested party (paid for in money or barter);
- Reviews written intentionally with the aim of promoting someone or something to the target audience, etc.;

**Text Volume**
- Reviews up to one sentence;
- Reviews up to one paragraph;
- Expanded texts.

It should be especially noted the importance of the study of Internet reviews not only as a speech Internet genre, but also as an important part of the marketing Internet discourse: for example, Internet reviews are becoming an important tool for forming public opinion about goods, services, events, etc. promotional texts from “traditional” promotional genres is that the addressee (initiator of promotional activity) can only indirectly influence the content of reviews, which, in turn, play an increasingly significant role in the formation of a positive information field around the promoted product (services, etc.).

CONCLUSION

Internet reviews are a relatively new, widespread, but still practically unexplored genre of Internet communication. The genre of such a response can be considered as an example of a dynamically developing form of speech behavior that combines the features of interpersonal and professional communication. The study of the characteristics and features of this genre will help to get an idea of the state and development trends of modern online communication. Of interest is also the belonging of the genre of Internet reviews to samples of natural written speech and its relationship with the traditional genres of oral and written forms of language implementation.

REFERENCES

PARATHYROID STATUS AND ITS ASSOCIATION WITH HAEMOGLOBINOPATHIES AMONG TYPE 2 DIABETES MELLITUS IN SOUTHERN NIGERIA

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ABSTRACT

Background: Endocrine action is integrative and an endocrine dysfunction of one gland is known to affect other endocrine glands. Parathyroid glands are associated with the beta cell function. Thus, insulin resistance observed in type 2 diabetes mellitus (T2DM) may be associated with alterations of parathyroid hormones and their metabolic pathways. These have been reported to have a genetic root, postulated to be aberrant haemoglobin gene resulting in haemoglobin variants. This has not been fully explored in sub-Saharan Africa, which has significant population of haemoglobin variants.

Aim: The aim of this study was to evaluate the status of parathyroid dysfunction and its association with haemoglobinopathies among Sub-Saharan Africans with type 2 diabetes mellitus.

Method: A total of 204 individuals aged 25 – 80 years which comprised 100 T2DM and 104 Controls without T2DM were enrolled from a tertiary hospital, in Ibadan, Nigeria and environs. 10mL intravenous blood was obtained from each participant. Parathyroid Hormone (PTH) was measured using enzyme linked immunosorbent assay (ELISA). Calcium, Phosphate, Albumin and Fasting Plasma Glucose (FPG) were analysed spectrophotometrically. Haemoglobin A2 (HbA2), Haemoglobin A (HbA), Haemoglobin C (HbC) and Haemoglobin S (HbS) and Glycated haemoglobin (HbA1c) were determined by High Performance Liquid Chromatography (HPLC) method using Variant Haemoglobin Testing System (Bio-Rad Variant II). Data analysed using appropriate statistical analysis were significant at p<0.05.
1.0 INTRODUCTION

Recent epidemiological studies have shown increasing prevalence of Type 2 diabetes mellitus (T2DM) in developed and developing countries (Dianna et al., 2019). T2DM is principally linked with insulin secretory defects, which may be related to inflammation, metabolic stress and genetic factors, manifesting clinically as hyperglycemia (Diabetes Care, 2019). Diabetes and osteoporosis are prevalent chronic diseases with serious clinical complications (Cipriani et al., 2020). Reduced metabolic control of diabetes mellitus may possibly prompt defects in calcium homeostasis and affect bone mineral metabolism (Cipriani et al., 2020).

Calcium (Ca) is an essential mineral that exerts a wide range of biological functions, including bone and tooth mineralisation, blood coagulation, muscle contraction, nerve impulse transmission and cellular signalling transduction (Serva et al., 1990; Peacock, 2010; Becerra-Tomás et al., 2014; Rooney et al., 2016 & Sing et al., 2016). Ca also plays a fundamental role in insulin secretion and glucose homeostasis (Mears, 2004; Becerra-Tomás et al., 2014 and Zaccardi et al., 2015). Glucose-dependent insulin secretion is a Ca regulated process, which is dependent on intracellular Ca concentration in pancreatic β-cells (Wollheim et al., 1981 & Zaccardi et al., 2015). Additionally, increased cytosolic Ca also affects glucose uptake in the myocyte (Begum et al., 1993; Ojuka et al., 2002 & Zaccardi et al., 2015).

Ca homeostasis abnormality could therefore, be potentially involved in insulin action defects and disorders in glucose homeostasis, causing T2DM advancement (Procopio et al., 2002; Mears, 2004; Becerra-Tomás et al., 2014; Zaccardi et al., 2015). An increase in parathyroid hormone (PTH) secretion may occur to correct the chance of reduction in calcium (Seino et al., 1995).

Parathyroid Hormone (PTH) is a polypeptide that comprises 84 amino acids (Chang et al., 2009), which preserves the extracellular calcium levels within a narrow normal range and controls plasma calcium homeostasis (Stanley et al., 2013). The parathyroid glands secrete PTH in response to low calcium levels causing an increase in bone resorption and maintaining extracellular calcium through direct effect on the kidneys and bones as well as an indirect impact on the small intestine.

The association of parathyroid hormone (PTH) with insulin resistance has been demonstrated (Chang et al., 2009). The development of diabetes has been linked with elevated PTH concentrations with insulin resistance, beta cell dysfunction, and abnormal glucose levels (Chiu et al., 2000; Reis et al., 2007; Kramer et al., 2014). High levels of PTH is predominant in diabetes mellitus by two to four times the levels in individuals without T2DM (Rahimi, 2014). Studies of patients with primary hyperparathyroidism have shown a higher prevalence of diabetes compared to control populations (Werner et al., 1974; Ljunghall et al., 1983; Cheung et al., 1986 & Taylor, 1991).

Hyperparathyroidism is a disease characterized by autonomous excess production of PTH resulting in hypercalcemia. Overproduction of PTH results in mobilization of calcium from bone and inhibition of the renal reabsorption of phosphate, resulting to hypercalcemia and hypophosphatemia (Dariusz et al., 2012). PTH downregulates the insulin receptors peripherally, increases insulin resistance and has a direct effect on beta cells (Murray, 2005). Both primary and secondary hyperparathyroidism are involved in abnormal glucose metabolism. Ivarsson et al. (2014) reported a higher prevalence of diabetes mellitus in patients with primary hyperparathyroidism while the removal of parathyroid glands improve glucose tolerance in these individuals (Hamed et al., 2011).

Hypoparathyroidism is thought to be a rare complication, that is usually, but not always complemented by hypocalcemia (Chern et al., 2003). A relationship exists between reduced levels of PTH and vertebral fracture in T2DM patients (Yamamoto et al., 2012), which could be associated with the diminished anabolic effects of PTH on bones (Wang et al., 2005). Hypoparathyroidism is defined by decreased serum calcium and increased phosphorous levels, complemented by the reduced PTH (Ali Bazi et al., 2018). Parathyroid hormone (PHT) concentrations is likely to be 20%-50% lower in T2DM subjects in than in controls (Dobnig et al., 2006 & Yamamoto et al., 2012). Reduced parathyroid hormone (PTH) in the blood results in
decreased calcium and calcitonin. Deficient parathyroid hormone leads to hypocalcemia symptoms including pain and muscle cramp, numbness, tingling, seizures, carpopedal spasms, Trouseau and Chvostek signs (Yavari, 2014; Ferrara et al., 2002; Al-Akras et al., 2016).

Genetic factors appear to be important in the development of reduced bone mass and osteoporotic fractures (Voskaridou et al., 2013), which are often prominent in T2DM (Hothersall et al. 2014; Sellmeyer et al., 2016). T2DM and parathyroid dysfunction are associated endocrinopathies with genetic basis, largely attributed to haemoglobinopathies.

Hemoglobinopathies are the most common genetically inherited single-gene disorders in the world (Goonasekera et al., 2018). Haemoglobin disorders are divided into quantitative and qualitative defects in globin synthesis. Quantitative defects result to thalassemia syndromes, often with normal globin structure. Hemoglobin variants result from qualitative defects with point mutations in globins (Kohne 2011; Payandeh et al. 2014; Brancaleoni et al. 2016). The two major types are structural haemoglobin variants (HbC, Haemoglobin E (HbE) and Hbs) and thalassemia syndromes (α- and β-thalassemia) are known (Kohne, 2011). Several Investigators have identified about 700 structural haemoglobin variants but only three (HB S, HB C, and HB E) are predominant (Lal et al., 2010).

Bone disease has been characterized as an evident cause of morbidity in individuals with thalassaemia and other haemoglobin disorders. The risk of T2DM, gestational diabetes, osteoporosis, renal diseases, decreasing pulmonary functions and dental problems is shown to be increased in a individuals with beta thalassemia minor (Leung & Lao, 2012; Giusti et al., 2016; Helmi et al., 2017 and Nickavar et al., 2017. (Voskaridou et al., 2013). Hypoparathyroidism with reduced serum calcium levels in thalassemia patients was improved with vitamin D and calcium supplementation (Goyal et al., 2010).

Several studies have reported parathyroid gland status in diabetes mellitus in different populace but reports on the effect of haemoglobin disorders on parathyroid function in T2DM individuals in African blacks, are unavailable. Hence, the aim of this study is to determine the association of haemoglobin variants with parathyroid dysfunction among T2DM in Southern Nigeria.

2.0 METHODOLOGY

2.1 Study Design

This is a case control study and was approved by the Joint Ethical Committee of the tertiary hospital in Ibadan, Nigeria.

2.2 Participants

204 (two hundred and four) participants consisting of 100 (one hundred) T2DM and 104 (one hundred and four) without T2DM (controls) volunteers who gave their consent were enrolled from a tertiary hospital, in Ibadan, Nigeria and environs. The diabetic group were confirmed diabetics by a Consultant Endocrinologist using the World Health Organisation Criteria (Venous fasting plasma glucose (FPG) values of ≥ 7.0 mmol/L (126 mg/dL), 2-h post-load plasma glucose ≥ 11.1 mmol/L (200 mg/dL) (WHO, 2006), HbA1c ≥ 6.5% (48 mmol/mol); or a random blood glucose ≥ 11.1 mmol/L (200 mg/ dL) in the presence of signs and symptoms are considered to have diabetes (WHO, 2016). The individuals without T2DM and history of diabetes were volunteer staff of the same tertiary hospital where the cases were recruited and persons without history of diabetes from the environs were selected. All the participants fasted overnight (10 – 12hrs) and details on biodata, lifestyle, diet and medical history were obtained through a pre-test semi-structured questionnaire.

2.3 Sample Collection

Intravenous blood (8mL) sample was aseptically obtained by venepuncture from each of the participants after an overnight fast (10 –12 hours). Four millilitres (4mL) of blood was dispensed into labelled vacuum collection tube containing potassium ethylene diamine tetra acid (K3EDTA), stored at 2–8°C and processed within 7 days of sample collection for the determination of haemoglobin variants (HbA2, HbA, HbC and Hbs) without sample centrifugation. 4 mL of blood was dispensed into gold-topped serum separator gel tubes for the determination of PTH, Calcium, Albumin, and Phosphorus. Serum/plasma was obtained by centrifuging blood and spun at 300g for five minutes. These were stored in small aliquots at -20°C until analysis was done.

2.4 Biochemical Investigations

Biochemical parameters estimated were Fasting Plasma Glucose Serum Parathyroid Hormone (PTH), Calcium, Albumin and Phosphorus and Haemoglobin Variants (HbA2, HbA, HbC and Hbs).

2.4.1 Fasting Plasma Glucose Estimation

Fasting Plasma Glucose was determined by glucose oxidase, an enzymatic method (Produktion, Austria), as described by Barham and Trinder, (1972). Participants were classified according to WHO criteria: Normal range for Fasting Plasma Glucose (FPG) was FPG ≤110mg/dL (≤6.1mmol /L) (Normal); FPG (110 – 125mg/dL (6.1 to 6.9mmol/L) (Prediabetes) for the control group and FPG ≥126mg /dL (≥7mmol /L) (Diabetes Mellitus) for the T2DM group (WHO, 2016).
2.4.2 Calcium Estimation

Serum calcium ions was determined by colorimetric method with O-Cresolphthalein complexone without deproteinization medium (Randox Laboratories, Crumlin, United Kingdom) as described by Benedict et al., 1924). The reference range for normal calcium level was 8.10 – 10.4mg/dL.

2.4.3 Phosphate Estimation

Serum phosphate ions was determined by the formation of a yellow phosphorus molybdate complex when it reacts with ammonium molybdate and the concentration obtained photometrically (Dialab Produktion, Austria), as described by Thomas (1998). The reference range for normal phosphate was 2.6 -4.5 mg/dL.

2.4.4 Albumin Estimation

Serum albumin was determined by a colour change of indicator in the presence of bromocresol green and the intensity of the colour obtained photometrically (Dialab Produktion, Austria) as described by Johnson et al., (1999). The normal reference range for albumin concentration was (3.5 - 5.2g/dL).

2.4.5 Determination of Haemoglobin Variants and Glycated Haemoglobin

Haemoglobin parameters (HbA2, HbA, HbC and HbS) were determined by high performance liquid chromatography method using Biorad Variant II (Bio-Rad Laboratories Inc., Hercules, CA, USA). The reference value for HbA2 variant was normal (2.0 -3.3%), Beta thalassemia Trait (BTT) (≥3.5%) (Buch et al., 2016). Normal adult percentage of Haemoglobin was HbA (≥98%), HbF (<1%), HbS (0%), HbC (0%); HbAS, Sickle Cell Trait percentage of normal form of HbA was about 60% and moderate amount of HbS (about 40%); HbAC, haemoglobin C trait percentage of normal form of HbA was about 60% and moderate amount of HbC (about 40%); HbCC, hemoglobin C disease percentage of HbC was 80% and above); HbSC, sickle-haemoglobin C disease percentage was 50% of HbC and 50% of HbS ; HbSS Sickle Cell Disease percentage of HbS was 80% and above (AACC, 2019). Participants were classified according to WHO criteria: Reference value for Hba1C was normal (4 – 5.6%) and Prediabetes (5.7 – 6.4%) for the control group and Diabetes ≥ 6.5% for T2DM group (WHO, 2016).

2.4.6 Estimation of Serum Parathyroid Hormone (PTH) Level

Serum PTH was estimated by quantitative enzyme immunoassay technique (Double-antibody sandwich) technique (Melsin Medical, Changchun, PTH, ELISA KIT CAT.NO: EKHU-1533). The reference range for PTH was between 11.0 and 70.6 pg/mL(Souberbielle et al 2016). Normal parathyroid status is defined when PTH levels fall within the normal range with normal calcium and phosphate. Hypoparathyroidism was defined by decreased serum calcium and increased phosphorous levels with reduced PTH (Ali Bazi, et al., 2018) while hyperparathyroidism by inappropriately high PTH level with increased calcium and low phosphate (Dariusz et al., 2012).

2.5 Statistical Analyses

Analysis of data was done using Statistical Package for Social Sciences (SPSS) version 21.0. Quantitative variables were presented as mean ± standard error of mean (SEM). Categorical variables were presented as absolute (n) and relative frequencies (in percentage). Comparison of means between two groups and among subdivided groups was done by statistical independent t-test while test of association was determined using Pearson’s Chi square test and Analysis of Variance (ANOVA). Post hoc was used to compare difference between the groups. Statistical significance was defined by p value < 0.05.

3.0 RESULTS

Table 1 shows the parathyroid function of the study participants. (p< 0.001). Among the T2DM and controls, 93 (93%) vs 96 (92.3%) were found to be normoparathyroid, 3 (3%) vs 1 (0.96%) were hyperparathyroid and 4 (4%) vs 7 (6.73%) were hypoparathyroid respectively. A high percentage of T2DM and healthy controls had normal parathyroid function and minority of the type 2 diabetics and controls had hyperparathyroidism and hypoparathyroidism. There was no significant difference in the parathyroid function among T2DM and controls (p>0.005).
# Table 1 Parathyroid function among Type 2 Diabetes Mellitus and Control Group

<table>
<thead>
<tr>
<th>PARATHYROID FUNCTION</th>
<th>T2DM n = 100</th>
<th>CONTROL n = 104</th>
<th>TOTAL N = 204</th>
<th>X2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normoparathyroidism</td>
<td>93 (93.0)</td>
<td>96 (92.3)</td>
<td>189 (92.6)</td>
<td>1.788</td>
<td>0.429</td>
</tr>
<tr>
<td>Hyperparathyroidism</td>
<td>3 (3.0)</td>
<td>1 (0.96)</td>
<td>4 (1.96)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypoparathyroidism</td>
<td>4 (4.0)</td>
<td>7 (6.73)</td>
<td>11 (5.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100 (100.0)</td>
<td>104 (100.0)</td>
<td>204 (100.0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Values are presented in number (n) and (%) = percentage in parentheses, N = total number, X2 = Chi-squared test, p = probability, * = significant at p 0.05, T2DM = Type 2 Diabetes Mellitus participants, Controls = Apparently healthy participants without Type 2 Diabetes Mellitus.
The prevalence and association of parathyroid function status among T2DM and controls with normal and abnormal genotypes are shown in table 2. The prevalence of parathyroid function status among the T2DM was (AA and Non AA were 62 (62%) and 31 (31%) normoparathyroidism, 2 (2%) and 2 (2%) hypoparathyroidism, 3 (3%) and 0 (0%) hyperparathyroidism respectively) while the prevalence among the controls were 76 (73.1%) and 20 (19.2%) normoparathyroid, 7 (6.73%) and 0 (0%) hyperparathyroid and 1 (0.96%) and 0 (0%) hypoparathyroid in AA and Non AA respectively. The associations between parathyroid function in T2DM and controls with normal and abnormal haemoglobin genotypes were not significantly different (p>0.05).

Table 2 Prevalence and Association of Parathyroid Function in Individuals with Normal and Abnormal Haemoglobin Genotypes among Type 2 Diabetes Mellitus and Control Group.

| Parathyroid Function | T2DM (n = 100) | Control (n = 104) |  |
|----------------------|----------------|------------------|  |
|                      | AA             | Non AA           | Total | X2  | P    | AA   | Non AA | Total | X2  | p    |
| Normoparathyroidism  | 62 (62.0)      | 31 (31.0)        | 93 (93.0) | 2.005 | 0.367 | 76 (73.1) | 20 (19.2) | 96 (92.3) | 2.063 | 0.356 |
| Hypoparathyroidism   | 2 (2.0)        | 2 (2.0)          | 4 (4.0)   |      |      | 7 (6.73) | 0 (0.0)  | 7 (6.73)  |      |      |
| Hyperparathyroidism  | 3 (3.0)        | 0 (0.0)          | 3 (3.0)   |      |      | 1 (0.96) | 0 (0.0)  | 1 (0.96)  |      |      |
| Total                | 67 (67)        | 33 (33.0)        | 100 (100.0) |      |      | 84 (80.8) | 20 (19.2) | 104 (100.0) |      |      |

Values are in number (n) and (%) = percentage in parentheses, N = total number, X2 = Chi-squared test, p = probability, * = significant at p < 0.05, T2DM = Type 2 Diabetes Mellitus participant, Controls = Apparently healthy participants without Type 2 Diabetes Mellitus, HbAA (AA) = Normal Haemoglobin, Non AA = Abnormal Haemoglobin
Table 3 shows the prevalence and parathyroid function status among T2DM and controls with and without Beta Thalassemia Trait. The prevalence of parathyroid function status among the T2DM was (BTT and NBTT were 5 (5%) and 88 (88%) normoparathyroidism, 0(0%) and 4 (4%) hypoparathyroidism, 0 (0%) and 3 (3%) hyperthyroidism respectively) while the prevalence among the controls were 6 (5.8%) and 90 (86.5%) normoparathyroid, 0(0%) and 7 (6.73%) hypoparathyroid and 1 (0.96%) and 0 (0%) hyperparathyroid in BTTand NBTT respectively. The association between parathyroid function in T2DM with and without Beta Thalassamia Trait was not significantly different (p>0.05) but the difference between parathyroid function status in the control group with and without Beta Thalassaemia Trait was significant (p<0.05).

Table 3 Prevalence and Association of Parathyroid Function in Individuals with and without Beta Thalassemia Trait among Type 2 Diabetes Mellitus and Control Group

<table>
<thead>
<tr>
<th>Parathyroid Function</th>
<th>T2DM (n = 100)</th>
<th>Control (n = 104)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BTT</td>
<td>NBTT</td>
</tr>
<tr>
<td>Normoparathyroidism</td>
<td>5 (5.0)</td>
<td>88 (88.0)</td>
</tr>
<tr>
<td>Hypoparathyroidism</td>
<td>0 (0.0)</td>
<td>4 (4.0)</td>
</tr>
<tr>
<td>Hyperparathyroidism</td>
<td>0 (0.0)</td>
<td>3 (3.0)</td>
</tr>
<tr>
<td>Total</td>
<td>5 (5.0)</td>
<td>95 (95.0)</td>
</tr>
</tbody>
</table>

Values are in number (n) and (%) = percentage in parentheses, N = total number, X2 = Chi-squared test, p = probability, * = significant at p < 0.05, T2DM = Type 2 Diabetes Mellitus participants, Controls = Apparently healthy participants without Type 2 Diabetes Mellitus, BTT = Beta Thalassaemia Trait, NBTT = Individuals without BTT.
The association of parathyroid function status among T2DM and controls with various haemoglobin genotypes is shown in table 4. The prevalence of parathyroid function status among the T2DM with haemoglobin genotype AA, AC, AS and CC were 62 (62%), 4 (4%), 26 (26%) and 1 (1%) normoparathyroid, 2 (2%), 1 (1%), 1 (1%) and 0 (0%) hypoparathyroid respectively and only AA (3%) had hyperparathyroidism respectively while the prevalence among the controls with haemoglobin genotype AA, AC, AS and SC were 76 (73.1%), 5 (4.81%), 14 (13.5%) and 1 (0.96%) normoparathyroid, 1 (0.96%) and 7 (6.73%) with AA only were hyperparathyroid and hypoparathyroid in controls respectively. There was no significant difference between the function of the parathyroid gland with different haemoglobin genotypes in both T2DM and controls (p>0.05).

Table 4.0 Prevalence and Association of Parathyroid Function in Individuals with various Haemoglobin Genotypes in Type 2 Diabetes Mellitus and Control Group

<table>
<thead>
<tr>
<th>Parathyroid Function</th>
<th>T2DM (n =100)</th>
<th>Control (n =104)</th>
<th>X2 (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HbAA n (%)</td>
<td>HbAC n (%)</td>
<td>HbAS n (%)</td>
</tr>
<tr>
<td>Normoparathyroid</td>
<td>62 (62.0)</td>
<td>4 (4.0)</td>
<td>26 (26.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyperparathyroid</td>
<td>3 (3.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>2 (2.0)</td>
<td>1 (1.0)</td>
<td>1 (1.0)</td>
</tr>
<tr>
<td>Total</td>
<td>67 (67)</td>
<td>5 (5.0)</td>
<td>27 (27)</td>
</tr>
</tbody>
</table>

Values are in number (n) and (%) = percentage in parentheses, N = total number, X2 = Chi-squared test, p = probability, * = significant at p < 0.05, T2DM = Type 2 Diabetes Mellitus participants, Controls = Apparently healthy participants without Type 2 Diabetes Mellitus, Haemoglobin AA = HbAA, Haemoglobin AC = HbAC, Haemoglobin AS = HbAS, Haemoglobin CC = HbCC and Haemoglobin SC = HbSC.
Table 5 shows serum levels of calcium, phosphate, albumin and PTH in T2DM and controls. As shown in table 4, significant increase in phosphate (p< 0.001) and decrease in albumin concentrations were observed (p< 0.001) in T2DM when compared with controls respectively. Moreover, Calcium was lower while PTH was higher when compared with the controls but the difference were not significant (P> 0.05).

<table>
<thead>
<tr>
<th>Parameters</th>
<th>T2DM (n = 100)</th>
<th>Controls (n = 104)</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium (mg/dL)</td>
<td>9.03 (0.17)</td>
<td>9.12 (0.66)</td>
<td>-0.123</td>
<td>0.902</td>
</tr>
<tr>
<td>Phosphate (mg/dL)</td>
<td>4.39 (0.14)</td>
<td>3.81 (0.09)</td>
<td>3.49</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Albumin (g/dL)</td>
<td>4.38 (0.43)</td>
<td>4.73 (0.07)</td>
<td>-4.224</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>PTH (pg/mL)</td>
<td>31.61 (1.93)</td>
<td>28.81 (1.83)</td>
<td>1.053</td>
<td>0.294</td>
</tr>
</tbody>
</table>

Values are in mean with SEM = Standard Error of Mean (SEM) in parentheses, N = total number SEM = Standard Error of Mean, N = total number, t= t tests, p = probability, * = significant at p < 0.05, T2DM = Type 2 Diabetes Mellitus participants, Controls = Apparently healthy participants without Type 2 Diabetes, Parathyroid Hormone = PTH

Correlation of PTH with calcium, phosphate and Albumin in T2DM and controls is shown in table 6. There was a negative correlation of PTH with Calcium and albumin in both groups and controls respectively, phosphate was positively correlated in T2DM and controls but no association was found between PTH and all the biochemical parameters (p> 0.05).

<table>
<thead>
<tr>
<th>Parameters</th>
<th>T2DM</th>
<th>Controls</th>
<th>P</th>
<th>PTH (pg/mL)</th>
<th>Controls</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium (mg/dL)</td>
<td>-0.092</td>
<td>0.364</td>
<td>0.292</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphate (mg/dL)</td>
<td>0.122</td>
<td>0.225</td>
<td>0.437</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albumin (g/dL)</td>
<td>0.119</td>
<td>0.237</td>
<td>0.289</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parathyroid Hormone = PTH, p = probability, * = significant at p < 0.05 T2DM = Type 2 Diabetes Mellitus participants, Controls = Apparently healthy participants without Type 2 Diabetes
Table 7 shows the comparison of serum calcium, phosphate, albumin and PTH levels with normal and abnormal haemoglobin genotype in T2DM and controls. ANOVA compared the variables among the normal and abnormal haemoglobin genotypes. There were significant differences in all the biochemical parameters except calcium in T2DM when compared with the control group. Calcium was significantly lower in the T2DM with AA haemoglobin genotype when compared with NON AA of controls (p<0.05). The mean phosphate concentration of T2DM with AA and Non AA were significantly higher than AA of controls (p<0.05). Serum albumin was significantly lower in T2DM with AA and Non AA compared with the corresponding values of controls with AA and NON AA. The mean concentration of PTH in Type 2 diabetics with AA genotype was significantly higher as compared with NON AA in control individuals (P<0.05).

### Table 7 Comparison of Serum Calcium, Phosphate, Albumin and Parathyroid Hormone in Type 2 Diabetes Mellitus and Controls with Normal and Abnormal Haemoglobin Genotype

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>T2DM (n = 100)</th>
<th>CONTROLS (n = 104)</th>
<th>ANOVA Test</th>
<th>Post Hoc Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SEM)</td>
<td>Mean (SEM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(mg/dL)</td>
<td>AA</td>
<td>NON AA</td>
<td>AA</td>
<td>NON AA</td>
</tr>
<tr>
<td></td>
<td>9.029 (0.196)</td>
<td>9.035 (0.344)</td>
<td>8.54 (0.19)</td>
<td>11.52 (3.38)</td>
</tr>
<tr>
<td>Phosphate</td>
<td>(mg/dL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.36 (0.172)</td>
<td>4.45 (0.23)</td>
<td>3.82 (0.10)</td>
<td>3.80 (0.23)</td>
</tr>
<tr>
<td>Albumin</td>
<td>(g/dL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.37 (0.06)</td>
<td>4.39 (0.06)</td>
<td>4.73 (0.09)</td>
<td>4.74 (0.12)</td>
</tr>
<tr>
<td>PTH</td>
<td>(pg/mL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34.57 (2.62)</td>
<td>25.59 (2.07)</td>
<td>30.97 (2.12)</td>
<td>19.76 (2.43)</td>
</tr>
</tbody>
</table>

Values are in mean with SEM = Standard Error of Mean (SEM) in parentheses, N = total number SEM = Standard Error of Mean, N = total number, p = probability, * = significant at p < 0.05, T2DM = Type 2 Diabetes Mellitus participants, Controls = Apparently healthy participants without Type 2 Diabetes, Parathyroid Hormone = PTH, P = values obtained from ANOVA, P1 = Comparison between AA of T2DM and AA of Controls, P2 = Comparison between AA of T2DM and NON AA of controls, P3 = Comparison between NON AA of T2DM AND AA of Controls, P4 = Comparison between NON AA of T2DM and NON AA of Controls.
Table 8 shows the comparison of serum calcium, phosphate, albumin and PTH levels with and without BTT. There were significant differences in phosphate and albumin while calcium and PTH were comparable when compared with the controls.

Table 8 Comparison of Serum PTH, Total Calcium, Phosphate and Albumin in Individuals with Type 2 Diabetes Mellitus and Controls with and without BTT

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>T2DM (n = 100)</th>
<th>CONTROLS (n = 104)</th>
<th>Mean (SEM)</th>
<th>Mean (SEM)</th>
<th>ANOVA Test</th>
<th>Post Hoc Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BTT</td>
<td>NBTT</td>
<td>BTT</td>
<td>NBTT</td>
<td>P</td>
<td>P1</td>
</tr>
<tr>
<td>Calcium</td>
<td>8.42 (0.97)</td>
<td>9.06 (0.18)</td>
<td>9.23 (0.66)</td>
<td>9.11 (0.71)</td>
<td>0.992</td>
<td>0.782</td>
</tr>
<tr>
<td>Phosphate</td>
<td>4.65 (0.39)</td>
<td>4.38 (0.14)</td>
<td>4.26 (0.49)</td>
<td>3.78 (0.09)</td>
<td>&lt;0.004*</td>
<td>0.570</td>
</tr>
<tr>
<td>Albumin</td>
<td>4.49 (0.17)</td>
<td>4.37 (0.44)</td>
<td>4.54 (0.19)</td>
<td>4.75 (0.76)</td>
<td>&lt;0.001*</td>
<td>0.888</td>
</tr>
<tr>
<td>PTH</td>
<td>26.47 (5.62)</td>
<td>31.88 (2.01)</td>
<td>33.48 (13.07)</td>
<td>28.48 (1.75)</td>
<td>0.586</td>
<td>0.53</td>
</tr>
</tbody>
</table>

Values are in mean with SEM = Standard Error of Mean (SEM) in parentheses, N = total significant at p < 0.05, T2DM = Type 2 Diabetes Mellitus participants, Controls = Apparently healthy participants without Type 2 Diabetes, Parathyroid Hormone = PTH, P = values obtained from ANOVA, P1 = Comparison between BTT of T2DM and BTT of Controls, P2 = Comparison between BTT of T2DM and NBTT of Controls, P3 = Comparison between NBTT of T2DM and BTT of Controls, P4 = Comparison between NBTT of T2DM and NBTT of Controls.
There were significant differences in phosphate and albumin while calcium and PTH were not statistically significant in T2DM when compared with the control group. Phosphate was significantly higher in T2DM with AA and AC haemoglobin genotype when compared with AA and AC of controls respectively (p<0.05). Serum albumin was significantly lower in T2DM with AA and AC genotypes when compared with the corresponding values of controls with AA and AC respectively. The mean concentration of PTH in Type 2 diabetics with AC genotype was significantly higher (P<0.05) as compared to AC in control individuals (Table 9).

### Table 9: Comparison of Biochemical Parameters in Individuals with Haemoglobin genotypes in Type 2 Diabetes Mellitus and Control Group

<table>
<thead>
<tr>
<th>Thyroid Hormones</th>
<th>T2DM (n= 100) Mean (SEM)</th>
<th>Control (n =104) Mean (SEM)</th>
<th>t</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium (mg/dL)</td>
<td>AA: 9.029 (0.196)</td>
<td>AA: 8.63 (0.75)</td>
<td>1.71</td>
<td>0.089</td>
<td>0.207</td>
<td>0.08</td>
<td>0.52</td>
<td>0.31</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>AC: 9.09 (0.42)</td>
<td>AC: 8.54 (0.00)</td>
<td>1.28</td>
<td>0.65</td>
<td>1.08</td>
<td>0.06</td>
<td>1.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AS: 9.54 (0.00)</td>
<td>AS: 8.54 (0.19)</td>
<td>1.81</td>
<td>0.72</td>
<td>2.54</td>
<td>1.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphate (mg/dL)</td>
<td>AA: 4.36 (0.172)</td>
<td>AA: 4.3 (0.30)</td>
<td>2.88</td>
<td>0.005</td>
<td>0.140</td>
<td>0.34</td>
<td>0.48</td>
<td>0.04*</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>AC: 4.50 (0.28)</td>
<td>AC: 3.93 (0.00)</td>
<td>1.50</td>
<td>0.34</td>
<td>0.97</td>
<td>0.72</td>
<td>1.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AS: 3.82 (0.10)</td>
<td>AS: 3.4 (0.18)</td>
<td>2.54</td>
<td>0.34</td>
<td>0.97</td>
<td>0.72</td>
<td>1.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albumin (g/dL)</td>
<td>AA: 4.37 (0.06)</td>
<td>AA: 4.41 (0.14)</td>
<td>3.40</td>
<td>0.001</td>
<td>0.001*</td>
<td>0.047</td>
<td>0.93</td>
<td>0.015*</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>AC: 4.40 (0.06)</td>
<td>AC: 3.99 (0.00)</td>
<td>3.43</td>
<td>0.001*</td>
<td>0.001*</td>
<td>0.047</td>
<td>0.93</td>
<td>0.015*</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>AS: 4.73 (0.09)</td>
<td>AS: 4.73 (0.09)</td>
<td>2.02</td>
<td>0.09</td>
<td>0.09</td>
<td>0.09</td>
<td>1.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTH (pg/mL)</td>
<td>AA: 34.57 (2.62)</td>
<td>AA: 20.01 (4.94)</td>
<td>1.02</td>
<td>0.31</td>
<td>0.046*</td>
<td>0.036</td>
<td>0.49</td>
<td>0.33</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>AC: 27.13 (2.27)</td>
<td>AC: 11.92 (0.00)</td>
<td>2.03</td>
<td>0.31</td>
<td>0.046*</td>
<td>0.036</td>
<td>0.49</td>
<td>0.33</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>AS: 30.97 (2.12)</td>
<td>AS: 30.97 (2.12)</td>
<td>2.13</td>
<td>0.31</td>
<td>0.046*</td>
<td>0.036</td>
<td>0.49</td>
<td>0.33</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>SC: 14.66 (1.56)</td>
<td>SC: 21.61 (3.34)</td>
<td>1.05</td>
<td>0.09</td>
<td>0.001*</td>
<td>0.001*</td>
<td>0.047</td>
<td>0.93</td>
<td>0.015*</td>
</tr>
<tr>
<td></td>
<td>SC: 19.26 (0.00)</td>
<td>SC: 19.26 (0.00)</td>
<td>1.39</td>
<td>0.31</td>
<td>0.046*</td>
<td>0.036</td>
<td>0.49</td>
<td>0.33</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Values are in mean with SEM = Standard Error of Mean (SEM) in parentheses, N = total number SEM = Standard Error of Mean, N = total number, t= t tests, p = probability, * = significant at p < 0.05, Haemoglobin AA = HbAA, Haemoglobin AC = HbAC, Haemoglobin AS = HbAS, Haemoglobin CC= HbCC and Haemoglobin SC = HbSC P1 =Comparison between AA of T2DM
and AA of Controls, P2 = Comparison between AA of T2DM and AC of controls, P3 = Comparison between AA of T2DM and AS of controls, P4 = Comparison between AA of T2DM and SC of controls, P5 = Comparison between AC of T2DM and AC of controls and P6 = Comparison between AS of T2DM and AS of controls.

Table 10 shows the comparison of PTH, calcium, phosphate and albumin levels according to parathyroid function status in T2DM and controls. There were significant differences in phosphate and albumin while calcium and PTH were not significantly different in T2DM and controls. Serum phosphate and albumin were significantly higher and lower in the normoparathyroid group with T2DM and controls respectively (p<0.05).

Table 10  Comparison of Serum PTH, Total Calcium, Phosphate and Albumin in Individuals with Type 2 Diabetes Mellitus and Control with parathyroid function

<table>
<thead>
<tr>
<th>T2DM (n = 100)</th>
<th>CONTROL (n= 104)</th>
<th>NPT</th>
<th>HPT</th>
<th>HPPT</th>
<th>NPT</th>
<th>HPT</th>
<th>HPPT</th>
<th>t</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium (mg/dL)</td>
<td>9.12(1.68)</td>
<td>8.80(1.46)</td>
<td>6.69(2.61)</td>
<td>9.15(7.04)</td>
<td>8.78(1.52)</td>
<td>8.43(0.0)</td>
<td>-0.041</td>
<td>0.968</td>
<td>0.985</td>
<td>0.623</td>
<td></td>
</tr>
<tr>
<td>Phosphate (mg/dL)</td>
<td>4.36(1.34)</td>
<td>4.28(1.29)</td>
<td>5.54(2.66)</td>
<td>3.80(0.88)</td>
<td>3.76(1.21)</td>
<td>5.83(0.0)</td>
<td>3.403</td>
<td>0.067</td>
<td>0.934</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albumin (g/dL)</td>
<td>4.37(0.42)</td>
<td>4.37(0.36)</td>
<td>4.54(0.83)</td>
<td>4.75(0.76)</td>
<td>4.60(3.67)</td>
<td>4.33(0.0)</td>
<td>-4.204</td>
<td>0.031</td>
<td>0.848</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTH (pg/mL)</td>
<td>30.22(14.10)</td>
<td>10.28(0.11)</td>
<td>103.13(23.50)</td>
<td>29.30(16.73)</td>
<td>10.44(0.63)</td>
<td>110.99(0.0)</td>
<td>0.408</td>
<td>-0.489</td>
<td>0.636</td>
<td>0.799</td>
<td></td>
</tr>
</tbody>
</table>

Values are in mean with SEM = Standard Error of Mean (SEM) in parentheses, N = total number SEM = Standard Error of Mean, N = total number, t= t tests, p = probability, * = significant at p < 0.05, Parathyroid Hormone = PTH, NPT = Normoparathyroidism, HPT = Hypoparathyroidism, HPPT = Hyperparathyroidism. P1 = Comparison between NPT of T2DM and NTP of Controls, P2 = Comparison between HPT of T2DM and HPT of controls, P3 = Comparison between HPPT of T2DM and HPTT of controls.
4.0 DISCUSSION

Elevated levels of Parathyroid Hormone (PTH) has been associated with insulin resistance, beta cell dysfunction, abnormal glucose levels with eventual development of diabetes in recent studies (Kramer et al., 2014). However, increased frequency of functional hypoparathyroidism in patients with type 2 diabetes mellitus with impaired blood sugar regulation have also been reported (Seddek et al., 2016). Parathyroid hormone has some regulating effects on osteoblasts and any discrepancy in its concentration could result in bone loss and increased risk of fracture (Wang et al., 2005 & Motyl et al., 2012). Bone disease denotes a perceptible cause of mobidity in persons with thalassaemia and other haemoglobin disorders (Voskaridou et al., 2013).

In our study, normal parathyroid function, hyperparathyroidism and hypoparathyroidism were present in 93% vs 96%, 3% vs 0.96% and 4% vs 6.73% in T2DM and controls respectively. No significant association of parathyroid function in the T2DM and controls was observed (p>0.05). The parathyroid function status among T2DM and controls with AA and Non AA who had normoparathyroid, hyperparathyroid and hypoparathyroid were 62% vs 31%, 3% vs 0% and 2% vs 2% respectively (p>0.05). The association between parathyroid function in T2DM and controls with normal and abnormal haemoglobin genotypes was also not significantly different (p>0.05). Parathyroid dysfunction was not found in T2DM with BTT while 0.96% of the control group with BTT had hypoparathyroidism. The association between parathyroid function in T2DM with and without Beta Thalassamia Trait was not significantly different (p>0.05) but the difference between parathyroid function status in the control group with and without Beta Thalassaemia Trait was significant (p<0.05). No significant difference between the function of the parathyroid gland with different haemoglobin genotypes in both T2DM and controls (p>0.05) was observed. Hypoparathyroidism was present in T2DM and controls with Haemoglobin genotype AA (2%), AC (1%) and AS (1%) vs 6.73 in controls respectively while hyperthyroidism was present in T2DM and controls with only Haemoglobin genotype AA (3%) and (0.96%) respectively. There was no significant difference between the function of the parathyroid gland with different haemoglobin genotypes in both T2DM and controls (p>0.05).

The low prevalence of hyperparathyroidism of in our study in the case and control groups is consistent with the study of Taylor et al., (1997) who reported 0.99% in diabetic patients and increased by three times more when compared with the general population. Taylor in 1991, also observed the frequency of 7.8% in 205 diabetic patients with primary hyperparathyroidism and 3.0% among 200 successive patients without hyperparathyroidism attending the same medical clinic. Hyperparathyroidism may possibly be the long-term status of hypercalcemia and hypophosphatemia which triggers insulin resistance and hyperinsulinemia, and reduces the number of insulin receptors (Kumar et al., 1994). Several other studies also reported low prevalence rates of hyperparathyroidism ranging from 0.5 to 7.6% in thalassaemia patients (Shamsihraz et al., 2003; Gamberini et al., 2008 and Canatan, 2013). In this study, we observed low prevalence of hyperparathyroidism (0.96%) in controls with BTT. However, hypoparathyroidism was not detected in T2DM and controls with BTT. This parathyroid dysfunction in controls with BTT in this study may likely be due to iron deposition in the parathyroid gland as reported by Habeb et al., (2013) in beta thalassaemia patients.

Recently, Egshatyen (2017) observed magnesium dependent PTH suppression with development of transient hypoparathyroidism and hypocalcemia in T2DM patients. Hypoparathyroidism briefness with associated hypomagnesemia was confirmed after normalization of the blood magnesium level and that vitamin D deficiency may be the possible cause of hypomagnesemia and functional hypoparathyroidism. Similarly, previous studies revealed that T2DM patients with hypomagnesemia, inadequately normal or lowered parathyroid hormone (PTH) that resulted from inhibition of its secretion or synthesis may develop PTH resistance with vitamin D deficiency and hypocalcemia (Hermans et al., 1996; Chase et al., 1974; Rude et al., 1978; Fatemi et al., 1991; Rude et al., 1976; Rude et al., 1985). In our study, the hypoparathyroidism observed in persons with HbAS, HbAC and HbSC in T2DM and HBAA in controls may be due to the lack or excess magnesium playing a role in defective cyclic AMP generation in the parathyroid glands interfering with PTH synthesis and secretion.

Our study revealed a significant increase in phosphate, decrease in albumin and calcium concentrations were observed (p< 0.05) in T2DM compared with controls respectively. Moreover, calcium was lower while PTH was higher in T2DM when compared with the control group but the difference were not significant (P> 0.05). Hussain et al., (2018) reported similar results but the difference in PTH, calcium, and phosphate concentrations between T2DM patients and healthy controls were not significant. In addition, Atmaca et al., (2014) also reported no significant difference in calcium and albumin with statistical difference in phosphorus with PTH below and above 65 ng/mL in diabetic patients with vitamin D levels <30ng/mL. This is in agreement with our findings. Reis et al., (2016) also
reported higher levels of PTH among blacks compared with whites in diabetes and no significant association was observed this is in line with our study outcome. Serum phosphate and albumin were significantly higher and lower in the normoparathyroid group with T2DM and controls respectively (p<0.05). Alterations in calcium metabolism in addition to vitamin D deficiency in Diabetic patients, particularly poorly controlled ones may manifest as reported by Atmaca et al., 2014. Deficient PTH secretion, lower calcium and lower serum magnesium are present in poorly controlled diabetics compared to controls, whereas patients with good metabolic control have normal calcium ion and PTH secretion (Paula et al., 2001). The comparable differences observed in our study group may be due to well controlled Type 2 Diabetes Mellitus.

In this present study, there was negative correlation of PTH with Calcium and albumin while phosphate was positively correlated but no significant correlation found between PTH and all the biochemical parameters in the T2DM and controls (p>0.05). Arora et al., (2018) observed significant negative correlation of serum calcium and positive correlation of phosphate with PTH. This is in agreement with the observation in our study but the difference was not significant. It seems that type 2 diabetics and apparently healthy individuals with Haemoglobin genotype AA are more likely to have hypoparathyroidism and hyperparathyroidism. There is also a probability that apparently healthy individuals with BTT may be considered to have hypoparathyroidism.

5.0 CONCLUSION
This study has shown a high prevalence of hypoparathyroidism among Type 2 diabetes Mellitus and control individuals. Hypoparathyroidism is often associated with complications and comorbidities like neuropsychiatric conditions, kidney dysfunction, kidney stones, extra skeletal calcifications, cataracts and fracture. These findings support the importance of parathyroid disorder and haemoglobin variants screening to detect and reduce its long-term complications. Further studies are required to elucidate the mechanisms that could explore the impact of haemoglobinopathies on parathyroid function in Type 2 Diabetes Mellitus.

LIMITATION OF STUDY
The study limitation was, no measurements of plasma Vitamin D and Magnesium are available for all the participants. Thus, the possibility to determine which individuals were at high risk of primary hyperparathyroidism or secondary hyperparathyroidism due to vitamin D deficiency and magnesium dependent PTH suppression could not be revealed.

CONSENT
Informed consent was administered to all participants after detailed explanation before being recruited into the study.

ETHICAL APPROVAL
Approval to conduct the study was obtained from the University of Ibadan /University College Hospital, Ibadan ethics committee and study executed in agreement with the Declaration of Helsinki.

ACKNOWLEDGEMENT
This study was funded partially by the University of Ibadan, Research Foundation (UIRF).
COMPETING INTERESTS
Authors have declared no competing interests.

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HAND CALCULATION AND EXTENDED THREE DIMENSIONAL ANALYSIS OF BUILDINGS (ETABS) SOFTWARE: AN ANALYSIS AND DESIGN FOR A THREE (3) STORY BUILDINGS

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ABSTRACT

Earthquakes are known to produce one of the most destructive forces on earth. It has been seen that during past earthquakes many of the building were collapsed. Therefore, realistic method for analysis and design are required. Performance Based Design is the modern approach for earthquake resistant design. It is an attempt to predict the performance of buildings under expected seismic event. It involves the calculation of load and total Seismic weight of building from that the base shear is calculated in different zone.

The study is carried out with the help of both manual calculations and ETABS software for a three story building in the campus. Analysis of structure is used to verify the fitness of the structure for use. To perform accurate analysis information such as structural loads, geometry, support condition and material properties should be determined. ETABS is the acronym of extended 3D analysis of building system is software developed by Computers and Structures, Inc. (CSI). ETABS is an engineering software product that can be used to analyze and design multi-story buildings using grid-like geometry, various methods of analysis and solution techniques, considering various load combinations. ETABS can also handle the largest and most complex building models, including a wide range of nonlinear behaviors, making it the tool of choice for structural engineers in the building industry. ETABS can be effectively used in the analysis and design of building structures which might consists of structural members like beams, columns, slabs, shear walls and the like.

To perform accurate analysis information such as structural loads, geometry, support condition and material properties should be determined. The results of such an analysis typically include support reactions, stresses and displacements. Advanced structural analysis may examine dynamic response, stability and nonlinear behavior.

KEYWORDS: Extended three analysis dimensional system, analysis and comparison, beams, building geometry, material properties

INTRODUCTION

Buildings constitute a part of the definition of civilizations, a way of life advanced by the people. The construction of buildings should be looked upon as a process responded to human requirements rather than as a product to be designed and built a great expense. It is well known fact that users of any software for structural analysis and design do not know whether the program is having any bugs or its correctness while using. Since any program developed may contain some error or bugs it is necessary for the users to check the model and analysis and design results manually.

To analyze and design the low and high rise building, one must analyze and design the elements that combined it, such slabs, beams, columns and footing. Large amounts of full hand calculation, analysis and design of low and high rise building concrete are used in the construction industry and most countries due to its availability. Concrete is arguably the most important building material, playing a role in all structures. It has the virtue of versatility, i.e. its ability to be molded to take different shapes in the structural work.

Building Geometry

In order to evaluate and optimize building geometry, different analysis cycles should be part of an integrated design process. This challenges the current traditional design paradigm with a performance-based design method (Aksamija & Mallasi 2010). Traditional method has deficiencies because, 1.) It may include simplified assumptions based on rules-of-thumb which can be inaccurate, 2.) It may force an aesthetic feature without considering performance impacts, and 3.) It may not provide performance measurement/evaluation of a certain design solution.

Apparently, past research on utilization of simulation tools during the architectural design process indicates that despite the increase in number of available tools in the last decade, some architects and designers find it difficult to use these tools, since they are not compatible with the working methods and needs, or the tools are judged as complex and bulky (Gratia & Herde 2002; Punjabi & Miranda 2005). Computational analysis tools provide a method where design and analysis process can be integrated from the earliest stages of the design, and can also assist in design decision-making (Aksamija 2010).
Material properties

Concerns deterioration of concrete and corrosion of reinforcing steel due to potentially aggressive environment, the designer has to identify and anticipate conditions of the environment where the structure will be located in order to take adequate provision for protection of the materials used in the structure.

Considering to satisfy rules related to the different exposure classes of the structural members are given such as: 1) Minimum concrete strength class, 2) Concrete composition, 3) Minimum concrete cover to reinforcement and, for more critical exposure classes, 4) Maximum allowed crack width. Concrete strength is used as indirect measure of concrete durability, on the basis of the assumption, that higher strength → less porous concrete → higher durability. Complementary information about the maximum water/cement ratio and minimum cement content per cubic meter of concrete. The result is a large variation of requirements in different places, (Beltran L., de Herde A. & J. Hensen. 2009).

Base Shear

Determination of design earthquake forces is computed using equivalent static lateral method and dynamic analysis. In the first method, different partial safety factors are applied to dead, live, wind earthquake forces to arrive at the design ultimate load. Apparently, while considering earthquake effects, wind loads assuming that both severe wind and earthquake do not act simultaneously. In American and Australian code recommendations are similar but with different partial safety factors. The dynamic analysis involves the rigorous analysis of the structural system by studying the dynamic response of the structure by considering the total response in terms of component modal responses, (Wetter, M. 2011).

RESULTS AND DISCUSSION

Comparison of Results of Area of Steel in Tension (AST)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>ETABS result for AST (mm²)</th>
<th>Manual result of AST (mm²)</th>
<th>Percentage variation of Moments (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support section of Beams B80</td>
<td>3126</td>
<td>2103.14</td>
<td>1.67</td>
</tr>
<tr>
<td>Midspan section of beams B80</td>
<td>2013</td>
<td>1854.85</td>
<td>0.85</td>
</tr>
<tr>
<td>Column C24/C47</td>
<td>3128</td>
<td>4621</td>
<td>0.31</td>
</tr>
</tbody>
</table>

Comparison results of Moments

<table>
<thead>
<tr>
<th>Parameters</th>
<th>ETABS result for moment (kNm)</th>
<th>Manual result of moments (kNm)</th>
<th>Percentage variation of Moments (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support section of beams B80</td>
<td>446</td>
<td>387.10</td>
<td>5.76</td>
</tr>
<tr>
<td>Midspan section of beams B80</td>
<td>437</td>
<td>452.70</td>
<td>4.70</td>
</tr>
<tr>
<td>Top section of Column C42/ C47</td>
<td>321</td>
<td>331.15</td>
<td>8.75</td>
</tr>
<tr>
<td>Bottom section of Column C42/ C47</td>
<td>167</td>
<td>181.51</td>
<td>6.42</td>
</tr>
</tbody>
</table>

Average % difference in AST = (1.67 + 0.85 + 0.31) / 3
= 0.943 %

Average % difference in Moments = (5.76 + 4.70 + 8.75 + 6.42) / 4
= 6.407 %

Therefore, the average % difference in Area of Steel and Moments of the portal frame From ETABS software and manual calculation are obtained 0.943 % and 6.407 % respectively.

CONCLUSION AND RECOMMENDATIONS

The design and analysis of the multistoried building is carried out by ETABS software and the same is carried out for a portal frame of the structure by manual calculation. The analysis of the structure is carried out manually with the help of Kani’s Method and the design is carried out by Limit State Method. The results obtained from ETABS software and manual calculation are compared and it shows the average % difference of Area of steel and moments of the portal frame as 1.12 % and 6.44 % respectively. Hence, after comparing ETABS software with manual calculation, it can be concluded that ETABS software gives nearly

accurate results and can be used for the design and analysis of multistoried structures.

REFERENCES


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STUDY OF LASER LIGHT IN MEDICINE WITH
INTERACTIVE TEACHING METHODS

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ANNOTATION
Currently, when studying the interaction of laser radiation with biological tissue and when developing modern methods and technologies of laser medicine, it is necessary to take into account both the structure of certain laser radiation pulses in such a way as the wavelength and energy dose.

For continuous laser radiation power of pulsed laser is equal to radiation power of a medium size, while the power of the pulsed laser exceeds three or four rules. Therefore, the effect of laser radiation, which has a continuous and pulsed mode of operation, on the whole organism, as well as the effect on individual systems and organs, can be radically different.

KEYWORDS: pulsed and continuous mode of operation, pulsed structure of laser radiation, application features.

INTRODUCTION
At present, modern teaching methods are widely used in the educational process. The use of modern teaching methods leads to high efficiency in the teaching process. When choosing teaching methods, it is advisable to choose based on the didactic function of each lesson. While maintaining the traditional form of teaching, enriching it with methods that activate the activities of various learners leads to an increase in the level of mastery of learners. To do this, the lesson process should be organized rationally, the teacher should constantly stimulate the interest of students in the learning process, divide the teaching material into small pieces, open their content, brainstorm, work in small groups, debate, problem situation, orientation. using techniques such as text, project, role-playing, and encouraging learners to perform practical exercises independently. These methods are also called interactive or interactive methods.

The Interactive Method is an integral part of the learning process, a set of teaching methods aimed at activating both the professor and the student at the same time.

Interactive methods are methods that activate learners and encourage independent thinking, learning at the center of the learning processes.

When these methods are used, the educator encourages the learner to actively participate. The learner is involved throughout the whole process. The use of a number of interactive methods is also important in the application of lasers in medicine.

The general and characteristic features, mode of operation, as well as the structure of radiation pulses of modern lasers are considered. A comparative analysis of the pulse structures of laser radiation shows that, firstly, they are very diverse, and secondly, the structures of radiation pulses can
differ from each other even for one type of laser, e.g., shape, amplitude, duration, and frequency. Third, the level of radiant energies, i.e., the degree of energy density, i.e., the magnitude of the light and energy dose of the radiation, is compatible, but the structure of the radiation pulses may also differ. Thus, in studying the mechanism of interaction of laser radiation with bio-tissue and in the development of modern methods and technologies of laser medicine, both the wavelength and energy dose, as well as the pulse structure of a particular type of laser must be taken into account. In addition, the types of laser active media used in medicine, the characteristics of different laser radiation, they are one-dimensional indicators of radiation quality, general recommendations for their application are considered. In particular, it has the property of multifunctionality (wavelength generation range 510.6 nm; 578.2 nm; 600 ÷ 750 nm), as well as the ability to adjust the average power of laser radiation with an accuracy of ~ 1.0 mJ, keeping the radiation dose in the range 0.001 ÷ 15 W. The certified and registered KULON-MIS laser medical device, made on the basis of lasers in copper vapor, can be used as a universal instrument for the production of modern methods and technologies for clinical and scientific medicine.

For pulsed-mode lasers, the energy characteristics can be represented by at least two parameters, for example, peak power and pulse energy, peak power and radiation pulse duration, pulse energy, and radiation pulse duration. It is also necessary to specify the frequency of the radiation pulses for a more complete characterization of pulses operating in the pulse mode.

**Brainstorming Method** - it is a method of gathering the free thoughts and opinions expressed by learners on a problem and using them to come to a definite solution.

There are written and oral forms of the mental attack method. We consider the impulse operation of lasers in the written form of such a method.

The operation of lasers in pulsed modes is characterized by three parameters in addition to the wavelength of radiation: the peak (maximum) intensity of radiation, pulse duration and pulse frequency (specified in the passport data).

Note: The order of pulsed laser radiation of constant amplitude and periodic series radiation is called pulsed-periodic (or quasi-continuous) depending on the order of pulse generation, in which the periodic sequence is broken and the pulses come with random amplitude and frequency.

Average power (W) is an integral characteristic of a pulsed mode laser, obtained by multiplying all three of the above quantities with sufficient accuracy to be used in medicine for the pulsed periodic mode, and all other characteristics of the laser are derived from this parameter.

Pulse frequency correction allows medical procedures (technologies) with an average power of one milliwatt to 15 W when operating with a laser at a nominal frequency range (15 kHz) at a frequency of 1 Gts.

The shape of the modulated radiation pulse is shown in the diagram in Figure 1. It should be noted that the modulation does not change the pulse energy and the power of the peaks in the group increases accordingly, resulting in a redistribution of the pulse energy equal to 1J, which is proportional to their quantity. The increase in power also depends on the location of the peaks along the pulse duration.
Figure 1. Some views of radiation pulse structures — neodymium-activated glass lasers, where a - free generation mode, b - modulated mode of laser operation; v - pulse laser pulse operating in free generation mode

Keys: The surgeon slowly guided the laser scalp and cut the tissue. Due to the fact that the surgeon exceeded the depth of the incision beyond the established norm, a lot of blood loss was observed in the patient. To investigate the situation, the chief doctor ordered the head of the department to conduct an investigation. In this case, the head of the department noted that the surgeon performed all the procedures correctly but there was a defect in the laser scalp device.

Questions about the case
1. In this case, did the head of the department correctly state?
2. Describe ways to solve the problem based on this situation?

CONCLUSION
The conclusion of this article is that the planned scientific, experimental and clinical results in modern laser medicine, taking into account the differences in the order of operation of lasers and the structure of radiation pulses, can be achieved by calculating the required energy dose of laser radiation and the time structure of radiation pulses, which, in turn, must be expressed in the passport and recommendation on the operation of the medical laser or laser medical device.

LIST OF USED LITERATURE
3. Лазеры и устройства управления лазерным излучением. Термины и определения. ГОСТ 15093–90.
NATIONAL SELF-AWARENESS: THE DISCOVERY OF DESTINY AND BEAUTY

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ABSTRACT
National self-awareness is an event directly related to one's life, destiny. Literature is a force that influences thinking through emotions, shaping a person's characters and outlook. It creates a new artistic world by summing up the call of the heart, the phenomenon of self-awareness with the pain and wonder of the soul. Certainly, the book “My Dagestan” and poetry of the great poet of Dagestan, Rasul Khamsatov and the works of the great Kyrgyz writer Chingiz Aitmatov have given a new impetus to the development of national identity in the works of Uzbek writers. Indeed, every talent gains strength and energy from other unique featured great talents. In this sense, we know how much Rasul Hamzatov enjoyed Oriental poetry at times, in particular, the works of Alisher Navoi. In addition, Amir Timur “Disciplines” of Chingiz Aitmatov, the teachings of Bahauddin Naqshbandi, the works of Alisher Navoiy, the works of the twentieth century Jadid literature, especially the works of Abdulla Kadiri were truly impressed him which contributed to his literary maturity. Therefore, this article tells about the great intimacy and spiritual harmony in the work of the great Uzbek writer Abdulla Kadiri and the great Kyrgyz writer Chingiz Aitmatov. To be more precise, the particularities related to the influence of Kadiri's works on Aitmatov’s artistic thinking which influenced on the development of world literature are analyzed.

KEY WORDS: Abdulla Kadiri, Bahauddin Naqshband, Chingiz Aitmatov, Dagestan, Jadid literature, writer.

1. INTRODUCTION
It is well-known that the feeling of love plays a special role in the self-consciousness of each nation and its adornment. In the Orient, two love-loving hearts can be united by marriage, according to Muslim values. It is said that all beings, the universe, and the angels welcome the covenant of the two beloved hearts. In the Oriental epics, the greatness of human love is again tested by faithfulness, and is strengthened by faithfulness. In many of them, if the heroes see their situation as the verdict of the destiny and fate, the heroes Ra’no and Anvar of “Mehrobdan chayon” (Scorpion from the Chancel), by the first modern novelist in Central Asia, Abdullah Kadiri sought to get out of a difficult situation they faced with unmatched courage and determination for their lifetime, they fought for the right to a happy life, proving that this trial was not destiny and fate. It was in this sense that the work had a revitalizing power.

In the preface to the fourth edition of the “Mehrobdan chayon”, academician I.Sultanov says: “Not only have we Uzbeks, but many peoples of our union learned lessons in this regard from Abdullah Kadiri. According to Mukhtar Avezov, a great Kazakh writer and one of the greatest representatives of world literature, A. Kadiri stays as “The Most Outstanding Oriental Soviet Writer” [1], [4].

It should be noted that this new literary interpretation in the work of Abdulla Kadiri has become a peculiar principle in the Oriental literature and has inspired many artists, including then-barely-recognized the then-young Kyrgyz writer Chingiz Aitmatov.

At first glance the novel by A. Kadiri “Mehrobdan chayon” and the story “Jamila” by Ch. Aitmatov seem to have no shared emotion or spiritual connections. Is it really so? The reader is quick to point out that Rano's immense love and devotion to Anvarmirzo is an indisputable spiritual gulf between Jamila’s betrayal for her husband Sadiq who was fighting in the war to win Donyor's love. Comparative analysis of the two works will attempt to shed light on the differing views on the story of Jamila.

Another important aspect of Oriental values is that the more glorious of love, loyalty, and faithfulness, the more the condemnation of unfaithfulness and betrayal of the beloved is. Adultery, that is to say, premarital coition is considered to be the most serious sin.
Influenced by such great values, many of us have been unable to forgive Jamila in the story of “Jamila” by Ch. Aitmatov for her betrayal to her husband for over 30 years. Because, we did not want to understand her love. According to the famous French writer Louis Aragon, “... How can a young man on the edge of Central Asia, in the second half of the twentieth century, write such a story, and, I swear, the best of love stories in the world?”, the comparison of the story with Shakespeare’s “Romeo and Juliet” seemed a bit too much for many. There were many scholars and readers who blamed the writer for the “courage” of Jamila, as the one who dishonored the Oriental values, and the one who abused marriage.

2. METHODS
Although famous writers and the Western world were highly acclaimed by the story, at times the writer had to receive serious criticism for the story of “Jamila”: “When the story “Jamila” was published, our presentable literary writer immediately stuck to it, - remembers the author. – “The story had been ruined in a sectarian meeting, in the eyes of the public ...” [2], [56].

While analyzing the “courage” of heroes of Aitmatov’s “Jamila” and Utkir Khashimov’s “Ikki eshik orasi” (Between Two Doors) a well-known literary scholar Yuldash Salijonov says: “In fact, this infidelity deserves serious discussion (the statement is ours - M.M). However, the writers behave unbiased in this regard. Chingiz Aitmatov will refer the assessment of Jamila’s actions to the storyteller Seit, the people from aul (a little village) and the readers who are directly witnesses to the incident.

Based on Oriental values, as prof. Salijonov said, this adultery is worth serious discussion. The main protagonist of Aitmatov’s “Jamila” story betrays her husband, who has been fighting in the war. It is clear that any Orientalist who comes to a hasty conclusion about the work, accuses Jamila of being unfaithful and ill-behaved. What is, in fact, reality?! Well, how did Ch. Aitmatov mange to violate the traditions of Oriental literature on this particular love? Did the French writer Louis Aragon appreciate this work for that reason alone? Who gave Aitmatov the will and strength to do so? Was he really the first in the East to sing such a rebellious love story?

3. RESULTS AND DISCUSSIONS
Although Kadiri’s first novel “Bygone Days” heroes’ destiny and fates end with tragic separation and doom in accordance with the Oriental traditions, the novel “Mehrobdan chayon” takes a completely new approach to the topic of love. Anvar’s lover, Ra’no, stands out for her fights with courage, love, and determination for her destiny. Rano does not consider the verdicts of time to be a fate. For the first time in this work, the author raises Rano’s courage to a level of stamina and skillfully expresses her courageous struggle for the happiness of not only the Uzbek but also the Eastern girl. This, in turn, had a strong influence on Ch. Aitmatov. The fact that he wrote the first story of his in the same spirit which proves the statement mentioned above.

We have comparative thoughts on the courage and persistence in Rano and Jamila’s nature which amazed their admirers, that shows that in writing his story “Jamila” Aitmatov was influenced by the peculiar tradition started by A.Kadiri.

As we read the story thoroughly, we begin to re-grasp meaning, symbols and essence hidden behind each word and line by Ch. Aitmatov. It feels like the curtains covering the words have been removed, and each expression seems to shine through the rays coming from the writer’s heart. The reason is that the writer had not committed something sinful as he was blamed for, he had not underestimated a millenium long traditions. He had not mock over marriage.

His heroine did not go through the street of betrayal. As we carefully researched the book, we realized why the author, although not so common in the Kyrgyz, called the girl, the heroine of the work with the name “Jamila” which means beauty. Now let’s move on to the comparative analysis of the essence of the works. First of all, how was Jamila and Sodiq’s family formed? Let’s Read on!

“... She was a daughter of a horseman in the Bakayar aul situated in the outskirts of a mountain, who grew up among the herdsman, from a young age, my brother Sadik was a rider, and one day he could not manage to overtake Jamila in a racing event organized in a grassland for the honor of a horsemen’s wedding. I knew that then he was ashamed and kidnapped her” [3], [79].

In the work, along with describing how Jamila gets trapped in the grip of furious Sodiq, the writer also draws the reader’s attention to the peculiar determination of Jamila’s nature: “Jamila’s behavior had some enthusiasm, a masculine personality. She was very enthusiastic about everything, and she never complained that her head and back, like many other brides, were in pain. But she was one of those stubborn women who would not let others to get her fortune, who would never stop arguing and insulting if she had to do” [4], [79].

The men in the aoul, especially the former soldiers who had returned from the front, could not dare to cross the border, though they would joke with Jamila. The reason was that Jamila was used to overreact. The author describes Jamila in such a way that the reader laughs, plays, and jokes with her, but his/her heart always feels not at ease. What would it be like to feel this pity for Jamila and miss her genuine happiness? In the process, the reader will be faced with endless questions as he looks at the sad life hidden in her joy. Did this family have any spiritual or moral foundations? Was this family fortified by a marriage that was agreed upon by both parties? Did Jamila’s heart and approval in the making of this family play a
role? Did anyone consider Jamila's will and wishes? Was Jamila happy with this marriage?

According to Islamic teachings, the family is built to please the Creator and to adorn humanity. In Islamic religion, a special emphasis is placed on marriage, that is, on the consent of both parties.

Now, back to the heroes of the work, Jamila does not receive matchmakers from Sodiq, nor does the consent of hers and her parents are sought. Despite seeming to agree with her fate, there was some sort of anonymous rebellion in the heart of Jamila. It seems that she was as helpless as a bird that had fallen into the eagle's claws against her dreams and happiness, and she appears to be as a flower, as a ray sentenced to die. The author describes this case through the words of Sei:

"... I noticed that Jamila was staring at the sunset for a long time. ... Jamila's hands were covering the sun and she was looking at the sun, smiling, looking at it, as if there was a strange sight."

There was hope and aspiration for tomorrow, a belief for a certain miracle to happen in her state towards the sunset "as if there was a stunning view". The author describes this situation through the words of Sei: "Jamila was silent for a moment in the setting sun. Then, as if talking to herself, not to me, she said, "Would such people understand what was in one's heart? God knows, maybe, there is no such man in the world!"

Through the episode of sunset the author describes how yet another day without a single dream of hers coming true made Jamila feel gloomy from deep down from her heart. She was living her life waiting for a true lover who could understand her heart full of love in the state of unrelatedness to her. She even did not bother to read the letter she received from her husband, to be more exact, did not rush to read it. The reason was that such letters could not light Jamila's dark heart. Why were her eyes faded? Because her dreams had been crushed by the rush of violence. She was condemned to give up the desires of the soul. She was tormented by the fact that she would never live in such an unhappy, unloving, or hopeless life.

It all starts with Jamila coming to the field to work on a daily basis. The chairman got her mother-in-law agreed. At first the mother-in-law hesitates and then feels at ease as her son Seit and mild-hearted Doniyor, who had returned home from war after getting injured, would be regular companions to her bride. The naive and timid Doniyor was the exact opposite of the bride. Jamila often humiliated and annoyed Doniyor.

The author slowly takes the reader to the world of Doniyor, who, at first glance, seems to be a quiet river, but in the depths of his heart playing waves. Yes, Doniyor had his own inner world. It is clear that the world was more beautiful, more charming, and full of hopes than this world. There was a great love devoted to someone there. Even Doniyor did not know to whom it was meant to be. Therefore, he would enter the world and enjoy it as soon as he could. Even Seit, though a young boy, could feel it. Sometimes his eyebrows were twitching, his eyes were twinkling and his body was filled with energy, and he seemed to leap out of his seat and stretch his arms around his chest to embrace the whole world. In another glance, he would seem just as an exhausted man getting more and more languish." [7], [85]. The reason for this dejection was to wait, wait and wait.

Ch. Aitmatov compares the development of the relationship between Doniyor and Jamila with such vivid images that we are amazed at how naturally the two opposite ends of poles are approaching each other. Every time Jamila and Seit overtake Daniel on the way, leaving him in the dust. Though it is a joke, Doniyor does not say a single word. He gently smiles at the chariot driven by Jamila and Seit passing by him with noise. He looks silently, in the state of joy as if he is content, to Jamila standing up on the cart whipping horses again and again. The writer draws the image of an overindulgent gentleman, at the same time with the heart full of mysterious grief through the single look of his.

Seit feels the beginning of the relationship between Jamila and Doniyor. More precisely, he is the one who sees this love sparkle in Doniyor's eyes, not in Jamila's.

The event of the "big bag" in the storage house is a turning point in the lives of heroes. In this scene, Doniyor's manly pride along with honor, his love which is reflected in his heart is revealed. Several calls of Jamila to Doniyor to throw such a heavy bag to the ground gets in vain, no matter how hard she tries to explain that all of these were just joke, he says "Move over!" and does not throw the bag away. Although Jamila laughs and says some sarcastic words as she follows Doniyor on his way towards the storage house through a hanging wooden corridor on his wounded feet, her laughter gets artificial over time. The call of Jamila "Return Back!" is left unresponded.

The next morning, when the grain was being packed, Jamila picked up the sack and tore it to pieces. And they go back to their normal jobs. The silence between them is also broken by Jamila herself; and she cannot keep silent. It was as if she was trying to entertain and relieve his frustration. On the other hand, there was a special layer of apology, a unique way of seeking for forgiveness. But this plea is not in the form of a plea, but in the vividness and joy of the nature of Jamila.

Jamila, at first, shudders, and then sings out loud with her enthusiastic voice coming from her hot boiling heart. Her song would let people relax. Suddenly, she stops singing and screams at Doniyor: "Hey, you, naive guy, get your voice out! Are you a man?" - says Jamila, Doniyor stops his chariot and responds: "Sing away, Jamila, I'm all ears." But Jamila is not satisfied with this. She asks a series of sarcastic questions: "Do you really think that others don't want to hear a song?". "Don't sing if you don't want to, look at the way he tries to excuse!". "Hey, Doniyor, have you ever been in love with someone?" Doniyor does not
respond to her ridiculous funny questions. Jamila gets silent too. When they cross the road and reach the rushing stream, Doniyor suddenly slows down the chariot, whips the horses, and starts to sing with a trembling voice.

Doniyor's singing also makes it clear that there is some charm and pain in the way he was singing. The author describes his situation from the Seit's words: "Is this the voice of the singer or something else that comes from the heart? What is it that touches the most delicate strings of a man's heart and gives him good intentions? Honestly, I can't even answer that question right now."[8], [94].

There were almost no words in this song, but the song was expressing all the joy, hopes, and wishes of the sincerest and sincere heart even without the words. Seit can't understand Doniyor. But it was clear that this day, as he had long been looking forward to, Doniyor was pouring out his entire secret. Doniyor sings so great that it feels as if his song is stirring up over the night field and awakening the sleeping field. Yes, it was the first step of two hearts to wake up. And the name of this awakening was love. From that day on, something will change in their lives.

Yes, it was a song about great love. In it there was a harmony of human love, spiritual and moral needs, and longing for the motherland, parents, friends, children, life, the world, and all goodness. The mystery of the song of Doniyor was that it made all the above images vivid in the listener's heart. Seit saw this as the reason for Doniyor's long-awaited and joyful time when he had been wandering abroad for many years, eager to see his country. For the man knew that with so much love and longing for his homeland, the sun of love and affection would shine in his heart.

Perhaps, it was at that time that his soulful songs about his motherland were born. As he listens to Doniyor's songs, he realizes why a human being loves and kisses her as if she were his own mother. This was the first time that he had experienced such a feeling in his heart. He is now burning with the strong desire that if he can feel and love the sacredness of his native soil, as well as the beauty, He can sing her hymn as Doniyor.

Because of these events, the work reaches its climax. Now a new, completely different world opens up in the heroes’ inner world. After that, Jamila was radically changed. The former cheerful, joking, and eloquent bride just fades away. Her playful eyes now look as sad as the sun on a cloudy day. It is no wonder as it was bearing the question of as to whether the sun could drive away the cloud blocking her path from her eyes. As they were going along the road Jamila was deep in thought and she was wearing a light barely noticeable smile. But it seemed that she was enjoying something delicately known to her only, and rejoicing in it. She was as if burning in two bonfires, and she knew what the other bonfire was and felt anxious as if she knew what was to come.

“Sometimes, on the contrary, he would shake the sack from his cart to his shoulder and stay there, as if his mind had broken something. He was like a man who, in his standing, was confronted with raging water and was amazed that he could not pass it. [9]” The author here adheres to his own style and describes the situation on the basis of a particular image. Though Jamila's sanity ordered her not to go through this water, her heart was leading her to this storm. Jamila takes Doniyor's shirt to the channel to wash and then hangs it to dry as she wipes the wrinkles. At this moment, she strokes the shirt for a long time, unknowingly. The plot of the story becomes even more acute in the process of Jamila's joke with the young men. Doniyor looked at the young men as if he was going to chew them out, and it was as if he was going to run in no time to free Jamila out of their hands.

Hidden aspiration lying in both hearts for many years was now revealing itself in its true full form overcoming any kinds of obstacles and embarrassment. A magical power led Jamila to Doniyor. After all, he wasn't the guy of yesterday. Now he was singing with such a heart that he could not understand what was going on. With her heart pounding and relaxing, Jamila would never notice her hand reaching out involuntarily. Daniel would not notice it ...

The love that Jamila and Doniyor had in their hearts was so pure and so fresh that they could hardly put it out of their bodies, they had no way other than to endure its pleasure and suffer and to obey it unconditionally. Even little Seit, who was impressed by these happy moments, thought for a moment that "It would be great if Jamila were in love with Doniyor." However, the thought that she was a bride and she was his brother's wife and it was awkward and troubling. Seit looks at Jamila's face which was growing more beautiful and more refined, and flashing of light, and although he could not realize how pure, decent and imaginative she is in her heart, and that love is a powerful force that leads man to dreams and prospects, he could sense the wake-up in these two bodies with his little heart, he watches them with surprise and joy at times.

It was so beautiful and charming that Seit's brain, influenced by Doniyor's songs, got an idea "I'll draw their picture!" - he thought and felt ecstatic as if he had found something unique. Although initially fearful of his own thinking as he thought as the whether "Can I do this or not?" - the desire overcame his fears and decided, "Yes, of course, I draw their picture, and I portray them as happy as they are now!" Doniyor's song suddenly stopped as Seit was in the midst of such beautiful thoughts. It all happens in an instant, and Jamila unconsciously hugs and embraces Doniyor, then she jumps off the chariot as if something frightened her. Jamila stays up in the middle of the road facing us, says to Seit, crying, "Why are you looking? What thing of yours is with me? Do not look at me; drive your cart and go!" Then she turns to Daniel.
and says, "Well, and you, why are you standing like a log, drive your carriage! What a disaster that you have happened to be to me!" The words of impatient sigh of relief indicated how much her heart was suffering and burning between the boundaries of voluntariness and involuntariness.

Finally, we get closer to the events that are the culmination of the work. Here, for a moment, we will turn to the turning points of A. Kadiır's novel "Mehrobdan chayon". These two points show the courage and determination of two heroines Rano and Jamila to admire their beloved. We understand that A. Kadiyr did not call this chapter a "brave girl" for nothing.

Ra'ño, who had been engaged to the Khan of Kokand against her dreams, love, desires, and pleasure, was helpless in the face of this tyranny for a moment. Anvar, who worked as Khan's palace as an officer, was totally helpless. Unfortunately, such events are very common in the history of humanity and in the life of the peoples of the East. In many of these, the lovers surrendered in the face of fate. For the first time Abdulla Kadyr had set fire to the charcoal in the heart of Kumush in the heart of the Ra'ño, and with the brutality of the girl, he undertakes this risky task and destroys the "millennium wall."

Ra'ño sends a letter to Anvar through the trustees, and the burden of the letter was very heavy: "... Who would think that it is a noble deed of yours to be influenced from the bottom of your heart to the little thing in the darkest moments? You cannot be blamed for failing to save the life of an unfortunate girl; but is it written in the legends or credited in there that when unhappy Ra'ño is under threat, when today or tomorrow is going to be a tragic day for her, should her loyal companion? Don't worry about having such a great blame, my dear Anvar. If you yearn for forgiveness of these sins, you should do one thing, and the easiest service for you: Come to us tomorrow, Wednesday, if you wish openly, or if you do not wish secretly, and say your last words to me. For, where you point the light, Ra'ño is going to see her end"[10], [97].

As Kadiır wrote, this letter from Ra'ño was a concern for Anvar. It made no sense to approach her, but instead he saw the burning of the heart and the renewal of the wounds. He felt no sign of goodness in the action, realized how devastating it was, and even when he met Ra'ño he could see nothing but tears and frustration. But the not visiting her would also not be right for worth of the long-years love and the dignity of the young man. Therefore, Anvar was determined to meet Rano no matter how challenging the situation was. During the meeting Anvar, who decided to quit his job as a head of officers and to leave Kokand completely, was addressed with unexpected courage by Ra'ño saying: "- Would you not... Would you not take me with yourself?" The words of Ra'ño was responded by Anvar as, "- Would it be... Would it be possible for you, Ra'ño?" And Ra'ño replies with trembling voice saying "possible..."[11], [258].

Anvar was taken back from the unexpected suggestion, and he thinks to himself that she was a "brave girl". Indeed, this was the first time for women to act rebellious towards the animalistic manner of Khudayarkhan. Despite consciously expecting how hard and dangerous it was going to be in the future, Anvar embraces the bravery listening to his heart's decision.

Let us go back to the plot when Jamila and Doniyor were in the same predicament. For some reason, it is not a good thing for Jamila to receive a letter from a colleague who met her husband Sodik in one of Saratov's hospitals which does not cause her happiness.

"Jamila hurriedly took the letter, blushing at first, whether she was excited or ashamed, and then turned pale and silently looked at Doniyor. He stretched his legs like in the storage house, and stood alone near his chariot, looking sad at Jamila. "[12], [264].

This melancholy would mean the defenselessness of love in the face of impossibility; it would mean that the love had no other options than to surrender. The reason is that Jamila was the wife of a soldier who had been fighting walking over the blood in the war. That was the side which was putting Doniyor's heart in fire. Yet, he did not know how to cross the border of impossibility. It is then that the "brave woman" Jamila, by her courage and dare, crossed that border destructively. Because she had the right to live happily, just as Ra'ño, who said "I won't sleep in the dirty bed of Khan", did. According to the literary researcher Kh. Lutfiddinova, "This breviary is the breviary that destructed the slavery, dependency, helplessness, instability, coward and jailbird chains which have been living in the spirituality of Uzbek girls and women" [13], [105]. Ch. Aitmatov defines the courage of Jamila in this term as follows:

"- Doniyor, here I am, I have come myself! – She said whispering.

The surrounding is as silent as a grave; a bolt of lightning strikes the sky causing a horrific thunderclap.

"Have you been upset? Are you feeling despondent? The silence took place again, the soil near the bank of water plopped as it dropped into water.

Lightning boomed over the mountains. When Jamila glanced frightenedly, the light shone on her face. Jamila looked around and threw herself into Doniyor’s chest; her shoulders were trembling under Doniyor’s strong hands..." [14], [9].

In this case as well, Ch. Aitmatov describes the inner rebellions and uprisings of heroes in harmony with natural phenomena in accordance with his artistic style and skills. Yes, "the bank plopped, the lightning boomed over a millennium old mountains". We can see the extreme example of that in exactly the aforementioned situation. The courage of Jamila...
.injected power into Doniyor who had completely lost himself in the world of hopelessness:

"I have always loved you. Even though I had never seen you before, I constantly thought of you in lying down in the trench. I knew that my loved one was in my homeland. This was you, My Jamila" [15], [106]. This is how the writer describes such a subsequent situation. "There came rain then. The black canvas covering the roof of the black house flew in the wind like a winged bird. Sometimes the sloping, sometimes vertically rain poured down upon the soil kissing as if it was waiting for the soil. It was as if a series of thunderstorms soared and the whole sky swept through. The mountains so far away looked as red as spring tulips" [16], [107]. The writer describes this hope reborn in Doniyor’s heart that beautifully. This hope led them to new life. Seit says goodbye not only to Jamila and Doniyor, but also to his childhood. The next day, rumors spread in the aul. Everyone condemns Jamila.

In the aul, it was only Seit who did not condemn Jamila for her escape with Doniyor, and found her right. He believed that Jamila and Doniyor, a high-hearted man, had found their true happiness. He did not feel sympathetic for his brother at all, but he did feel pity on his mother. After that, the mother felt very vulnerable and lost all her power. A mother, whose understanding of a task for a married women to be lifelong commitment to a husband in married life, was not able to understand that the flow of life which is cruelly engrossed in the old roots and pursued with new happiness. Sodik, who came from the military, was not feeling furious for the loss of love, and the beloved wife, but for the sake of manly honor. The manly honor, yes, he had stolen Jamila because of this desire, not asking for her consent or agreement and not counting on her dreams. So when he drank, he would say, "It is a bastard that has gone! She will wander around and die of hunger sooner or later. The world is full of wives; one can choose the best one among many. A frog-headed husband is far better than a golden-headed wife!"

One day, while Seit was painting a picture at his house, the door suddenly opens, and his brother Sodik, whose eyes were pale and bloody with anger, comes into the house. "Did you draw it?" he showed him a piece of paper with anger. It was a picture of Doniyor and Jamila sitting on the storage house painted in a pencil. When his brother heard him say, "Yes, I drew it," he said, "Oh, you betrayer!" he tore the picture into pieces, tucked it under his feet, and then closed the door hard as he went out.

The mother asks Seit "Did you know it?" and he responds saying "Yes, I did!" As Seit looks at the torn picture lying down on the ground, he cannot bear with the humiliation nailing him in his heart: "Fine, I am a "traitor" to our family and tribe, but I have not betrayed on humanity, the truth and the honesty of life. In contrast, I have been on the side of justice..." [17], [111]. Unfortunately, Neither people nor even his own mom could understand such emotions and situation.

It was a triumph of happiness over old habits and beliefs that undermined the unhappiness, the gloom, and the right to love.

As we mentioned at the outset, Chingiz Aitmatov did not name this story as “Jamila” for no reason. Jamila is a beauty, and this work is a symbol of true beauty. In fact, the names Jamil and Jamila are most common in the countries of the East. Often, our scholars say comforting words, "(May the Almighty bless you with a beautiful patience)" when consoling families. Apparently, the words “jamil” and “jamila” do not only mean the physical beauty, but also the beauty, inner beauty of the person, the light and the pleasure that comes from endurance and patience. From this it can be said that this work is primarily the work of the beauty of the hearts of those who have overcome the darkness and ignorance by the sun of love.

When a person has a big heart, it can include the homeland, the creation, all the good, and he looks everything lovingly ... Maybe, that is what drew Louis Aragon's attention? In this sense, this work was a modern interpretation of Oriental love based on the poems "Tohir and Zuhra", "Layli and Majnum", "Farhad and Shirin". The reason of this was that there is no lust, nor passion towards intercourse, but purity, freshness, spiritual harmony, pure bliss, and perfection. It was the love of the author's dream. The reason was that he grew up influenced by such love stories. Now his only goal was to bring it closer to the heart of the world, this was a modern interpretation of Oriental love that was elevated by the will to beauty.

Seit in "Jamila" is the author himself. First of all, the author is in love with this beauty. Seit draws a picture of pure love in his eyes, which he wants to show the world. It was an image of happiness, of happy ending. The child is insulted for not telling although he knew it, in fact, the insults were aimed at the author himself. The author knew that they would blame him, just as they blamed the child.

What is life? Why does man come into this world? Does a person have the right to love and be loved? In a forced way of life, Jamila's words seemed to light up, but her heart was still in the dark. In this compulsory way of life, she was looking for a bunch of light. In Doniyor she saw the true life, the beauty of the heart, the world that she longed for and desired. At first, she humiliated Doniyor and laughed at him. Then, the beauty of Jamila's heart surrendered to the sun, which burst through the black clouds, and she rushed to Doniyor. Jamila was abducted against her wishes and dreams. She had the right to live as she pleased, to love whomever she wanted. Unlike Jamila's predecessors, she did not admit what was in her fate saying "C'est la vie". She fought for life, struggled for her dreams, and love. Jamila and Sodik, the couple did not have a sacred marriage in their essence. The author does not refer to marriage anywhere. On the contrary, the essence of this captive life was cruelty and ignorance.
If Sodik was a symbol of ignorance, Jamila was a symbol of freedom that penetrated the veil of ignorance.

Chingiz Aitmatov brings Jamila to the world, palace of love from the paws of cruel fate. He gives her the love, the happiness of love, the happiness of living as a human being. Needless to say, the marriage of Jamila and Daniel is “organized” by the author himself.

Remember, there is such a passage in the work. Seit can never forget the scene of Doniyor and Jamila sitting next to each other on the chariot. In the end, he stole a thick sheet of paper from the accountant from the storage house, and hides behind the stack, put it on a grain-cutting shovel, and began to portray them with excitement. The author writes the scene as follows: "I said "Bismillih" as my father said when putting me on the horse for the first time, and let the pencil touch the paper."

Note that the boy, that is, Seit, started painting by saying "bismillah," in other words, "in the name of Allah." Seit seems to have wedded two sweethearts and wished them a new way of life… Although it was not allowed to use the word in the literature works at the times of Soviet regime, Chingiz Aitmatov firmly says the sacred word. The writer here refers to the great value. In the name of Allah, he gives his heroes the right to live and love and to be happy, and to guide them in this life.

"Jamila" is a work that glorifies the love and right to live within the hearts condemned to exist, ignorant of the existing traditions, which are created against the wishes of human beings, especially girls. Yes, every soul has the right to love, to be loved, to marry, to build a family according to the will and hope of the two souls. Many scholars and ordinary readers describe this rebellion in the nature of Jamila as contrary to the Oriental mentality and values.

4. CONCLUSION

According to the teachings of Sacred Islam, Islam forbade man to marry women when they did not request or permit it. So it is rebellion against ignorance, not religious values. That is why, we fall in love with Jamila, approve of her struggle for happiness, and the only reason we admire her is the voice that applauds Jamila deep in our hearts. This is the right of the hearts.

"Behold, the sun was rising up from the mountain, and the lonely sunflower on the ditch was reaching out to it. It was surrounded by crows, but the sunflower was eager to go to heaven, with its yellow flowery heads proudly absorbing the sun rays." It is the embodiment of the courage and love that captivated us, the triumph of the human will, the human heart and love that did not obey the fate of destiny.

From the analysis it can be concluded that Jamila, the courageous woman who has taken the first step in this regard, who is determined to change her destiny for love and happiness, is the symbol of elegance - Ra’no's counselor sister.

Chingiz Aitmatov's Jamila also has the courage to embrace the beautiful love as Abdullah Kadiri's Ra’no. After all, it was a poem about the illuminated souls who, in the hope of self-realization, sought love, happiness, conquered ignorance, and surrendered before beauty.

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A STUDY OF GRAMMATICAL SKILLS AND EFFECTIVENESS OF TEACHING OF ENGLISH GRAMMAR IN THE B.Ed. STUDENT-TEACHERS

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ABSTRACT
Grammar lays the groundwork for English language. It has an immense bearing on the skills of language namely, reading, writing, listening and speaking. Advanced communication competencies call for an improved level of grammatical ability. Capability in communication, involves the awareness and application of suitable grammar and language to express precise meaning. Thus, instruction of grammar is crucial and thus has found its way into curriculum.

English chiefly as a second or a foreign language is intricate to acquire naturally; preparation and planned education are very important. Though it is debated that some learners gain grammar principles naturally, but the importance of Grammar for fluent and appropriate use of English Language cannot be demeaned.

With this point of view, the researcher constructed an English Grammar Course and intended to investigate its effectiveness among the B.Ed. student-teachers. The researcher used an experimental method to check the effectiveness of the course in case of First and Second year B.Ed student-teachers.


INTRODUCTION
Language of an individual serves as a mirror to ones thoughts, values and beliefs. Thus it plays a pivotal role in the overall development of an individual. It serves as a formative feature in the success of a student in his academic achievements as well as his social interaction in school and community at large. English being an international language is given immense significance in curricula all over the globe. It thus becomes vital to learn this international language in its aptness.

Grammar is the base of English language. It has an immense bearing on the skills of language namely, reading, writing, listening and speaking. Advanced communication competencies call for an improved level of grammatical ability. Capability in communication involves the awareness and application of suitable grammar and language to express precise meaning. Thus, instruction of grammar is crucial and thus has found its way into curriculum.

English chiefly as a second or a foreign language is intricate to acquire naturally; preparation and planned education are very important. Though it is debated that some learners gain grammar principles naturally, but importance of Grammar for fluent and appropriate use of English Language cannot be demeaned.

Teachers play a key role to empower students with the skills of English language. It is the teachers who to a great degree have an impact at improving the language skills of their pupils. Thus, it is of chief significance that the teachers should have an optimum level of competency in English language. It is essential to make sure that the English Grammar skills of teachers are honed prior to their teaching career. With this aim, the researcher constructed an English Grammar Course and intended at investigating the efficacy of this course among the B.Ed. student-teachers. The researcher used an experimental method to determine the effectiveness of the course in case of First and Second year B.Ed student-teachers.
STATISTICAL DESIGN
The experimental method with a pretest-posttest research design was used in this study.

Sample
The sample of the study comprised of the student-teachers pursuing the Bachelor of Education (B.Ed.) degree. The total number of participants was 78 of which 49 student-teachers were studying in First year B.Ed. (F.Y.B.Ed.), while 29 student-teachers were studying in Second year B.Ed. (S.Y.B.Ed.)

METHODOLOGY
Experimental method is used by the researcher to conduct this study. One-group Pretest-posttest research design was used. A test on a single group before the treatment and after the treatment was administered. An English Grammar Course was developed by the researcher. This course was divided in 20 modules. Each module dealt with one topic of English Grammar and consisted of study material, assignments and quizzes. To test the initial level of competency in English Grammar, the researcher administered the pretest. After the pretest, student-teachers were taught the concepts in English Grammar using the English Grammar course developed by the researcher. The posttest was administered after the Grammar Course was conducted. The pretest and the posttest consisted of 50 MCQ type questions based on the topics that were dealt with in the English Grammar Course.

Null Hypothesis
1. There is no significant difference between the pretest of the F.Y.B.Ed. and S.Y.B.Ed. student-teachers.
2. There is no significant difference between the posttest scores of the F.Y.B.Ed. and S.Y.B.Ed. student-teachers.

Analysis and Findings
To determine the difference in the grammatical competencies of the F.Y.B.Ed. and S.Y.B.Ed. student-teachers in the pre-test and post-test scores, t-test was applied.

Testing Hypothesis 1
The null hypothesis states that there is no significant difference between the pretest scores of the F.Y.B.Ed. and S.Y.B.Ed. student-teachers.

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of Students</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>df</th>
<th>t-Value</th>
<th>P</th>
<th>Level of Significance</th>
</tr>
</thead>
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<tr>
<td>F.Y.B.Ed.</td>
<td>49</td>
<td>36.3265</td>
<td>5.1372</td>
<td>76</td>
<td>0.82</td>
<td>0.4147</td>
<td>Not Significant</td>
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<tr>
<td>S.Y.B.Ed.</td>
<td>29</td>
<td>35.3103</td>
<td>5.5491</td>
<td></td>
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</tbody>
</table>

The calculated t-value from the table is 0.82 while the t-value from the table at 0.05 level is 2.00 and at 0.01 level is 2.66. That means that the calculated t-value is less than the table value at both 0.05 and 0.01 level. Hence the null hypothesis was accepted. Thus there is no significant difference in the pretest scores of the F.Y.B.Ed. and S.Y.B.Ed. student-teachers.

Testing Hypothesis 2
The null hypothesis states that there is no significant difference between the posttest scores of the F.Y.B.Ed. and S.Y.B.Ed. student-teachers.

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of Students</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>df</th>
<th>t-Value</th>
<th>P</th>
<th>Level of Significance</th>
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<td>76</td>
<td>0.6</td>
<td>0.5502</td>
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<td>S.Y.B.Ed.</td>
<td>29</td>
<td>45.7586</td>
<td>4.0940</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The calculated t-value from the table is 0.6 while the t-value from the table at 0.05 level is 2.00 and at 0.01 level is 2.66. That means that the calculated t-value is less than the table value at both 0.05 and 0.01 level. Hence the null hypothesis was accepted. Thus there is no significant difference in the posttest scores of the F.Y.B.Ed. and S.Y.B.Ed. student-teachers.

Also, the p-value is more than .0001 thus it is statistically not significant. This further suggests that the null hypothesis is accepted, reinforcing no
significant difference in the posttest scores of the F.Y.B.Ed. and S.Y.B.Ed. student-teachers.

RESULTS AND DISCUSSION

The findings show that there is no significant difference in the pretest scores of both the F.Y.B.Ed. and S.Y.B.Ed. student-teachers. This shows that the level of competency in Grammar is almost similar in case of both the F.Y.B.Ed. and S.Y.B.Ed. student-teachers in the pre test.

This further suggests that even though S.Y.B.Ed. students had a complete year of training in the B.Ed. course, there was no marked difference between their pre-test scores and the pre-test scores of the F.Y.B.Ed. students. Thus, there was probably no marked enhancement in their grammatical skills and thus the B.Ed. course may not have contributed to the knowledge of Grammar of the student-teachers.

The findings show that there is no significant difference in the pretest scores of both the F.Y.B.Ed. and S.Y.B.Ed. student-teachers. This shows that the level of competency in Grammar is almost similar in case of both the the F.Y.B.Ed. and S.Y.B.Ed. student-teachers in the post test.

This may be because both the groups had similar level of proficiency in grammar at the beginning of the course as suggested by the pre test scores in the table 1. And further both the groups were given the same treatment, i.e. they were taught using the same modules in the grammar course and hence there was similar increase in the knowledge level of both the F.Y.B.Ed. and S.Y.B.Ed. student-teachers. This further suggests that there may not be any significant impact of the teacher training received for one year by the S.Y.B.Ed. student-teachers on the ability to gain grammatical skills through the Grammar Course designed by the researcher. Hence the knowledge gained by the F.Y.B.Ed. and S.Y.B.Ed. student-teachers does not have any influence of the teacher training received during the B.Ed. course.

CONCLUSION

1. The findings shows that the level of competency in Grammar is almost similar in case of both the F.Y.B.Ed. and S.Y.B.Ed. student-teachers in the pre test as well as in the post test.
2. Results in the tables 1 and 2 show that the achievement of student-teachers after attending the English Grammar Course is significantly higher than the pretest achievement.
3. The B.Ed. course may not contribute to the knowledge of Grammar of the student-teachers. There may not be specific training or provision made in the B.Ed. curriculum to enhance grammar skills of the student-teachers.

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WORK, OPPORTUNITIES AND CONDITIONS ON PUBLIC HEALTH PROTECTION IN UZBEKISTAN

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ANNOTATION
In this article described improvement of health care system in our country. Essential attention is given to social protection of motherhood and children. The author analyses admitting of achievement of our government in the sphere of health care by the world society.
KEYWORDS: health care, reform, medical service, harmoniously developed generation

INTRODUCTION
The book of the first President of Uzbekistan Islam Karimov "Uzbekistan on the threshold of independence" provides an in-depth analysis of the political, economic, cultural and spiritual situation in Uzbekistan in the late 80s and early 90s. It states: “When we talk about focusing on social issues, it is important to emphasize that improving health is a priority. On top of the fact that the material base of this network is extremely poor, we do not have a well-organized and efficient use of this sector. It is no exaggeration to say that the nation's offspring fund will have to carry out a large set of large-scale measures to save it from disaster. The role of family physician needs to be reinstated. It is time to address this issue, organize the training of such doctors and create working conditions for them.” (Khayrullayev Ch.K., Khayrullayeva Z.Ch. et al., August, 2020).

MAIN PART
The Decree "On the State Program of Health Care Reform in the Republic of Uzbekistan", adopted as a prelude to one of the five important principles set by the first President of our country in the first period of independence, has served as a solid foundation. One of the important issues is that every parent should pay attention to the health of their child not before they reach the age of marriage, but much earlier. Article 17 of the “Family Code” of the Republic of Uzbekistan of 1998 (“Code of the Family” of the Republic of Uzbekistan, et al., 1998) stipulates that married persons must undergo a medical examination before their marriage can be registered. According to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated August 25, 2003 (Resolution of the Cabinet of Ministers of the Republic of Uzbekistan, et al., 2003), the marriage will be subjected to an in-depth, high-quality medical examination before the marriage is...
registered. According to the decision, the couple will now undergo a comprehensive medical examination at the clinic where they are registered for five different diseases: mental, drug, trauma, tuberculosis, AIDS, without having to undergo a general medical examination. If the disease is diagnosed in boys and girls, it is up to them to decide whether to get married or not. Premarital medical examinations are mandatory in many countries. Hence, it would be incorrect to understand human health, the purity of society, as a deliberate necessity as an infringement on human freedom. In Uzbekistan, medical examinations are free of charge. 160,000 (320,000 young men and women) are registered in the country every year.

During the years of independence, many effective activities have been carried out, such as improving the quality of medical services, bringing medical care closer to the population by improving the activities of rural health posts, the establishment of modern specialized research centers in 10 important areas of medicine. On the basis of the Resolution of the First President of the Republic of Uzbekistan dated November 28, 2011 "On measures to further deepen the reform of the health care system" (Khayrullayev Ch.K., et al., June, 2020), 102 more rural health posts were established in the most remote areas of the country. Over the years, the measures taken in our country within the framework of the program "Healthy mother - healthy child" recognized by the international community have reached a new level. In particular, in cooperation with the UN, UNICEF and other international funds, the Health-3 project has improved the skills of medical staff, qualified diagnostics using modern technical means, early treatment of diseases on a clear plan, with special coverage of all segments of the population. Diagnostic, screening and perinatal centers equipped with modern medical equipment, new maternity wards have been built in the capital and regions to protect the health of mothers and children. New screening centers have been established in all regions within the framework of the State Program "Mother and Child Screening", achievements in the field of public health, in particular maternal and child health. In 2011, a number of international organizations, including the World Health Organization, participated in the International Symposium "National Model of Maternal and Child Health in Uzbekistan: Healthy Mother - Healthy Child" in Tashkent. The organization was highly praised by UNICEF.

In 2007, Uzbekistan was included in the list of 4 out of 53 countries designated by the World Health Organization for the implementation of the European Strategic Program "Health and Development of Children and Adolescents" became the criterion. In 2010, the World Health Organization recommended the Uzbek medical model as a model for other countries. In 2011, Save the Children in the United Kingdom ranked Uzbekistan as one of the top 10 countries in the world for child health among 161 countries. As a result of measures taken to ensure epidemiological stability in our country, for a number of years no polio, diphtheria, tetanus were registered among the population. In 2002, Uzbekistan received a certificate from the World Health Organization on the polio-free zone. As a result of effective preventive and anti-epidemic measures, quarantine and highly contagious diseases such as plague, plague, yellow fever, anthrax, avian influenza, as well as the spread of the new A (HINI) influenza have been prevented.

If we look at the annals, 1999 - "Year of Women", 2000 - "Year of Healthy Generation", 2001 "Year of Mothers and Children", 2008 - "Year of Youth", 2010 - "Year of harmoniously developed generation", 2012 - the year of the Family, 2014 - the Year of the Healthy Child, 2016 - the Year of the Healthy Mother and Child. On February 7, 2017, President Sh.M.Mirziyoyev approved the "Action Strategy for further development of Uzbekistan in 2017-2021" (Decree of the President of the Republic of Uzbekistan, et al., February 7, 2017). The state programs adopted during these years, as well as the work done in accordance with it, have served as an important factor in educating a comprehensively developed generation in our country.

The achievements of Uzbekistan in this area have been recognized by foreign experts. For example, the Minister of Health of Latvia Ingrida Tsirtsene said: “Uzbekistan has made great strides in this area. In 2011, Uzbekistan has reached a new level. In particular, in cooperation with the UN, UNICEF and other international funds, the Health-3 project has improved the skills of medical staff, qualified diagnostics using modern technical means, early treatment of diseases in a clear plan, with special coverage of all segments of the population. Diagnostic, screening and perinatal centers equipped with modern medical equipment, new maternity wards have been built in the capital and regions to protect the health of mothers and children. New screening centers have been established in all regions within the framework of the State Program "Mother and Child Screening", achievements in the field of public health, in particular maternal and child health. In 2011, a number of international organizations, including the World Health Organization, participated in the International Symposium "National Model of Maternal and Child Health in Uzbekistan: Healthy Mother - Healthy Child" in Tashkent. The organization was highly praised by UNICEF. According to the “Yuksalish” national movement, the 11th meeting of UNICEF (November 8-9, 2018, Geneva) decided to establish an annual special award to recognize and promote the achievements of individuals who make a significant contribution to the prevention and control of noncommunicable diseases.
On May 20, 2019, at the 72nd session of the World Health Organization (WHO) in Geneva, the Minister of Health of the Republic of Uzbekistan Alisher Shodmonov was elected WHO Vice-President for the WHO European Region.

It is a great achievement that Uzbekistan, among the few countries in the world, has recognized the complete eradication of malaria on its territory.

It is worth noting the great assistance of WHO experts in creating a concept for the development of the health system of the Republic of Uzbekistan in 2019-2025, approved by the Presidential Decree dated December 7, 2018 "On comprehensive measures to radically improve the health system of the Republic of Uzbekistan" (Decree of the President of the Republic of Uzbekistan, et al., December 7, 2018). Thanks to the support of international experts, effective measures are being taken to improve health financing, introduce compulsory health insurance and e-health, promote healthy lifestyles and healthy eating, fight infectious and non-communicable diseases, and harmful habits.

It is known that today the coronavirus pandemic has spread all over the world and did not bypass Uzbekistan. Nowadays, all efforts and means, funds and resources are aimed at preventing the spread of the coronavirus epidemic, the recovery of those infected with the virus, the stabilization of the sanitary-epidemiological situation in the whole country. In order to protect the life and health of citizens, on March 23, 2020, the Cabinet of Ministers of the Republic of Uzbekistan adopted a resolution "On additional measures against the spread of coronavirus infection" (Resolution of the Cabinet of Ministers of the Republic of Uzbekistan, et al., March 23, 2020).

It also outlined the following additional tasks: to develop and implement the necessary measures to prevent the spread of coronavirus infection among the population; to coordinate the activities of law enforcement and other government agencies within their competence; control over the uninterrupted supply of priority medicines, masks and medical supplies (disinfectants, etc.) to the population at fixed prices; regular analysis of the situation with the spread of coronavirus infection in the country, etc.

The responsibility to fight the virus and save lives naturally falls on doctors. The pandemic has shown how important a profession doctors are and how they have a place in society. Every day is a heroic day for the medical staff who have been carrying out such an honorable task faithfully to their oath.

At present, large-scale measures are being taken in our country to prevent the entry and spread of coronavirus. In particular, strict control was established over the provision of sanitary and epidemiological tranquility, control of the epidemic and compliance with quarantine regulations.

Comprehensive measures against coronavirus in the country and, most importantly, the transition of the population to a life of isolation and adherence to the principle of "social distance" by the population with a deep sense of responsibility are clearly bearing fruit.

CONCLUSION

As President Mirziyoyev Sh. M. noted at the solemn meeting on the occasion of the 27th anniversary of the adoption of the Constitution of the Republic of Uzbekistan: "In Uzbekistan today, the entry into social life of the harmoniously developed young generation, who think freely and make a worthy contribution to the development of the country, is of great importance. In Uzbekistan, children with a bright future are treated with confidence and respect, and all opportunities are created for them to grow up healthy and strong. It is no coincidence that the work being done in our country in this direction is recognized by the world community".

USED LITERATURE

3. Resolution of the President of the Republic of Uzbekistan on measures to further deepen the reform of the health care system. (November 28, 2011) On measures to further deepen the reform of the health care system
5. Decree of the President of the Republic of Uzbekistan on comprehensive measures to radically improve the health care system of the Republic of Uzbekistan. (December 7, 2018).
6. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan on additional measures against the spread of coronavirus infection. (March 23, 2020)
COLLECTION, PRESERVATION, PROTECTION AND ACCESS OF TRADITIONAL KNOWLEDGE

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Sindewahi,
Distt. Chandrapur

INTRODUCTION
Traditional knowledge is the knowledge that we receive through word of mouth at home or through social, cultural and religious customs, environment, age-old skill, habits, local languages, arts, crafts, folklore etc. This Knowledge is achieved through complex processes that have succeeded protecting it for generations in the past. This knowledge may be known to in person or to a group of persons. The indigenous people of the world possess an immense knowledge of their environment, based on centuries of living close to nature. Living in and from the richness and variety of complex ecosystems, they have an understanding of the properties of plants and animal, the functioning of ecosystems and the techniques using and managing them that are particular and often detailed. In rural communities in developing countries, locally occurring species are relied on for many - sometimes all – foods, medicines, fuel, building materials and other products. Equally, people’s knowledge and perceptions of the environment, and their relationships with it, are often important elements of cultural identity. Traditional knowledge is frequently described and understood as communal or public knowledge, WIPO considers that traditional knowledge would encompass ‘the content of knowledge would encompass ‘the content of knowledge itself as well as well as traditional cultural expressions, and signs and symbols associated with traditional knowledge’, and would also refer to ‘the comment or substance of traditional know-how, kills, practices and learning.’

Traditional knowledge is thus tradition-based. It may or may not be proven scientific or authentic in a modern since but it could have all such attributes and yet be termed as traditional. We notice, therefore, that knowledge is eternal. It is the leveling that it receives as a result of its occurrence and form in the time and space it flourishes in and then flows down to generations, spreads to other lands or diminishes as a result of various economic, scientific and technological factors. The scientists often reject traditional knowledge as they consider it to be anecdotal and unscientific. But a good scientist will consider it necessary to test traditional knowledge within scientific principles while scientists test traditional knowledge, it would be ideal to collect and classify it. That would help its interpretation in a scientific manner. We all known that science is the systematized body of knowledge and traditional knowledge and traditional knowledge is not systematize but has flowed down from generation to generation after getting tested in nature settings time and time again. This time-tested characteristic of traditional knowledge could also be readable within a fixed set of parameters. But to identify those parameters is a complex process. Thus, in the absence of such tests traditional knowledge is not looked at as scientific knowledge, although within a fixed set of parameters. But to identify and quality those parameters is a complex process. Thus, in the absence of such tests traditional knowledge is not looked at as scientific knowledge is as much a reality as a scientific observation could be. Therefore, comparisons are not necessary unless scientific study would trivialize traditional institution. In the field of environment, for instance tradition knowledge may be supplemented by new scientific studies. People could admit a change in practices and beliefs, as a result of such studies.

Collection
Traditional knowledge is collective in nature and is consider being the property of the entire community. It does not belong to a single individual but sometimes, it may be known to a single individual. It is transmitted through cultural and traditional information exchange methods that are natural and evolutionary in nature. It is also transmitted orally from
generation. Traditional knowledge is thus location-based and therefore while capturing it, local terms do get precedence. This results in the creation of a terminology which may not be a standard one. While recording it, the context within which a particular traditional knowledge component is used needs to be highlighted. Also, certain terms may not get properly translated. Therefore, while capturing traditional literature which already exists in different fields such as: Agriculture; art including artifacts, designs, motifs etc.; environment including ecological knowledge; flora and fauna; health; folk music; literature including stories and legends; inventions (local); medicinal plants. Names and symbols; dances including performances; cultural habits; customs; food; skill; spiritual practices; and scientific works and local discoveries, etc.

Traditional knowledge is important not only for the society to which it belongs but to the world at large. It is therefore essential to identify if and record it in such a way that it can be accessed and archived. We have seen that traditional knowledge covers a wide range of subjects and can be collected from a variety of sources. It responsible for transformation the personality of a person as it is a part of the culture of the society to which the person belongs. It gets reflected through language and all kinds of practices following by a society. It not only gives the means for individuals to remain economically independent but also gives them moral strength by following it.

The Factors

Collection of traditional knowledge is thus important. Various factors need to be kept in mind while recording traditional knowledge. Generally interview or survey method are used for doing so but both methods cannot gives perfect result unless the questions framed to not take into account ambiguities inherent in the collection process of traditional knowledge. For instance the local names emerging out of different language groups, say in biodiversity including agriculture create many ambiguities. These ambiguities can be avoided if in addition to the local terms, scientific equivalents area also given. Also a tradition can be veiled from various contexts and each context would have a separate meaning. We therefore notice that in the absence of a reference to the context, improper translation of local terms may emerge .Thus the using of local terms with their scientific equivalent should not create ambiguities in the final result of the captured data, which need to be checked. Few examples of procedures adopted in collecting sample of traditional knowledge:

The Principles

Respective the stakeholders and communities;
“Clarity the objectives of data collection;
Develop an interactive approach and communication between the team and the stakeholders;
Recognize the limitation of the information;
“Recognize informants of informants’ biases;
“Recognize and minimize biases of the team members including gender, education/ discipline background, language, outsider priorities;
“Take detailed notes;
“Cross-check data;
Create opportunities to reflect on learning;
“Recognize when to stop.”

The GIS

The Geographical Information System (GIS) is also used in collecting tradition Knowledge. The information so collected makes the traditional knowledge more dependable. The tools that are used in GIS include cartographic and database management techniques. There techniques help in collecting data about natural resources, land usage, condition of monuments, etc. This helps in developing local databases and tries to identify skill that would be useful to a particular community.

Preservation

Interest in the preservation of traditional knowledge is growing all over the world. We have seen that traditional knowledge is available through a variety of intellectual products and sources including traditional medicines, medicinal plants, ecosystems, traditional symbols, traditions, folk tales, religious and other cultural heritage etc. I would like to highlight the issue associated with the preservation of traditional knowledge. These issues include:

Traditional values and languages are diminished in scope and number around the world. There is a slow regression in this area because of various factors, including modernization, impact of Internet and ICT. Preservation of this heritage may not necessarily stop its regression, but it could stop its wholesale elimination, thus allowing the traditional societies to continue using traditions for religious, economic and artistic issue in mind. Preservation would eventually help in maintaining a historical link with the past. World Intellectual Property Organization (WIPO) supports preservation programmes, but the erosion is so fast that WIPO programmes help partly in maintaining the available traditional knowledge by developing historical sources. This can help in correcting unauthorized and improper presentation of traditional knowledge by developing historical sources. This can
help in correcting unauthorized and improper presentation of traditional knowledge includes the following policy adjectives.

I Meet the actual needs of traditional knowledge holders
II Promote conservation and preservation of traditional knowledge
III Empower holders of traditional knowledge and acknowledge the distinctive nature of traditional knowledge systems
IV Support traditional knowledge system
V Contribute to safeguarding traditional knowledge

The archiving of traditional knowledge in the digital form or in other forms, such as display in museums, maintenance of documents, preserving through sound-recording, video recording etc. area specialized jobs, for which the facilities are not generally available in small libraries. At national and international level very elaborate programmer need to get established and executed. There is a need of preservation specialists and there is a need for preservation centers of traditional knowledge and each Government, whether at the State level or at the national level should draw plans to undertake this job. The issues that come up for understanding, evaluation and application include preservation ethics, role of memory in traditional knowledge, role of local languages, and the use of information and communication of traditional knowledge. Preservation methods of traditional knowledge vary from item to item. The data collection through field trips resulted in finding solutions to the depletion of the bio-diversity. Some of the recommended initiative creation of micro reserve, the organization of private fishing and hunting facilities, wood vegetation along artificial channels and reservoirs, promotion of local species of valuable herbs, etc.

Digitization of recorded knowledge: This is being done all over the world. It will not be possible to go the method used in the preservation of traditional knowledge on each item around the world. For instance the role of oral traditions has been important in preservation religious teachings and values, and traditional knowledge on various issues including, for instance, the traditional methods of creating dyes; and preserving high altitude medicinal plants.

Protection
A number of efforts were made since the 1980s by the U. N. Agencies at the international level to project traditional knowledge fro, misuse. Some of the major international efforts that were undertaken are listed below:

1983 Recognizing that the environments problems were global in nature the U.N General Assembly passed the Resolution No. 38/16 in 1983 which recommended that a Commission be established to prepare the Environmental Perspective to the Year 2000 and beyond.
1983 The Brundtland Commission was establish by the United Nations to look into the deterioration of the human environment and natural resources and their impact on economic and social development on indigenous people.
1989 The importance of collective human rights was later recognizes by the International Labor Organization (LIO) Convention 169 (1989)
1992 Convention on Biological Diversity (CBD) recognized the value of traditional knowledge in protecting species, ecosystems and landscape Environments and landscapes.
1996 Convention on Biological Diversity (Buenos Aires) emphasized the relevance of local Knowledge. The Convention Further appeared to States to let local communities and indigenous people to take care of their biodiversity within their territories in order to protect.
1999 World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Right (TRIPs), establishes rules for creating and protecting intellectual property.
1999 World Intellectual Property Organization (WIPO) established a Fact Finding Mission in 1999 which covered music, song traditional designs, etc. WIPO established the Inter-Governmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore.
WIPO started investigating the relationship between traditional knowledge, biodiversity and intellectual property rights.
2007 The importance of collective human rights was recognized at the United Nations Declaration on the Rights of Indigenous Peoples.
2009 WIPO General Assembly decided that discussions should continue for the next two years on the protection of traditional knowledge.

India had to fight for revocation of turmeric and basmati patents granted by United State Patent and
Trademark Office (USPTO) and neem patent granted by European Patent Office (EPO) In 1999, the Department of Ayurveda, Yoga & Naturopathy, Unani, Sridhar and Homoeopathy-(AYUSH) previously known as Department of India System of Medicine and Homeopathy (ISM&H) constituted on inter-disciplinary Task Force, for creating an approach paper on establishing a Traditional knowledge Digital Library (TKDL). It was in 2001 when the project was initiated by the Council of Scientific and Industrial Research (CSIR) Ministry of Science and Technology and Department of ayush, Ministry Of Health and Family Welfare. In case of, medicinal plants, mineral, animal resources Classification (TKRC) was established for developing a structured Classification system. This was done to systematically arrange traditional knowledge so that its dissemination is achieved well. The classification system covered about 25000 subgroups.

But the Patents Act, Plant Variety Protection and Farmers Rights Act, Biological Diversity Act, 2002 and Geographical Indication of Goods (Registration and Protection) Act, 1999 have provisions that can be utilized for protecting traditional knowledge. Thus set practices have revolved to protect traditional knowledge from being used by other without the permission of the people to whom it belongs. Documenting of traditional knowledge without the consent of the people and documenting it with certain biases in mind amount to the violation of rights and there are instance when this knowledge slip out of their right hands. At the institutional level, both governmental and non-governmental, suitable steps can be taken. I am illustrating the role of knowledge Centers in protecting and promoting traditional knowledge.

Knowing full well that traditional knowledge is precious, it needs to be protected from getting patented by other individual’s organizations and Governmental as their own. India has such an old heritage and its traditional knowledge is immeasurable. Therefore steps need to be taken to show that a particular traditional knowledge, available in a community, town, city or country needs to be done and published.

There are a number of traditional/indigenous knowledge centers functioning around the world. The activities of knowledge centre are vary from centers to centre and will be determine by various factors including the immediate needs of peoples. The role of the knowledge centers could greatly help in preparing documentations of traditional knowledge in different sections of the society in the countries, In order to collect, organize and disseminate traditional knowledge, the knowledge Centre could undertake the following activities.

Getting TK Patents: Traditional knowledge is a type of intangible heritage. As traditional knowledge could be giving economic support to a community, its patenting by another agency and marketing it outside the economic zone to which it originally belonged could sharply affect the community economically, it would be a serious human rights violation. Therefore, if any individual or organization is trying to get IPR for the traditional knowledge which is within the scope of the knowledge Centre [KC]. The KC should prevent it from happening by forwarding the objection to the next higher authority under which the KC is functioning. For instance, when turmeric was being patented in the United States, the Government of India fought to reverse the process. Similarly there has been the case of patenting Basmati rice. There is a great effort needed to reverse the patents on Neem, Amla, Anar, Karely, among others. The role of the knowledge Centre becomes very potential in protecting it.

Stopping Misrepresentation and Misuse: Misrepresentation of local knowledge by individuals who may be local or non-local people or experts should be resisted. The KC should identify such a local traditional knowledge which has been willfully or mistakenly put in public domain or used by others without permission of the community, and which has been willfully or mistakenly put in public domain or used by other willfully or mistakenly put in public domain or used by other without permission of the community, and which use may be derogatory in mature or culturally offensive to the community.

Liaising on behalf of the community: The role of the knowledge centre is potential because the people who own the traditional knowledge should give consent for revoking any patenting of their knowledge should give consent for revoking any patenting if their traditional knowledge belongs would be the right people who can give some rights to other considerations.

Supporting Innovations: The innovation developed by local people based on traditional knowledge could be promoted by the KC.

Free Flow of TK: There were lobbies around the world that feel that traditional knowledge has remained a great source of support to people as it give access to cheap medicines and food. And therefore, the curbs should remove.

Promotional Support for Economic Development: The KC could make effort to see how the community they are serving can benefit from economically using their traditional knowledge. The KC could locate agencies that would help the community within a legal framework.
The KC could also try to introduce new innovations, crops products that would let the community benefit and introduce transformation in the society. Traditional knowledge has always give rise to skill that result in local product including handicrafts etc. The KC could find how such local products could be marketed well so that the community could get sufficient economic benefit from its sales.

Research in TK: There is always a need to undertake research in traditional knowledge so that the community could be benefit from it. The experts who want to do in-depth research on certain traditional knowledge products such as local drugs and natural products could introduce change in a community. One the permissions are received for such is shared with the local community. The KC could archive such research results could be used by the local community if relevant, for economic and other social purpose

**Access**

A modern public library or a Knowledge Centre for public in community should have access to local sources of knowledge including traditional knowledge available in the community. These sources of knowledge are used for several purposes. The first purpose could be to amplify their use by propagation and the other to bring to notice of the local people the improvements and advances made in the field around the world. The publicity given to the advances made in the field is to uplift the knowledge of people living in the community who may have become a victim of the old knowledge and are not ready to change. Nevertheless, traditional knowledge has let communities live and take care of their members in all times including difficult times. Any change to be undertaken has to be gradual with the consent of the local people.

The public libraries and knowledge centers have an obligation to give access to traditional knowledge that has been collected or access to which has been made possible by the public library or the knowledge centre. Reference service plays an important role in such a situation.

**Reference Service**

A Librarian or an official in a Library giving Reference Service to a user on traditional knowledge will have to either collect traditional knowledge or use the one already created by any other individual or agency. While giving reference service, the staff should keep in mind the following characteristics of traditional knowledge;

1. Traditional knowledge is authoritative in its character as it is supported by a community a long traditional history
2. Traditional Knowledge is a reality and should not rejected, even if it looks trivial, at the face of it and should be recorded
3. It gives a special identity to the people
4. It reflects a way of life of the people that follow it
5. It should not be separated from the people by any method, including the interpretation while giving access to it
6. Each tradition, skill, craft etc. has long history behind it and the staff should verify if it has been recorded well
7. Classification of the facets of traditional knowledge within each genre is very important. It has to be done in case of every community where a tradition is flourishing. Library staff will gain more access to traditional knowledge
8. The users of traditional knowledge need to be informed if it is patented and protected well
9. All knowledge needs to be shared. So is traditional knowledge. It has therefore to be organized in a knowledge Centre in such a way that it is comparable, it is shareable and is archived in which the knowledge Centre is not specializing should be verified or got verified thorough expert
10. The staff could answer questions on the subject in which the KC is specializing. But the replies to the traditional knowledge in which the knowledge Centre is not specializing should be verified or got verified the thought experts
11. The knowledge Centre should develop an educational kit for educating administrators, planner is a local community and other about the importance of local values, traditions etc.
12. Information about traditional knowledge may be promoted by the KC by establishing links with national and international experts in a given field
13. In a KC for public, the welfare of the society has to be taken into account. Appropriate solutions in the fields of food, nutrition, arts, craft etc. need to be passed on to public by the KC

**CONCLUSION**

The following recommendations emerge from the above presentation:

1. The collection of TK is essential. It is necessary to arrange proper training for all those that are associated with the collection of traditional knowledge.
2. The archiving or traditional knowledge in the digital form or in other forms, such as display in museums, maintenance of documents, preserving through sound-recordings, video-recordings etc. is also essential.

3. Preservation methods of TK vary from item to item. Different methodologies need to be used for different types of TK.

4. TK needs to be recorded and digitized.

5. Oral traditional should be maintained in institution where they are still in practice.

6. Coordination with international bodies like WIPO needs to be strengthened.

7. All traditional knowledge which is in finger of getting patented by other agencies and individuals should be got patented at the national level.

8. Misrepresentation of local knowledge by individuals who may be local or non-local people or experts should be resisted.

9. The innovation developed by local people based in traditional knowledge could be promoted by knowledge Centers.

10. Research in TK should be support by Government agencies.

11. A modern public library or a knowledge Centre for public in a community should have access to local sources of knowledge including traditional knowledge.

12. Knowledge Centers should be established to collect promote, preserve TK.

REFERENCES


POLICY ANALYSIS AND STAKEHOLDERS PERSPECTIVE OF RENEWABLE ENERGY UTILIZATION IN KERALA

Soorya Narayan  
Research Associate,  
International Centre for Technological Innovations  

Aaron Joseph George  
Director,  
International Centre for Technological Innovations

ABSTRACT

The power sector plays a vital role in all construction work in Kerala. The scarcity of electricity is the main obstacle to the development of new ventures in the manufacturing sector. The electricity demand is rising and the power production should increase accordingly. Hydro-thermal and wind sources form part of the power grid in Kerala. Hydropower is Kerala's most secure and reliable outlet. A survey was taken among people belonging to three sectors namely Energy policymakers, Energy generation companies, and Energy customers. The questions were about the importance of renewable energy in Kerala, the commercialization of various renewable energy and also the increasing power demands. 87% of respondents agree that renewables will play an important role in Kerala's future economy and climate. 67% believed that renewable energy will satisfy energy demands after the expiration of oil. 47% of interviewees believe that renewable energy will be the best field for investment. In response to government efforts concerning renewable energy, 53% of interviewees believed that the government has done sufficient effort to promote renewable energy. Also, the Indian Central and Kerala State Renewable energy policies are reviewed in the literature review section of this paper.

1.0 INTRODUCTION

1.1 Power Sector in Kerala

In all the development work in Kerala, the power sector plays a crucial role. The electricity shortage is the primary challenge to the introduction of new projects in the industrial sector. The electricity demand is growing and the output of power should rise accordingly. Monsoon is necessary to maintain the state's hydropower base, and the lack of rainfall normally causes a power crisis. Kerala has received ample monsoon during the current year and has raised the inflow to the KSEB reservoirs; the KSEB has been able to handle the power supply situation with a higher quantity of cheaper hydel power. Kerala is one of the very few states in the country in which the load lowering and power loss did not occur in 2019. KSEB was responsible for electricity generation, transmission, and supply in the Kerala State, with a special focus on supplying electricity for both domestic and agricultural purposes at an affordable cost. In the energy sector, the Board has been going through a transitional process of reforms. The Electricity Act 2003 envisages separate organizations for Transmission and Distribution. (The Kerala State of Environment and Related Issues, 2020)

1.2 Renewable Energy Sources of Kerala

The power system in Kerala encompasses hydel, thermal, and wind sources. Hydel energy is the most reliable and dependable source in Kerala. Of the total installed capacity, 2746.19 MW, the lion’s share of 1933 MW of installed capacity comes from 24 hydel stations; 783.11 MW is contributed by the thermal projects including NTPC in Kayamkulam which is Kerala’s dedicated thermal station. Kanjikode wind farm, Palakkad has an installed capacity of 2.03MW. Wind Energy from IPP is 28.05 MW. Capacity addition during 2009-10 was only 51.44 MW (1.9 %) to 2746.19 MW as on 31-3-2010 from 2694.75 MW on 31-3-2009. Monsoon is vital to preserving the state's hydroelectric power base and the rainfall deficit causes power crises. The most reliable and trustworthy source in Kerala is hydropower. Of the total power installed in 2012-13, hydel contributed a significant share of 2053MW (71%); whereas the thermal projects in Palakkad contributed 793MW, including NTPC in Kayamkulam and Kanjikode wind farm, Palakkad
has contributed 2MW, Wind Energy from IPP is 33 MW.

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<tr>
<th>KSEBL Internal Generation.</th>
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<td>1</td>
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<td>2</td>
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<tr>
<td>3</td>
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<tr>
<td>4</td>
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<tr>
<td><strong>Total</strong></td>
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2.0 RESEARCH METHODOLOGIES

A survey was taken among people belonging to three sectors namely Energy policymakers, Energy generation companies, and Energy customers. The questions were about the importance of renewable energy in Kerala, the commercialization of various renewable energy and also the increasing power demands. The survey was conducted on the 3rd Week of January and responses were collected from 120 people including policymakers, Energy generation companies, and also customers. The survey questions are similar to the survey done by M.A. Mohamed, Amin Al-Habaibeh, and Hafez Abdo in Libya on 2013.

**Q A: Do you think renewable energy is available in Kerala for commercial utilization?**

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Responses</th>
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<tbody>
<tr>
<td>EPM</td>
<td>100%</td>
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<tr>
<td>EG</td>
<td>71%</td>
</tr>
<tr>
<td>EC</td>
<td>56%</td>
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<td><strong>Total %</strong></td>
<td><strong>78%</strong></td>
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**Q B: Do you think renewable energy is important to the development of Kerala?**

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<th>Responses</th>
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<tbody>
<tr>
<td>EPM</td>
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<tr>
<td>EG</td>
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<tr>
<td>EC</td>
<td>88%</td>
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<tr>
<td><strong>Total %</strong></td>
<td><strong>87%</strong></td>
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3) Q C: Do you think renewable energy will satisfy energy demand for future Kerala?

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<th>Sectors</th>
<th>Responses</th>
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<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Energy Policy makers (EPM)</td>
<td>82%</td>
</tr>
<tr>
<td>Energy Generation (EG)</td>
<td>59%</td>
</tr>
<tr>
<td>Energy Costumers (EC)</td>
<td>56%</td>
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<tr>
<td><strong>Total %</strong></td>
<td>67%</td>
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</table>

4) Q D: Which type of renewable energy do you think has the most potential and could become the most economically feasible for large-scale use?

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<thead>
<tr>
<th>Sectors</th>
<th>Responses</th>
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<tbody>
<tr>
<td></td>
<td>Biomass</td>
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<td>Energy Policy makers (EPM)</td>
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<tr>
<td>Energy Generation (EG)</td>
<td>0</td>
</tr>
<tr>
<td>Energy Costumers (EC)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total %</strong></td>
<td>0</td>
</tr>
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</table>

5) Q E: What energy sector do you think could have the best investment opportunities?

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<tr>
<th>Sectors</th>
<th>Responses</th>
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<tbody>
<tr>
<td></td>
<td>Oil and Natural Gas</td>
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<td>Energy Policy makers (EPM)</td>
<td>45%</td>
</tr>
<tr>
<td>Energy Generation (EG)</td>
<td>41%</td>
</tr>
<tr>
<td>Energy Costumers (EC)</td>
<td>75%</td>
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<tr>
<td><strong>Total %</strong></td>
<td>53%</td>
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</tbody>
</table>
6) Q F: What are the reasons behind the insufficient electricity production to meet demand?

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Responses</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The productive capacity of stations</td>
<td>Increasing energy demand</td>
<td>The size of the grid</td>
<td>Other technical problems</td>
</tr>
<tr>
<td>Energy Policy makers (EPM)</td>
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<td>41%</td>
<td>14%</td>
<td>27%</td>
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<tr>
<td>Energy Generation (EG)</td>
<td>18%</td>
<td>47%</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Energy Costumers (EC)</td>
<td>31%</td>
<td>38%</td>
<td>31%</td>
<td>0</td>
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<tr>
<td>Total %</td>
<td>22%</td>
<td>42%</td>
<td>20%</td>
<td>16%</td>
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</table>

7) Q G: Do you think that adequate effort was done to promote renewable energy by the Kerala government?

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<th>Sectors</th>
<th>Responses</th>
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<th></th>
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<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes, but more is needed</td>
<td></td>
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<tr>
<td>Energy Policy makers (EPM)</td>
<td>64%</td>
<td>14%</td>
<td>23%</td>
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<tr>
<td>Energy Generation (EG)</td>
<td>47%</td>
<td>29%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Energy Costumers (EC)</td>
<td>50%</td>
<td>13%</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>Total %</td>
<td>53%</td>
<td>18%</td>
<td>28%</td>
<td></td>
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</tbody>
</table>

3.0 RESEARCH ANALYSIS

100% of Energy Policy Makers (EPM) claim clean energy for industrial use is available in Kerala. The bulk of electricity generation accounts for 71 percent (GE) and about 56 percent of energy customers. Nevertheless, none of the participants did argue with the lack of market prospects and 22% of respondents lacked facts or expertise. The energy decision-makers have more expertise and knowledge than the other two industries. Furthermore, renewable sources of electricity generation (EG) claimed that their operations would be significantly impacted, with many consumers losing business. 87% of respondents agree that renewables will play an important role in Kerala's future economy and climate. However, 9% (EPM firms), 12% (EG companies) and 13% (EC companies) assume that they are not. On the other side, 6% of (EG firms) said they don't know. 67% believed that renewable energy will satisfy energy demands after the expiration of oil, 5% of respondents, however, think not, and 27% lack the knowledge and information with regards to the ability, and capacity of renewable energy which will be the best alternative. It was felt that consumers and producers of energy have limited confidence or knowledge regarding the capability of renewable energy. About 47% of interviewees believe that renewable energy will be the best field for investment. On the other hand, 53% of interviewees think fossil fuels such as oil and natural gas where the investment should be. The insufficient electricity production to meet demand is caused 64% by the increase in demand with limited production capacity from power stations. However, 16% indicated other maintenance and technical problems and 20% indicated the effect of the size of the grid. It was evident that demand has been growing much faster than the production capacity in place. In response to government efforts concerning renewable energy, 53% of interviewees believed that the government has done sufficient effort to promote renewable energy, and 18% of the respondent stated that the Kerala government has promoted renewable energy but more work is still needed. About 28% of them said NO, Kerala government has not done enough sufficient work to promote renewable energy.
4.0 LITERATURE REVIEW

4.1 Renewable Energy Policy in India

Today, India has significant potential for the generation of power from renewable energy sources. India’s search for renewable energy resources that would ensure sustainable development and energy security began in the early ’70s of the last century. Consequently, the use of various renewable energy resources and efficient use of energy was identified as the two thrust areas of sustainable development. (Ministry of New and Renewable Energy, 2016)

The few important steps taken by the ministry of India for the development of renewable Energy sources are recapitulated below:

1. India has among the world’s largest programs for renewable energy. India’s activities cover all major renewable energy sources of interest to us, such as biogas, biomass, solar energy, wind energy, small hydropower, and other emerging technologies. In each of these areas, India has programs of resource assessment, R&D, technology development, and demonstration. Several renewable energy systems and products are now not only commercially available but are also economically viable in comparison to fossil fuels, particularly when the environmental costs of fossil fuels are taken into account.

2. Realizing the need for concentrated efforts in this sector, The Government of India established a Commission for Additional Sources of Energy (CASE) in the Renewable Energy Sources – Policies in India 295 Department of Science and Technology, in 1981. The mandate of CASE is to promote research and development activities in the field of renewable energy.

3. CASE was formally incorporated in 1982, in the newly created Department of Nonconventional Energy Sources (DNES). In 1992 DNES became the Ministry for Nonconventional Energy Sources, commonly known as MNES.

4. India has a vast supply of renewable energy resources, and it has one of the largest programs in the world for deploying renewable energy products and systems. Indeed, it is the only country in the world to have an exclusive ministry for renewable energy development, the Ministry of Non-Conventional Energy Sources (MNES). MNES was renamed the Ministry of New and Renewable Energy (MNRE). (India 2020 Energy Policy Review).


6. The Ministry is encouraging the setting up of grid-interactive power projects based on renewable energy through private investment route. The State Nodal Agencies are responsible for the promotion and development of private sector projects by way of providing necessary clearances, allotment of land, allotment of potential sites in case of SHP projects, and facilitating power purchase agreements, etc. State Electricity Regulatory Commissions (SERCs) are determining tariffs by taking into account the submissions of all stakeholders, including consumers. Several leading financial institutions and banks are financing renewable energy-based power. (Rajnath Ram, 2016)

4.2 Renewable Energy Policy in Kerala

The spread of various renewable energy technologies has been aided by a variety of policies and support measures by the Government. Major policy initiatives have been taken to encourage private/foreign direct investment to tap energy from renewable sources including the provision of fiscal and financial incentives. This policy is directed towards a greater thrust on the overall development and promotion of renewable energy technologies and applications. This will facilitate excellent opportunities for increased investment in this sector, technology up-gradation, induction of new technology market development, and export promotion. The conventional sources of energy in Kerala are fuelwood, petroleum products, and electricity. Till recently Kerala has been depending solely on hydropower for electricity, availability of which is limited due to lack of technically favorable sites and unfavorable ecological impacts. Nuclear power and fossil fuel-fired thermal stations are the other conventional sources. Owing to widespread popular opposition, because of high population density and fragile ecology, nuclear stations could not be installed in Kerala. The only other alternative was fossil-fired thermal stations like Brahmapuram or Kayamkulam. It is widely accepted that fossil fuels are limited, that their price will go on increasing, that they do not offer a long-term solution, that they contribute to global warming and that alternative sources are to be identified. To cater to the ever-increasing demand for power, the Government of Kerala has decided to encourage power generation from Non-conventional Energy Sources. It is proposed to generate energy from municipal waste, agro waste, industrial waste, sewage, and other biomass, small-hydel units, solar
photovoltaic, wind, tide, wave, geothermal, etc. These technologies are environmentally friendly. The use of Municipal Solid Waste for power generation, besides generating power, will eliminate the problem of pollution and disposal of urban waste. Private investment will be attracted in all these sectors. Ministry of Non-Conventional Energy Sources (MNES), Government of India has formulated a legal, financial, and administrative framework for the promotion of investments in this sector and has advised the State governments to formulate policies. (Kerala State Govt, Renewable Energy Policy)

5.0 CONCLUSION AND DISCUSSIONS

A survey was performed between people from three industries, including energy decision-makers, energy generation firms, and energy consumers. The questions were about the value of green energy in Kerala, the commercialization of different forms of renewable energy sources, as well as the growing energy demand. 87% of respondents agree that renewables will play an important role in Kerala's future economy and climate. 67% believed that renewable energy will satisfy energy demands after the expiration of oil. 47% of interviewees believe that renewable energy will be the best field for investment. In response to government efforts concerning renewable energy, 53% of interviewees believed that the government has done sufficient effort to promote renewable energy. These are the remarkable results of the survey taken. Apart from the usage of renewable energy sources, it is very important to know about the national and state renewable energy policies. Under the central government of India, there is a wide range of activities they are as follows.

- Promotion of renewable energy technologies
- Renewable energy resource assessment
- Production of biogas units, solar thermal devices, solar photovoltaic, cooks stoves, wind energy, and small hydropower units.
- Strengthen India’s energy security
- Formulation of policy and legislation
- Institutional Linkages for the integration of renewable energy
- Identification of high focus areas
- Marketing outlets
- R&D and specialized institutions
- International partnerships and exports
- Concern for the environment
- Take efforts to minimize the demand-supply gap, especially as the population increases.

The objectives of State government policies are as follows.

- Development, propagation, and promotion of Non-conventional Energy sources.
- The exploitation of Natural resources to avail cheaper power.
- Acceleration of identification, development, and implementation of new projects with the long-term objective of substituting all non-renewable sources.
- Development of Eco-Friendly Projects.
- Provision of a “single window” service for technical consultation, sources of finance, and project clearance.
- Decentralized and microlevel power generation through renewable energy sources to reduce expenditure on transmission lines and transmission and distribution losses.
- Self-sufficiency in Power shortly.
- Creation of suitable environment for private participation in Power Generation sectors.
- Publicity of Renewable Energy through various media.

As per the mandate given to it by MNRE, ANERT shall be the State Nodal Agency for coordinating all activities relating to Renewable Energy Development. ANERT should lay down procedures for project preparation, approvals, monitoring, etc., and should act as the State Agency to:-

1. Promote the development of renewable energy sources.
2. Function as a single-window clearing agency for all renewable energy power projects including small hydel power plants up to and including 3 MW, for issuing necessary clearances and approvals on behalf of the Government of Kerala, providing technical support, facilitating financing, etc. (KSEB will be the authority for SHP projects above 3 MW and up to 25 MW).
3. Make recommendations to the Government on issues related to renewable energy development.
4. Certify/arrange for certification of all devices related to renewable energy sources. Companies, cooperative, partnerships, local self governments, registered societies, NGOs, individuals, etc would all be eligible producers to generate power from non-conventional energy source conditions.

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ENABLING INTERMEDIATE LEARNERS TO WRITE FORMAL TRANSACTIONAL LETTERS

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ANNOTATION
The article deals with the problem of teaching writing to students of non-linguistic universities. The author analyzed the structural and linguistic features of formal email as a genre. The paper provides examples of the most typical mistakes of students when teaching writing as a type of speech activity in English. The author offers practical guidelines for teaching how to write business emails.

KEY WORDS: Teaching writing; English for Specific Purposes; email.
In this paper the focus is on developing intermediate learners’ writing skills through the genre of transactional letters. I have chosen this topic for several reasons:

– My experience shows that intermediate learners are aware of a growing range of language structures, but they can struggle to organise their written work clearly and intelligibly;
– Learners can use this genre in various contexts (information requests, job applications, exam preparation);
– The ability to write basic formal letters/emails requesting information is developed at intermediate level [4]. In the past decades, e-mail has become used for some of the purposes traditionally carried out by letter. Also, many of the request emails features can be applied to other genres of formal transactional writing.

Research supports the idea of analyzing written genres to better teach writing skills [7].

According to Tribble ‘genre’ is a communicative event which uses texts in a predictable way in order to achieve agreed communicative purpose, e.g. letter of application [10]. This also applies to writing emails. From the genre perspective, email can communicate different transactional messages [5], e.g. requests, responses, or directives, which tend to contain elements that are associated with particular social actions.

As a transactional email sub-genre, request emails are also influenced by subject matter, the relationships between the writer and the receiver and the pattern of organization.

A request email is a solicited electronic letter addressed to a particular individual or company in order to elicit a specific response from its reader(s). This means that from a communication point of view, the most important part of the text is the enquiry itself, and the measure of success is whether the purpose (to receive the answer) is achieved. The efficient way to do it is to follow the established conventions in the organisation of content and use the language appropriate to a formal style.

The structure of the formal request email in English is fixed, and in many respects resembles the structure of traditional letters [3] i.e. introductory, body and concluding paragraphs. However, the limitations imposed by the screen consist in the generally accepted idea that the body of a message should not extend beyond the screen [ibid]. So, paragraph structure should be kept short and clear. This also allows respondents to add reactions which refer directly to the whole of a received message.

A header of an email (the To, From and Subject lines) also distinguishes it from a traditional letter. It can be regarded as a virtual envelope, which determines from and to whom the message will be sent. The subject line is the first thing that the recipient of a request email is likely to notice, especially from an unknown sender. So it is a critical element in the decision-making process regarding what priority to assign to it. Clear, brief, relevant, and concrete subject descriptions are recommended, with the most important piece of information put at the beginning of the line, e.g. ‘Volunteer job request’. Unlike in formal letter writing, it is common for an email to have only one sentence paragraph. New paragraphs are not usually indented but rather double-spaced.

Crystal [3, p.105] points out two important functions of emails closings which are different to traditional letters: firstly, farewell “acts as a boundary marker, indicating that further scrolling down is unnecessary”. Secondly, it identifies the sender to the recipient, especially if the e-address is opaque or email is forwarded.

Closely linked to genre is the notion of style. Because of its spontaneity and speed, transactional e-mail offers the option of greater levels of informality than are found elsewhere in traditional writing. Nevertheless, a lot of people expect a certain degree of formality based on status and social distance, especially in educational, business, and other workplace settings, where e-mails are routinely seen as providing a more convenient professionalism rather than just an opportunity for a chat (ibid).

Consequently, transactional email should meet the style requirements of a formal, polite, somewhat distant communication. It is undoubtedly the case that a writer needs to follow the layout rules, use the correct salutation and complimentary closing.

At the same time, due to the high level of the recipient’s accessibility and assumed fast responses the style of email seems to be more natural in comparison with the traditional formal letter.

Due to its virtual nature, email discourse represents a hybrid means of communication that shares both oral and written speech characteristics [11].

Transactional email often requires the writer to ask the recipient questions. To mitigate the force of a request, it is more effective to do it indirectly:

E.g. Could you send me more information about the trip, please?
I wonder if you could (possibly) provide me with more details about the company.

To Klímová, the syntax of the written discourse is less complex [9]. Also, new technologies are conducive to the use of contracted forms or a lack of punctuation: E.g. I’m writing about your advert. Although writing is an activity which many people engage in on a daily basis with few problems in their mother tongue, it is still frequently a cause of problems for foreign learners of English [6].

Writing a request email, following its genre features, poses a challenge for learners of English [2]. This may result in failure in communication.
The most obvious potential reason is that genre might be unfamiliar. It can be assumed that some learners have not written a transactional email in their L1.

Generic conventions can also be problematic for adult learners. Even those who frequently exchange formal emails in their L1 fail to recognize transactional email communicative purpose, structure and linguistic rules due to L1 interference.

For example, in Russian formal writing it is common to omit the salutation and opening sentence, and use the pronoun ‘we’ instead of ‘I’.

Also, if intermediate learners have relatively good language proficiency but lack genre awareness, they tend to write as much as they know about the subject in long, poorly structured paragraphs.

Though some L2 learners manage to recognize and differentiate between some distinctive genres, e.g. a business letter and an email written to a friend, they sometimes fail to apply the appropriate level of formality in practice. For example, the most demanding stylistic aspects for some intermediate ESP students are the use of politeness strategies and indirect questions:

_E.g.? I want to get more information.?_  
Waiting for your answer.

Another student problem with style is the inclusion of colloquial expressions, such as? I also wanna visit a castle. This might be due to the fact that students generally view email as an informal means of communication. This is also the case when students employ phrasal verbs in their formal writing, e.g. look into that option.

Moreover, this could be a result of them having been encouraged to use phrasal verbs in the spoken mode and informal written registers, and they have equated phrasal-verb use with ‘good English’ across all contexts of use.

We have found that some students lack control of formulaic expressions due to overgeneralisation, e.g.? with concern to your email (instead of with reference to/with regard to).

At intermediate level, a focus on appropriacy as well as accuracy is still in development and discourse markers/linking words are still being learnt. However, it can sometimes be difficult to focus student attention on cohesion, not just the language system control.

Many of the issues identified above can be addressed by a genre-based pedagogical approach to writing. In this approach, students are offered explicit and systematic explanations of the ways language functions in social contexts which determine the nature of content and organisation of the text [7, 1].

In terms of writing development, Dudley-Evans [cited in 1] identifies three stages in genre-based teaching. First, a model of a particular genre is introduced and analysed with the teacher’s guidance to identify the text’s communicative purpose and potential readership. Learners then carry out exercises which manipulate genre dependent structure and relevant language forms. Finally, learners are able to independently produce a target text (in our case transactional email requiring information).

Although most of the learner problems identified with formal request email writing can be addressed by an awareness-raising genre-based approach, areas, which might need further explicit training, are organisation and style.

The examination of model text is often prominent in the genre approach to writing, and helps raise learners’ awareness of the conventions of typical request emails in English. Students read the letter and label the paragraphs with the names of the moves.

This activity allows students to realize how authors organise their writing. To further identify the structure of request email, learners are given the cut up strips of such an email and asked to group them into a formal letter. This is followed by examining the whole text. Learners underline the key words/phrases and identify the aim of different paragraphs (e.g. reason for writing, relevant experience, requesting details, etc.). Then students complete the paragraph plan. This activity is effective because students generally appreciate the examples showing specifically what they have to produce. This raises their awareness of the features of the genre and gives them some language chunks that they can use in their own writing.

To enable students to use the appropriate style in their writing, I give them the inappropriately written request email and ask a few simple comprehension questions, e.g. Have they been in contact before?

Then I ask what is wrong with the text, e.g. too informal, doesn’t follow request email-writing conventions. I then elicit examples from the students of what they will need to change to make it more formal (vocabulary, sentence structure, layout, paragraphing, greeting and close). In pairs, students re-write the message to make it more appropriate as a formal email.

At this stage I also draw attention to the conventional greetings and endings for formal emails. It may also be worth highlighting the punctuation used here, e.g. a comma after the greeting, as this can vary between languages. Other issues which are problematic for my learners, such as paragraphing, discourse markers/linking words, over-long sentences, etc., can also be dealt with here. In this activity students master their writing skills through understanding the type of language that is used in a formal email by contrasting it with informal communications. This enables the students to use the style appropriate to the purpose.
Recently, using games has become a popular technique applied by many educators in the classrooms and recommended by methodologists in the world. Many sources list the advantages of the use of games in foreign language classrooms.[11]

Taking a genre-based approach to teaching writing skills ensures that necessary language is treated in context by explicitly drawing attention to both purpose and audience. By so doing, it can address most of the problems intermediate students face with organisation, style and appropriate language patterns. The suggested teaching solutions demonstrate how a genre-based approach might be realised with regards to writing a formal request emails. Going forward, I will encourage students to exploit authentic discourse structures, so they comprehend writing as a tool that they can utilize outside the classroom.

Литература
PROBLEMS OF STUDYING SOURCES OF ENRICHMENT OF THE RUSSIAN LANGUAGE THROUGH THE TURKIC LANGUAGES

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ANNOTATION
This article discusses issues related to the study of the history of the sources of the introduction of Turkic words into the Russian language.

KEY WORDS AND PHRASES: written language and culture, semantic plasma of language.

ПРОБЛЕМЫ ИЗУЧЕНИЯ ИСТОЧНИКОВ ОБОГАЩЕНИЯ РУССКОГО ЯЗЫКА ЧЕРЕЗ ТЮРКСКИЕ ЯЗЫКИ

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Аннотация
В данной статье рассматриваются вопросы, связанные с изучением истории источников внедрения тюркских слов в русский язык.

Ключевые слова и фразы: письменный язык и культура, семантическая плазма языка.

В развитии языков и их обогащении большое значение имеет проникновение других языков. Например, велика роль тюркских языков в обогащении русского языка и поэтому сегодня их изучения остается актуальным вопросом.

Тюркские слова пришли в современный русский язык в разное время из самых различных языков. Первые крупные поэтические произведения на тюркском языке были поэма Юсуфа Баласагунского «Кутаду билиг» («Знание, дающее счастье») XI в, поэма Ахмада Адиба Югнаки «Атебат ал-хакаик», которая была переписана писарем Зайнул Абидин ибн Султанбахт ал-Журажони-ал-Хусайном. До этого поэма называлась «Хибат ул-Хакаик» («Подарок истин»). Письменность тюркского языка
вырабатывались на базе языков уйгурских, карлукских и других племен, среди них немаловажное место занимали огузы. В дальнейшем карлукские племена и некоторые из огузских племен слились с уйгурами, создав общий письменный язык и культуру. В XIX–XX вв., развивались два основных тюркских языка: уйгурско-карлукский и кичакско-огузский. В том же веке происходит формирование двух литературных языков: среднеазиатские тюрки и тюрки Поволжья и Урала. Эти языки тесно связаны с периодом расцвета Золотой Орды и её культурных центров (Сарай, Сынгака и Угренича). Культурно-экономические связи со Средней Азией народов Поволжья, особенно Нижнего Поволжья, в XIV веке значительно усилились. Сравнение памятника культуры XIV века из Сарайя, булгара и Угренича показывает, что культурная традиция народов Средней Азии оказала сильнейшее влияние на материальную культуру и искусство Золотой Орды. В развитии городов Золотой Орды принимали участие не только местные, но и приезжие, насильно утапнувшие из других стран ученые, ремесленники, мастера. Живое общение народов Средней Азии и Поволжья способствовало ещё большему проникновению в литературный язык Золотой Орды среднеазиатских элементов Проникновение в литературный язык Золотой Орды, они становятся общими элементами для ряда тюркских литератур, [1, 36-38].

Изучая заимствования от отдельных вопросов, следовало бы ответить на следующие вопросы: 1) Когда, в связи с какими историческими событиями и какая именно лексика заимствовала из данного языка (бытовая, военная, политическая, научная и т.д.)? 2) Каким путём происходило заимствование (устным или письменным, непосредственно из данного языка или через язык-посредник)? 3) Каковы внешние признаки, приметы, по которым мы можем узнать, что слово пришло к нам именно из этого языка (ответить на последний вопрос не всегда легко, особенно если речь идёт об очень старых заимствованиях и этих приметы стерлись)? Даже если этимология слова совершенно ясна, возможны разные ответы на вопрос: какого происхождения данное слово? Прав будет тот, кто скажет, что слово сундук пришло из тюркского языка, не ошибается и тот, кто отнесёт это слово к числу заимствований из арабского языка. Надо отметить, что противоречие здесь кажущееся, мнимое. Дело в том, что слово сундук вошло в нашу лексику в XV веке из тюркского языка, а не в тюркском языке оно появилось под влиянием арабского. Так что ближняя этимология этого слова — тюркская, дальняя — арабская. В таких случаях говорят, что слово пришло из арабского языка через тюркской. Слово амаз др. русск. заимствовано из тюркских языков, вероятнее всего из татарского. Татарское алмаз заимствовано из арабского языка. Арабское almas, olmas восходит к греческому adamas - «несокрушимый». [2,78-79]

Следует отметить, что все народы меняются словами и заимствуют их друг у друга. Но не все иностранные слова, проникшие в язык, сохраняют своё значение. Вот небольшая история слова диван. Диван (мебель), заимствован из французского языка в XIX веке. Франц. divan- «диван, софа» имеет своим первоисточником иран - دیوان - «возвышенный пол, покрытый ковром». В тюркском языке слово девон- диван обозначало «мудрость книж., источник мудрости, сборник стихов, письменность, мудрый совет».

Гете, восхищенный поэтической культурой Востока, создал ряд произведений, объединённых в цикл под названием «Западно-восточный диван». В данном случае слово диван употреблено в значении «сборник стихотворений» [4,11].

В 60-е годы в Ленинград (Санкт-Петербург), в отдел рукописей публичной библиотеки имени Салтыкова-Щедрина пришла посылка из Средней Азии. В ней оказался небольшой кирпич. В кирпич была замурована очень редкая рукописная книга, которая называлась «Диван хикметов», что в переводе значит «Сборник мудрости».

Автор рукописи Ахмад Яссави (1105-1166) жил около 800 лет назад. Он был ср.азиат. сувийским поэтом и проповедником, который оказывал влияние на развитие тюркского языка. Книга содержит переписанные в XIII веке песни этого древнего певца. Но слово «диван» имело в тюркских языках ещё и другое значение — «совет сановников при султане», позже — «комната для собраний, совещаний, в которой собирался государственный совет с широкими восточными «седанками»». Ближайшие соседи тюрк болгары, хорваты стали употреблять слово диван в значении «комната приёма для гостей» [3,10].

Когда слово продолжало свой путь дальше на Запад, к итальянцам и французам, оно оно изменило своё значение: это уже не «комната для приёма гостей», а «мебель в комнате», где принимают. С этим значением слово диван и пришло к нам от французов. В польском языке слово диван означает «софа», т.е. то, что лежит на диване, чем покрывается мебель, которую мы в настоящее время называем диваном.

В русском языке есть два разных значения слова диван. Одно — заимствованное
непосредственно из тюркских языков» - «собрание стихов, совetyмудрых», другое – прошедшегодолгий путь через западные языки – «мягкая мебель для сведения и легкания». В лингвистике ещё полностью раскрыты лексико-семантическое особенности тюркских слов, следует освоить их лексические, семантические, фонетические и морфологические особенности. Как уже нам известно, существуют два основных пути формирования лексики: прямой путь, при котором из имеющихся в языке элементов возникают так называемые исконные слова языка; путь заимствования, при котором новые слова приходят со стороны, из других языков, т.е. непосредственно и опосредственно.

Современный русский язык, обогащаясь за счёт заимствованных слов, остаётся в своей основе индоевропейско-славянско-русским. Это явилось одной из важных причин сохранения русским языком своеобразия, неповторимого национального характера.

Следует заметить, что не всегда можно установить разницу между понятием «исконное» и «заимствованное» в языке. Во-первых, этимология некоторых слов ещё не выяснена в современном русском языке. Во-вторых, слова, этимология которых, в общем, известна, все лифтер считать заимствованным? Можно ли, например, слово лифтер считать заимствованным? Казалось бы, все ясно: корень слова ангийского происхождения (англ. lift), суффикс –ер –французского (-er), входящий в состав таких слов, как например: режиссёр, директор, минер, монтёр, жонглер и т.д. Слово как будто явно не исконное. Но дело в том, что слово лифтер нет ни в английском, ни во французском языках. Скорей всего это слово (несмотря на свой корень) – иноязычное, например, слово английского происхождения (англ. lifter– французский (франц. – эр), суффикс –ер – французского (-er), входящий в состав таких слов, как например: режиссёр, дирижёр, минер, монтёр, жонглер и т.д.) Слово как будто явно не исконное. Но дело в том, что слово лифтер нет ни в английском, ни во французском языках. Скорей всего это слово (несмотря на свой корень) – иноязычное, например, слово английского происхождения (англ. lifter – французский (франц. – эр), суффикс –ер – французского (-er), входящий в состав таких слов, как например: режиссёр, дирижёр, минер, монтёр, жонглер и т.д.)

Так, например, в восточнославянской речи встречаются тюркские слова типа: женгут-жемчуг, (н-м) каблук-каблуг(к-г), танга-денги (н-д) и др. [2,8-9]

Лингвистам, писателю, что вышеизложенные слова проникли в русский язык непосредственно из татарского языка в XIII-XIV вв, а некоторые из этих слов проникли в русский язык ещё раньше, например, отдельные тюркско-татарские слова встречаются в «Слове о полку Игореве», созданным в XII веке.

Тюркские слова вошли в русский язык устным путём. Они проникли в русский язык в силу разных обстоятельств, т.е. в результате разных торговых, культурных и тому подобных связей. Среди тюркских заимствований большое место слои из татарского языка, что объясняется историческими условиями (многослетнее татарско-монгольское нашествие). Тюркские слова заимствованы в основном из языков половцев, тюрк, татар. Они обозначают: а) предметы кочевого быта: кибитка, арба, кабак, ковер, шалаш, таз, чугун, коныма и др.; б) предметы одежды и укрытия: армяк, башык, кушак, чалма, халат, жемчуг, бирюза, чулок, каблук, др.; в) предметы вооружения и снаряжения: кинжал, колчан, аркан, кабура; г) лошадей и их мест: лошадь, буланый, бурый, гнедой, каурый, джиноватых, птиц, растений: барсук, кабан, табун, сарай, камыш; д) название кушаний и напитков: лапша, балык, кабак, чалма, халат, жемчуг, бирюза, чулок, каблук, др.; е) предметы вооружения и снаряжения: кинжал, колчан, аркан, кабура; г) лошадей и их мест: лошадь, буланый, бурый, гнедой, каурый, джиноватых, птиц, растений: барсук, кабан, табун, сарай, камыш; д) название кушаний и напитков: лапша, балык, кабак, чалма, халат, жемчуг, бирюза, чулок, каблук, др.; ж) понятие из сферы общественного устройства и торговли: орда, хан, караул, мечеть, батрак, казак; з) презрительные наименования: балбес, балда, болван, вреалаш и др. [5,22]

Через тюркские языки проникли к русскому языку некоторые арабские и персидские слова: базар, бахча, сарай, бурка, бусы, оазис, алмаз, кафтан, чемодан, барахла, магарыч, визирь и т.д.

Процесс заимствования может быть обусловлен как внешними, так и языковыми причинами. Внешними являются причины социально-исторического характера – разносторонние связи между народами: торгово-экономические, политические, культурные. В результате таких связей и происходит процесс перемещения слов из одного языка в другой. Семантическим признаком иноязычного слова является разнообразие его значений в языке.
источнике. Из которых одно или несколько перешло в русский язык.

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DAS PROBLEM DER UNTERSUCHUNG DER MODERNEN DEUTSCHEN LITERATUR DES XX. JAHRHUNDERTS

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Anmerkung
Schlüsselwörter: Authentizität, biografische, authentische Schrift, moderne deutsche Literatur, gynozentrische Literatur.

ПРОБЛЕМА ИЗУЧЕНИЯ СОВРЕМЕННУЮ НЕМЕЦКУЮ ЛИТЕРАТУРУ ХХ ВЕКА

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Аннотация
В данной статье изучается проблема аутентичности в творчестве К. Вольф, Э. Елинек, И. Моргнер, З. Ленц, П. Эдель как явление autobiografischer Prosa in der neuesten deutschen Literatur des XX. Jahrhunderts.
Ключевые слова: аутентичность, биографический, аутентичное письмо, немецкая новейшая литература, гиноцентрическая литература.
der feministischen Bewegung die Probleme der sozialen Ohnmacht von Frauen und mögliche Wege ihres Selbst widerspiegelte -Identifikation in der dominanten patriarchalischen Gesellschaft.


Schreiben für Frauen ist laut K. Wolf ein Mittel, sich von der Männerwelt zu trennen. "Aber der Moment kommt unweigerlich, wenn die Frau, die schreibt ... nichts und niemanden mehr ausdrückt als sich selbst - und wer sie wirklich ist.“ [3, S. 215]. Dies ist jedoch nicht überraschend, da die Autobiographie eines der Grundprinzipien der "Frau enliteratur" ist, was jedoch die Häufigkeit des Auftretens dieser Technik in der "Männerliteratur"


und Diskussionen unter Literaturkritikern und Kritikern.

Literatur
8. Ulrich M. Paradies einer Konsumgesellschaft oder
PROBLEMS OF USE OF TEXTBOOKS IN TEACHING RUSSIAN LANGUAGE FOR MEDICAL STUDENTS

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ANNOTATION

This article examines a number of methodological problems, the solution of which is necessary when teaching Uzbek-speaking students Russian as the language of a future profession. The paper presents a linguodidactic typology of scientific texts used in many textbooks on the scientific style of speech, and also analyzes the manuals made within the framework of this classification and used by the authors in the process of teaching Russian to foreigners at a medical university.

KEY WORDS: educational and professional sphere; scientific style of speech; linguodidactic typology; text.

ПРОБЛЕМЫ ИСПОЛЬЗОВАНИЯ УЧЕБНИКОВ ПРИ ОБУЧЕНИИ РУССКОМУ ЯЗЫКУ СТУДЕНТОВ-МЕДИКОВ

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Аннотация

В данной статье рассматривается ряд методических задач, решение которых необходимо при обучении узбекоязычных студентов русскому языку, как языку будущей профессии. В работе приводится лингвонициклитическая типология научных текстов, используемая во многих учебных пособиях по научному стилю речи, а также анализируются пособия, выполненные в рамках данной классификации и используемые авторами в процессе обучения иностранцев русскому языку в медицинском вузе.

Ключевые слова: учебно-профессиональная сфера; научный стиль речи; лингвовидадкитическая типология; текст.
С развитием международных деловых контактов в современном мире вопрос о преподавании русского языка как иностранного в медицинских вузах стал одним из самых актуальных. Особенно актуален он для тех преподавателей, которые работают в национальных аудиториях.

Студенты, желающие обучаться на русском языке с целью получения профессии, наиболее пристально и внимательно относятся к языку-посреднику. Русский язык в этом случае для студента – посредник между ним и профессией, инструмент для получения профессиональных знаний и умений. Отсюда, соответственно, и повышенная ответственность преподавателя за уровень знаний его студентов.

Подготовка специалистов проводится на основе коммуникативной направленности обучения, которая связана с формированием интерактивной компетенции с целью развития познавательных процессов, творческого мышления, речевой активности.

Поскольку эффективность овладения русским языком зависит не только от стратегии обучения, но и от стратегии обучения, то максимальный эффект может быть достигнут в гармонии этих стратегий. Важным фактором, помогающим достичь этой цели, является повышение эффективности педагогического воздействия преподавателя на студентов, их общение на занятиях в условиях полной социально-психологической совместимости. Студенты воспринимают русский язык как ненужный предмет до тех пор, пока для каждого речевого или языкового действия у них не появится цель. Целью для наших студентов в данном случае является ощущение взаимодействия русского языка с другими предметами, изучаемыми в медиум. Узбекскоязычные студенты хотят быстрее овладеть русским языком на том уровне, на котором им необходимо общаться в процессе получения специальности.

Довузовский этап обучения предусматривает эту проблему и дает базовые знания учебно-профессиональной сферы. В медицинском вузе это знания по математике, физике, химии и биологии. Основой единицей обучения здесь выступает профильный текст. На уроках русского языка для национальной группы в рамках коммуникативно-ориентированного подхода, имеющего в своей основе идею обучения общение на изучаемом языке, студентам предлагается систематизированный профessionально-ориентированный текстовый материал с релевантным для дидактических целей набором моделей построения текстов заданного содержания и определенной функциональной направленностью. Еще в конце XX века была представлена типология научных текстов в «Учебнике русского языка для студентов-иностранцев естественных и технических специальностей». В основе разработанной концепции лежит положение о том, что «структура текста регулируется его смыслом» [4, с. 34], а организующим началом смысла текста является его тема, которая и есть предмет коммуникации. Базируясь на подобном представлении понятия «текст», авторы «Учебника» разработали лингвокультурную типологию научных текстов: 1) тексты о предметах, 2) тексты о процессах (производственных, познавательных и исторических); 3) тексты о свойствах, 4) тексты о лицах; 5) тексты об отношениях (зависимость, обусловленность). Эта типология хорошо себя зарекомендовала, в связи с чем большое количество учебных пособий на подготовительных факультетах страны и в наше время основываются на данной классификации. Не исключение и «Пособие по научному стилю речи для студентов-иностранцев. Медико-биологический профиль» [1], разработанное и изданные силами кафедры Русского языка ташкентской медицинской академии. В пособии существуют такие разделы, как «Классификация предметов и принадлежность предмета к классу», «Определение объекта и характеристика предмета» и др., связанные с текстовой типологией, описанной выше. Содержание текстов, входящих в разделы учебника, ограничено уровнем владения русским языком студентов начального этапа и рамками школьной программы по профильным предметам, необходимым для поступления в вуз. Это могут быть тексты «Клетка», «Кровеносные сосуды», «Тяжелая вода», «Движется ли покоится тело?» и др.

В начале XXI века в результате анализа текстового материала медико-биологического профиля данная классификация текстов была расширена, добавлены тексты об организациях [9], тексты о патологическом состоянии лица [5], тексты о практической деятельности лица [6]. Это стало необходимым дополнением, так как студентам не хватало в полном объеме знаний и умений в учебно-профессиональной сфере, полученных на предуве. Зачастую эти знания о строении клетки, способах движения, различных рода химических реакциях, веществах и классификациях организмов помогают студенту продвинутого этапа обучения только на так называемых теоретических дисциплинах (хими, биологии, анатомии). А современный студент-первокурсник должен успешно осваивать и другие предметы (история медицины,
правоведение, биоэтика). Освоение подобных дисциплин происходит как в письменной, так и устной формах, а значит на уроках русского языка в иностранной аудитории должны быть проработаны тексты соответствующего типа и содержания в этих двух формах общения.

При чтении специальных текстов расширяется круг речевых умений и навыков, связанных с техникой чтения, с различением и узнаванием языковых единиц (слов, синтаксических конструкций), с пониманием содержания текста. Формируются и такие виды умений, как перевод специального текста, конспектирование и реферирование.

Важными умениями, необходимыми для чтения и понимания научной литературы, связанной с овладением медицинской специальностью, являются умения определять главную мысль в прочитанном тексте, конспективно передавать его содержание, выбирать научные факты, нужные ссылки, пользоваться словарями и справочниками.

В данный момент мы не располагаем уникальным пособием, в котором бы реализовывались все компетенции, необходимые студенту продвинутого этапа обучения. Поэтому наши студенты занимаются по разным пособиям, ориентированным на освоение учебно-профессиональной сферы медико-биологического профиля. Это пособие: Скитар Г.Д., Журавлева В.Н., Дерипаско Л.И. Пособие по русскому языку для студентов медицинских вузов [8]; Дьякова В.Н. Диалог врача с больным. Последовательное по трактовке и практику по запросам медицины [7]; Шерстникова С.В. Методические указания по обучению профессиональному медицинскому профилю (для студентов-иностранцев 1–2 курсов) [7]; Щерстникова С.В. Методические указания по обучению реферированию (для студентов-иностранцев медицинских и фармацевтических специальностей продвинутого и завершающего этапов обучения) [10].

Остановимся соответственно на пособиях, разработанных преподавателями нашей кафедры. «Пособие по развитию навыков профессионально ориентированной речи медицинского профиля (для студентов 1–2 курсов)» Л.В. Разуваевой ориентировано на развитие устной речи будущего специалиста. «Пособие по развитию навыков профессионально ориентированной речи медицинского профиля (для студентов 1– курса)» Л.В. Разуваевой ориентировано на развитие устной речи пораженного специалиста. Цель данного пособия – помочь студентам национальных групп продвинутого этапа обучения – реализовать свои коммуникативные по- 331 требования в учебной и социально-профессиональной макросферах общения и подготовить их к профессиональному общению на поздних этапах обучения. Лексико-грамматический материал пособия, во-первых, направлен на закрепление изученного объема знаний и умений на довузовском этапе обучения:

Прочитайте слова, называющие персонал поликлиники. Расположите слова по возрастанию классификации.

Прочитайте и переводите слова, называющие внутренние органы человека. Напишите. К каким системам относятся эти органы.

Прочитайте слова, называющие части лица. Составьте с ними словосочетания по модели: что находится где.

Во-вторых, – на освоение минимума специальной лексики и лексико-грамматических конструкций устной профессиональной речи медицинского работника:

Прочитайте диалоги. Выпишите из них слова и словосочетания, относящиеся 1) к симптомам болезни; 2) к советам врача; 3) к диагнозу.

Прочитайте ситуации. Расскажите, что нужно делать в данных ситуациях. При ответе используйте слова для справок (Например, У Даши температура 38,8º, ее зобит. Даши жалуется на головную боль, кашель, насморк.) Составьте рассказ о том, что видели студенты-медики, будущие врачи, когда они были на практике в поликлиниках/ больницах. Используйте информацию прочитанного текста и материала для справок.

Закончите высказывания, употребив выделенные средства связи текста. Используйте инфомацию прочитанного текста (Например, 1) Интеллектуальные способности зависят не только от природы, но и … 2) Для нормального функционирования мозга необходимы многие микроэлементы. К их числу относятся …).

Целью речевых заданий пособия является формирование навыков и умений осмысления текста, выделения основных логико-смысловых частей текста, построения монологического и диалогического высказываний в рамках речевой ситуации при помощи изученных языковых средств русского языка.

Особо следует остановиться на вопросах обучения профессионально-ориентированной речи студентов национальных групп с элементами русского языка. Преподавателями кафедры русского языка ВГМУ им. Н.Н. Бурденко создано учебно-методическое пособие по обучению национальному стилю речи для иностранных студентов 1 курса. Цель данного пособия – обучение языковым и речевым навыкам и умениям в учебно-профессиональной сфере. В задачи пособия входит ввод в активизацию лексики и синтаксических моделей,
развитие навыков ознакомительного и изучающего чтения на материале текстов по дисциплине «Анатомия», а также развитие навыков монологической речи на базе научного стиля. Особое внимание уделяется формированию и развитию дополнительных навыков работы с научным текстом – составлению простого и сложного номинативного плана текста. При составлении текстов и заданий авторы опирались на содержание учебников общетеоретических дисциплин, используемых на этапе довузовской подготовки.

Микротексты с элементами описания и повествования – описание внешнего и внутреннего строения тела человека, тексты о функционировании систем и аппаратов органов – составлены и расположены в соответствии с принципом нарастающей сложности. «Представленный в учебно-методическом пособии лексико-грамматический материал, тексты с развернутой системой заданий позволяют иностранным студентам, изучающим научный стиль современного русского языка, постепенно овладеть языковыми и речевыми умениями и навыками в учебно-профессиональной сфере» [11, с. 42]. Учебно-методическое пособие «Подготовка к клинической практике» адресовано студентам-англофоным 1 курса. Основной целью данного пособия является подготовка студентов к успешному прохождению медицинской практики в больнице на 3 курсе. Клиническая практика в медицинском вузе предусматривает посещение больничных палат, проведение опроса стационарных больных и заполнение на основании полученных сведений медицинской карты. Профессиональное общение при этом осуществляется на русском языке. Тексты и диалоги, включенные в учебное пособие, содержат информацию об основных разделах медицинской карты стационарного больного: 1. Паспортные данные. 2. Жалобы. 3. История жизни больного. 5. Объективное (настоящее) состояние настоящего заболевания. 4. История жизни больного. 6. Описательное (настоящее) состояние больного. Каждый урок содержит задания, развивающие умения и навыки выделять основную информацию – сведения о больном – и оформлять ее в соответствии с требованиями заполнения медицинской карты.

В предтекстовых заданиях дается толкование новых слов и грамматических явлений, а также тренируется их употребление. На этом этапе вводится необходимая терминология: слова и словосочетания, обозначающие названия и симптомы заболеваний. Особое внимание уделяно разговорной и просторечной лексике, объясняются значения слов и выражений, которые может использовать больной в беседе с врачом и понимание которых может вызвать у иностранных студентов серьезные трудности, например, грудная жаба – стенокардия, желтуха – болезнь Боткина; боль отдает в руку – боль иррадирует в руку.

Примеры заданий:
1. Прочитайте вопросы врача и сформулируйте ответы больного.
2. Прочитайте ответы больного и сформулируйте вопросы врача.

На основании информации текста составьте диалоги врача с больным

Итак, при выполнении задачи по обучению русскому языку, как языку осваиваемой специальности преподаватели осуществляют отбор учебной литературы с учетом доминирующей функциональной направленности текстового материала пособия. Только выделив основную задачу на каждом этапе обучения, подобрав соответствующий данной задаче текстовый материал и определив направленность притекстовых и послетекстовых заданий, пособие может быть эффективным, а работа с ним можно добиться поставленной цели – получение профессии посредством иностранного языка.

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FEATURES OF TEACHING THE ENGLISH LANGUAGE AT THE ECONOMIC UNIVERSITY

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ANNOTATION
This article examines the main aspects of teaching English at an economic university. The author emphasizes the relevance of the study, which lies in the low level of research on the issue, the process of globalization, the development of modern technologies and other reasons. The study presents the main methods of teaching English for students of economic universities.

KEY WORDS: English language; features of teaching; methods of teaching; student; case stage; debate

ОСОБЕННОСТИ ПРЕПОДАВАНИЯ АНГЛИЙСКОГО ЯЗЫКА В ЭКОНОМИЧЕСКОМ ВУЗЕ

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Аннотация
В настоящей статье рассматриваются основные аспекты преподавания английского языка в экономическом вузе. Автором подчеркнута актуальность исследования, которая заключается в низком уровне исследованности вопроса, процессе глобализации, развитии современных технологий и иных причинах. В исследовании приведены основные методики преподавания английского языка для студентов экономических вузов.

Ключевые слова: английский язык, особенности преподавания, методика обучения, студент, кейс стадии, дебаты

It should be noted that in the framework of the process of humanization of modern university education, little attention is paid to the peculiarities of teaching methods of English in an economic university. This trend is evidenced by a rather small number of publications.

The author of the article is I.N. Tabueva notes that encyclopedic knowledge has faded into the background at the moment. In turn, the foreground is currently the ability to apply knowledge, skills and abilities to solve the assigned tasks, including tasks directly related to the future profession [9]. In
addition, in this aspect, the ability to find the necessary information is equally important.

It should be noted that the importance lies in intercultural communication, which today is becoming an integral part of almost any profession.

The author of the article is I.V. Ignatkin, who notes that due to the low level of intercultural competence, university graduates are not able to socially adapt to the new needs of society, to solve communicative and professional tasks. Knowledge of a foreign language is becoming one of the key requirements for specialists in modern conditions [1].

The development of modern technologies, as well as the information and telecommunication network, allows students to receive professionally important information. In the future, directly in the labor activity, a specialist will need knowledge of English to develop and develop advanced technologies and developments based on foreign experience. Modern realities show that in a number of areas in the Russian Federation there is some lag, which implicates the need to use foreign experience. It should be noted that the competence-based approach, which emerged in European higher education and entailed a reassessment of teaching methodology, including teaching a foreign language in Russian education, is also indispensable. The key objectives and goals of the new methodological approach in education were formulated by the Commission "Common European Framework of Reference for Languages: Learning, Teaching, Assessment" (CEFR, 2001).

From the standpoint of pedagogy, this approach should be considered as a change in the concept of the teaching process (including a foreign language in a technical university). In particular, in this process, the main emphasis is not on the transfer of knowledge from the teacher to the student, but on the activation of the role and personal motivation for students to search for information and learning keys.

From the standpoint of methodology, the specific goals of students (including technical universities) of programs within the framework of the "competence-based approach" are determined depending on the acquired competencies.

This approach to solving the problem is in absolute accordance with the structure of modern multidisciplinary higher education (that is, in accordance with the existing practice of the English designation of the system "Liberal Arts") [11].

"Liberal Arts" should be understood as "subjects and skills that in classical antiquity were considered fundamental for the competence of a free person who has the right to take an active part in creative and social life, what in the ancient Greek policies included participation in social, political, philosophical discussions, as well as the right to defense in court, military service, participation in construction. " The basis of this system, as a rule, included grammar, geometry, rhetoric, logic, arithmetic, astronomy [6].

One of the key principles of the competence-based approach in teaching English at a technical university is the need to formulate learning objectives based on the end result, i.e., the acquisition of knowledge, attitudes, skills, values and / or competencies for learners to master with their subsequent application on practice after the end of the academic period. In this regard, the author of this study believes that the process of teaching a foreign language in a technical university should be based on the profile of the educational program in which the student is trained.

The use of the "competence-based approach" technology in this process implies the planning of educational material with a focus on three key stages of training, which directly depend on the tasks set by the program, namely, it implies:

- General training, including the basics of phonetics, speaking practice, the study of grammar;
- Specialized training, which implies the acquisition of skills in selection, scanning, reading texts within the specialty, as well as writing annotations (for example, for technical articles, reviews, research), preparing messages within the received specialty (reports, abstracts in English);
- socio-professional training, which involves the achievement by the student of an advanced level of language proficiency, including the ability to listen and understand lecture material in English, as well as take part in university and international seminars and discussions on technical topics within the framework of the specialty received, independently prepare and conduct presentations in the specialty [3].

In the scientific literature it is noted that a special role in the acquisition of the necessary language skills in the framework of socio-professional training is played by linguistic training, which is aimed at developing general communication skills, i.e. the required level of general competence (reading comprehension and speaking skills).

At the second stage of the training, specialized communication is carried out, involving the assimilation of individual vocabulary units (technical terms) and structures of technical discourse. In addition, at this stage, the student must acquire a pragmatic understanding of the English technical text, as well as be able to annotate and discuss the read text.

The third stage implies the further improvement and development of the skills acquired in the course of socio-professional training, namely, the development of the skills of written and oral discourse, which is set within the proposed circumstances. Among the most relevant technologies that meet the modern tasks of higher education in the process of teaching English at a higher technical school are the following:
the project method based on the “competence-based approach” in teaching professional and spoken English, implies an increase in interest in the language being studied, independence and motivation of students. In this context, we are talking about the embodiment of the idea of creative, developmental learning. The methodology assumes differentiation of the proposed topics of projects depending on the level of training of students. The introduction of this method into the learning process, including the spoken and English economic language, ensures the acquisition of practical skills, and also allows to reveal the individual abilities of students; they learn to propose certain technical solutions, generalize the information received in a foreign language and draw appropriate conclusions, determine the extent of their responsibility when working in a team and individually. It is understood that students will work in a team and together with the teacher to find extraordinary solutions within the framework of their future specialty, as well as to carry out introspection at each stage of their education, to identify certain shortcomings and errors, to look for the causes of difficulties and to find ways to correct errors, like language, and technical plan [5].

The role of the teacher in this technique is the competent direction of the discussion, the correction of the necessary vocabulary. It is important that the teacher should refrain from correcting grammatical errors during the event. All grammatical errors are taken under special control and discussed at the end of the event. Such an approach can bring the participants of the discussion to a new level of proficiency in English, and provide a new vision of the problem itself.

- The “Case Study” technology involves the analysis of a specific educational and business situation in English. The “competence-based approach” method serves as the basis for this technology.

When using the specified teaching method from students, instead of answering specific questions about the text in English, a complete understanding of the proposed situation is required. This technique provides the development of initiative and independence, removes barriers to the free use of English for clarification in a team. Technology develops the prevalence of desire to speak in English [2].

The development and teaching of English by analyzing a specific educational and business situation is mainly applicable at the third stage of the learning process within the framework of the “competence-based approach” technology.

This method is a rather difficult task for a teacher, which at the same time requires high professionalism in the practice of fluency in English, a high level of pedagogical skills and erudition in technical matters [8].

- The “Debate” technology implies the use of the “competence-based approach” method at the second and third stages of training. Learning within the framework of this technology can be aimed at repetition and updating of the passed material [10]. In addition, the teacher has the right to organize independent work of students in the selection of specific materials. The technology can imply the conduct of certification and testing of students. The didactic functions of using the technology under consideration are interconnected with the tasks of a meaningful plan - the development of vocabulary within the framework of the studied topic and its subsequent use, as well as knowledge of the subject of disputes and the acquisition of argumentation skills in English (including technical - profile).

With the help of this technology, an English teacher can get the following results:

- The student's ability to state his own position on a specific issue regarding future professional activity in English (including using technical terms), to defend his own opinion;
- The ability to correctly formulate questions;
- The ability to critically comprehend oral speech;
- Skill to work in team.

Studying and mastering English (including technical) requires the student to be aware of his grammatical system and the correct use of grammatical and lexical structures. In the process of activity, it is inevitable to carry out comparisons of grammatical systems of the native and English languages [7].

Researcher Leont'ev A.A. in his article asserts that “... the grammatical system of a foreign language cannot be independently built by a student alongside the grammatical system of his native language - they will certainly come into contact. The well-known success of the direct method is due precisely to the fact that such a correlation still occurs.” [4]. The author of this study believes that this approach also applies to the process of teaching English at a technical university.

When teaching English in an economic university, it is necessary to take into account the peculiarities of the profile training of students. Students learn English using the principle of progressive information processing. This approach makes it possible to perceive well standard language programs, which include questions for mastering colloquial vocabulary and technical terminology, working with dictionaries (including technical ones), analyzing lexical expressions, etc.

Practice teachers note that when conducting classes with grammar, students must first explain the
grammar rule, and then offer one or another way of completing the assignment.

However, it should be noted that one of the most important and multilevel methods of learning English as a foreign language today is the linguosociocultural one, which involves an appeal to such a component as the cultural and social environment. The adherents of this method are firmly convinced that the language will lose its existence if the goal is solely the mastery of lexico-grammatical forms [1].

Particularly noteworthy are listening tasks (listening comprehension, for example listening to CDs with technical texts, as well as developing reading fluency.

As practice shows, when studying English, it is best for students of a technical profile to complete written assignments, as well as those types of educational activities that allow them to analyze and draw independent conclusions, both in a team and individually.

In a number of studies, it is noted that students of technical universities are characterized by difficulties in colloquial speech, and also excessive self-control over the spoken speech interferes. In addition, during speech activity, they tend to use pre-learned phrases and texts, which they include in their own speech without prior deliberation. Communicative tasks that contribute to memorizing entire phrases and blocks provide spontaneity in the use of the language of the specialty in speech without mechanical memorization, which helps to get rid of excessively rigid self-control over what they say.

Finally, the final stage of training is an uninterrupted understanding of the English-language text, which is achieved later when students work independently. Translation for technical students is a necessary way to find the equivalent. Consequently, a hidden or explicit translation into Russian will always be present.

Summarizing the above, it should be noted that the best results in teaching English to students of technical universities can be achieved with the integrated use of communicative methods and grammatical-translation method. In the process of teaching English to university students, the sequence of the methodological steps proposed by the teacher involves a gradual transition from the elementary mastery of the available language means to the formation of basic speech skills among technical students, as well as the development of speech skills, both productive and receptive. Thus, we can talk about the individuality of thinking of students of technical universities, which is different from students in the humanities.

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TOPICAL ISSUES OF STUDYING THE HISTORY OF DEVELOPMENT OF THE RUSSIAN LANGUAGE

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ANNOTATION
In this article, the author reflects on the history of the development of Russian linguistics and its significant contribution to modern world linguistics.

KEY WORDS: Russian linguistics, grammar, linguistics, parts of speech, phonetics, word formation, morphology, syntax.
Европы, Азии и Африки легли в основу этой работы. В России в первой половине XIX века монгольский язык изучали такие ученые, как Яков Шмидт, финно-угорский язык М.А. Кастрен, китайский язык Бичурин, язык хинди Г.В. Лебедев.

В конце XIX - начале XX вв. Основоположниками и крупными представителями русской школы востоковедения были В. Р. Розен, В. В. Бартольд, крупнейший знаток древневосточных стран и египетских языков.

Такие ученые, как Б. А. Тураев, о семитском языке, П. К. Коковцов, Н.И. Ильминский о тюркских языках, Н. И. Ашмарин, В.В.Радлов, П.М. Элиоранский, о монгольском языке, О.М. Ковалевский, Б.Я. Владимирович, об арабском языке, В.Ф. Гиргас, И.Ю. Крачковский, Ф.Э. Корш, Хинд К.А. Коссович, И.П. Индеев, В.Ф. Миллер, К.Г. Залeman, В.А. Жуковский, В.П. Васильева, П. Кафарова, В.М. Алексеева, о сирийском языке написали научные труды.

Русские лингвисты внесли значительный вклад в развитие мировой лингвистики, составив семитный словарь санскрита академиком Отто Батлингом и немцем Рудольфом Ротсом. В 1870 году был опубликован томный словарь санскрита В. Ф. Гиргаса, И.Ю. Крачковского, Ф.Э. Корш, Хинд К.А. Коссович, И.П. Индеев, В.Ф. Миллер, К.Г. Залeman, В.А. Жуковский, В.П. Васильева, П. Кафарова, В.М. Алексеева, о сирийском языке написали научные труды.

Михаил Васильевич Ломоносов

Великий русский ученый М. В. Ломоносов (1711-1765) опубликовал свои труды о самостоятельных основах русского языкоznания с исследованиями по грамматике, орфографии и стилистике. В 1755 году он опубликовал первую грамматику русского языка - труд «Русская грамматика» на русском языке. То есть, до М.Ю. Ломоносова русский язык не создавался на одном языке.

Грамматика М. В. Ломоносова на основе родного русского языка была очень известна. Однако эта работа сыграла важную роль в развитии русского языкознания. Грамматика М. В. Ломоносова является описательной - нормативно-методической грамматикой, а исходная русская грамматика считается грамматикой научной (академической). Хотя эта грамматика - это не только стандартная грамматика, это также общая, целостная и информативная грамматика русского языка. М. В. Ломоносов говорит о грамматике: «Без грамматики речь бессмысленна (« вздор »), поэзия - глупа, философия - необоснована, история- необоснована, закон- неnadежен».

Произведение М. В. Ломоносова «Грамматика русского языка» состоит из шести разделов (пропагандистских).

Эти:
1. О слове.
2. Об орфографии и правописании.
3. О существительных.
4. О глагола.
5. О вспомогательных словах.
6. О синтаксисе.

Он останавливается на проблеме частей речи и определяет их как восемь, то есть, существительные, местоимения, глаголы, прилагательные, наречия, предлоги, союзы и наречия.

Это также объясняет функцию слова в речи. Например, существительное используется для обозначения вещей, местоимение используется для сокращения существительного, а глагол используется для обозначения состояния действия.

В целом в основе грамматической системы Ломоносова лежит учение о семействах слов. Следовательно, на основе логики и функции, как мы видели выше, группы слов делятся на две группы: независимые слова и вспомогательные слова. Следовательно, на основе физики и функции, как мы видели выше, группы слов делятся на две группы: независимые слова и вспомогательные слова.

Самостоятельные слова - это существительные, глаголы, прилагательные и числа, которые относятся к объективному существу. Вспомогательные же слова, в соответствии с принципом экономии языковых единиц, уменьшают повторение речи и спасают ее от повторения.

Таким образом, вспомогательные слова в основном используются для соединения или сокращения прямых слов.

М. В. Ломоносов внес большой вклад в обогащение и совершенствование русской научной терминологии. Он разработал научную терминологию на основе русского языка, которая понятна, и большинство терминологию на основе русского языка, которая приобретает социальную значимость, «силу», давая значение, информацию об объекте, событиях.

Он справедливо подчеркивает, что оно служит людям для выражения своих идей, для информации других. Действительно, слово приобретает социальную значимость, «силу», давая значение, информацию об объекте, событиях.

Размышляя о слове, М. В. Ломоносов справедливо подчеркивает, что оно служит людям для выражения своих идей, для информирования других. Действительно, слово приобретает социальную значимость, «силу», давая значение, информацию об объекте, событиях.

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М. В. Ломоносов в своем труде «Краткий справочник по риторике» (1748) дает подробное изложение теории речи. Это основа русского синтаксиса. В «Правде церковных книг на русском языке» он разработал теорию трех стилей: различает верхний, средний и низкий стили. Высокий стиль составлен из славянско-русских слов, что доказывает композицию героических стихов и прозы.

Средний стиль составлен из слов, употребляемых в русском языке, и написаны сценические произведения, письма, комиксы.

Низкий стиль - церковь - русские слова, которые не редкость в славянском языке - комедия, эпиграммы, песни, письма в прозе, деловые бумаги.

В заключение, М. В. Ломоносов в своих исследованиях строго применил эмпирический метод, основанный на наблюдении и обобщении русскоязычных материалов, касающихся фонетики, словообразования, морфологии и синтаксиса.

Грамматика М. В. Ломоносова, основанная на русском языке, стала очень известной, и в период «русской грамматики» до лингвиста Александра Ивановича Востокова, почти 80 лет он провел в роли главной и ведущей грамматики русского языка.

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PROBLEME DES AUSDRÜCKS VON MODALEN DEUTSCHEN VERBS IN DER UZBEK-SPRACHE

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Anmerkung
Dieser Artikel beschreibt Probleme im Zusammenhang mit der Verwendung von Modalverben auf Deutsch.
Schlüsselwörter: Modalverben, Deutsch, Linguistik, Kategorie, Sprachmittel.

ПРОБЛЕМЫ ВЫРАЖЕНИЯ МОДАЛЬНЫХ ГЛАГОЛОВ НЕМЕЦКОГО ЯЗЫКА В УЗБЕКСКОМ ЯЗЫКЕ

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Аннотация
В данной статье рассматриваются вопросы, связанные с употреблением модальных глаголов на немецком языке.
Ключевые слова: модальные глаголы, немецкий язык, лингвистика, категория, средства языка.


All dies füllte jedoch nicht die Lücke im Studium der Modalverben in der deutschen Sprachwissenschaft. Im Gegensatz zu vielen Wörtern
im Hauptvokabular sind Modalverben (können, gehören, gehören, wollen, müssen) semantisch nahe an Verbtypen und haben viele lexikalische Bedeutungen wie bedingte, Nachrichten und zwanghafte Verbformen. Alle diese Bedeutungen zusammen dienen als Ausdruck einer besonderen Kategorie - der Kategorie der Modalität.

So müssen er das nicht gemeint haben.
Wir dürften auch mitkommen.
Das neue Haushaltsgerötungsbehaftete echte ist sein.
Dieser Brief stammt von meinem Onkel kommen.
Das neue Haushaltsgerötungsbehaftete echte ist sein.
Wir dürften auch mitkommen.
So müssen er das nicht gemeint haben.

Es ist bekannt, dass das Modalitätszeichen alle Sätze abdeckt. Dies ist eines der Hauptmerkmale eines Satzes, der sich auf das syntaktische System der Sprache bezieht. Modalität wird nicht nur durch grammatischale Mittel ausgedrückt, sondern auch durch lexikosemantische und intonationale Mittel. Im Gegensatz zu Usbekisch manifestiert sich Modalität in der deutschen Sprache nur in Form eigener Ausdrucksmitte entsprechend ihren eigenen strukturellen und systemischen Merkmalen. Zusammen mit den gängigen Verbtypen wird die Kombination von Modalverb + Infinitiv verwendet, um die Modalität auf Deutsch auszudrücken.

Wir können also sagen, dass Modalverben im Deutschen aus einem System von Hilfsverben bestehen, die Modalität im lexikalischen Sinne ausdrücken.

Modalität manifestiert sich im Deutschen nicht nur in Verbformen, sondern auch in anderen Ausdrucksmitteln. Beispielsweise:

Du darfst nicht lachen || Das Modalverb "bedeuten" im Satz zusammen mit dem Negationswort und der Befehlsintonation verringert die Modalität überhaupt nicht. Modalverben verlieren ihre lexikalische Bedeutung, wenn sie in Preteritum Conjunctiva verwendet werden, insbesondere in gegabelten Sätzen, und verschmelzen vollständig mit Conjunctiva, um eine neue Bedeutung zu geben. Beispielsweise:


So hat L.R. Zinder und T.B. Stroyera zeigen, dass sich sowohl in indikativen als auch in konjunktiven Modalverben unterschiedliche Modalsschattierungen stärker unterscheiden als in der Bindehaut. [1,12]

Selbst in Verzweigungssätzen, in denen die modale Bedeutung dieser Verben schlecht ausgedrückt wird, drücken modale Verben diese Bedeutung genauer im Präteritum Conjunctiva aus. Beispielsweise:

Es gab niemand, der es besser verstand.
Es gab keine, der es besser verstehen kann.

Im ersten Satz wird die Modalität abstrakter ausgedrückt als im zweiten Satz, da im zweiten Satz das Modalverb seine Bedeutung definiert, während das Modalverb connen die Bedeutung von "Möglichkeit" im Präteritum - der Bindehaut behält.


Ich weiss nicht, ob er das fragen würde.
Ich weiss nicht, ob er das fragen könnte.
Ich weiss nicht, ob er das fragen sollte.
Ich weiss nicht, ob er das fragen möchte.
Ich weiss nicht, ob er das fragen müsste.

Wie Sie den Beispielen entnehmen können, drücken Modalverben die Modalität genauer und klarer aus als Bindehaut und bedingte Formen.

Wenn man über die Unterschiede zwischen verbalen Formen und Modalverben spricht, sollte man bedenken, dass Modalverben eine spezielle Gruppe auf Deutsch bilden und ihr Hauptmerkmal ihre Grammatik ist. Die Grammatik der Wörter bedeutet, dass sie ihre Form ändern und die Zeit, den Typ usw. ändern. Grammatische Kategorien sollen bedeutungsnähe Bedeutungen ausdrücken.

In diesem Fall behalten Modalverben jedoch ihre lexikalische Bedeutung. Es sollte beachtet werden, dass die Grammatik immer weitergeht. Prominente Beispiele hierfür sind die Modalverben "sollen" und "wollen". Diese Verben waren im Mittelalter das Hauptausschlussmittel. Derzeit erfüllen Modalverben viele grammatischale Funktionen:

1) Sie stellen eine Frage (soll)
2) drückt die Zukunftsinform aus (sollen und wollen)
3) Bildet indirekte Sprache (soll und mogen)
Wer mag das sagen?
Ajnur ist gesund, sie kann kommen.
Wir dürfen (haben Recht) auf unsern sohn stolz sein.

In der Verbindungsform haben Modalverben, die fast keine Grammatik haben, mehr ihre ursprüngliche Bedeutung. Alles, was bleibt, sind ihre Bedeutungsschattierungen, die Modalverben zu einem lebendigeren Mittel machen, um Modalität auszudrücken, im Gegensatz zu dem einfachen Konjunktivisten in der Konjunktivform. Die semantische Anreicherung von Modalverben steht in direktem Zusammenhang mit ihrer Stabilität in dieser Sprache.


Alle diese spezifischen Bedeutungen sind nicht leicht zu ersetzen, wie es normalerweise in Lehrbüchern der Fall ist. Sie waren gezwungen, abstrakteren und allgemeineren Bedeutungen Platz zu machen. Daher gibt Cannes im Zauberer einfach nichts an. Mag wird speziell verwendet, um "stark zu sein" zu bedeuten, und Cannes wird in der abstrakten Bedeutung verwendet, um "das Recht zu haben", "zu entscheiden": Zum Beispiel.


Unter Berücksichtigung des oben Gesagten ist daher zu beachten, dass die Entwicklung und Semantik von Modalverben in grammatischen Sammlungen und Wörterbüchern der deutschen Sprache noch nicht die notwendige und korrekte Interpretation gefunden hat.

Literatur
FACTORS AFFECTING SUSTAINABLE DEVELOPMENT: PERSPECTIVE OF ENVIRONMENTALLY FRIENDLY

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ABSTRACT

Balancing sustainable development is a challenge to global human beings in terms of the use of natural resources, industrial products, energy, food, transportation, shelter, and waste management with the claim of preserving and protecting the quality of the environment and natural resources for future development. This concept is a long-term human need but would be impossible unless the natural physical condition of the earth, chemistry and biological systems were preserved and preserved. Therefore, this study was conducted to identify the factors that influence sustainable development based on the perspective of environmentally friendly interior decoration. These factors were analyzed using regression analysis. The findings show that there are 18 factors that influence sustainable development based on the perspective of environmentally friendly interior decoration. Therefore, sustainable construction requires certain practices in construction especially in terms of selection of materials that have been labeled green, environmentally friendly resources, construction methods as well as design. It is also important in ensuring that efforts to improve performance, reduce project load on the environment, reduce waste of resources and more environmentally friendly construction can be achieved holistically.

KEYWORDS: pembangunan lestari, hiasan dalaman, mesra alam, analisis regresi

INTRODUCTION

Sustainable development in Malaysia can be said to have started in 1973 with the establishment of the Ministry of Technology, Research and Local Government. The Ninth World Urban Forum (WUF9) held in 2018 at the Kuala Lumpur Convention Center (KLCC) aims for all countries in the world to have the same vision in future urban development (Bogdanova, 2016). In ensuring sustainable development, the basic knowledge of science and scientific thinking of the urban population is very important (Mohd Nazaruddin et al., 2018).

Along with the Sustainable Development Goals 2030 (Chan, Darko, Olanipekun & Ameyaw, 2018), the organization of WUF9 this time shows the government's commitment in sustainable and prosperous urban development. Malaysia needs to see a better urban future by taking into account the well-being of the urban population in terms of urban poverty, health, security and well-being as well as comfort and cleanliness (Natocheeva et al., 2019). In line with the passage of time and technological advances, there are various concepts of interior decoration and housing used by developers to reduce problems involving environmental pollution and energy consumption (Zhang, Kang, Jin, 2018).

Eco-home or also known as eco-friendly house is a concept of housing designed, built and occupied to give a lower impact than conventional house on its occupants (Dobson, Sourani, Sertyesilisik & Tunstall, 2013). This concept is an important innovation in environmental sustainability, climate change adaptation and affordable housing. Universiti Teknologi Malaysia (UTM) has successfully developed the concept of eco-friendly home with the support of smart applications for energy control. The house is built with environmentally friendly interior and exterior materials as well as the concept of interlock brick and does not require a frame or without beams and pillars that is firmly standing with the wall as a pillar. Named UTM Eco Home, the house is built to a height of one and a half storeys and is equipped with...
energy saving features through nine construction models (Jeddi, McCoy & Hankey, 2019). Therefore, this study aims to identify the factors that influence the elements of sustainability in property development, especially from the aspect of interior decoration in Kuala Lumpur, Malaysia.

LITERATURE REVIEW

The world community has begun to take proactive action by applying sustainable aspects in design and construction. This application will further ensure the comfort of occupancy, increase energy efficiency and in turn save property maintenance costs in the long run (Matiso, Noonan & Flowers, 2016). In addition, greenhouse gas emissions of almost 40% come from property development and operations (Hwang, Zhu & Ming, 2017) which are related to global warming. Balancing sustainable development is a challenge to global human beings in terms of the use of natural resources, industrial products, energy, food, transportation, shelter, and waste management with the claim of preserving and protecting the quality of the environment and natural resources for future development. This concept is a long-term human need but will be impossible unless the natural physical condition of the earth, chemicals and biological systems are preserved and preserved (Afanas & Shash, 2020).

The three main problems underlie and affect the overall sustainability issues in the construction environment. First, the increase in world population. Around the 1850s, the world’s population was about 1 billion people. But now, the world’s population has grown to more than 7 billion people and is estimated to reach about 10 billion people by 2050 (Revell & Blackburn, 2007). Projections by the U.S. Census Bureau show that the world’s population will continue to grow until the 21st century, but growth will be slower. The world population is estimated to increase from 6 billion people in 1999 to 9 billion people by 2045, which is an expected increase of 50% in 46 years (Urba, Haque & Oino, 2019). This increase will affect economic activities in developing countries. Malaysia is one of the three most populous countries in addition to China, India and Indonesia with a population growth of around 100,000 people per day (Shurrab, Hussain & Khan, 2019).

The second thing that underlies this sustainability issue is the growth of the world economy. When the world’s population reached 1 billion people in the 19th century, most (80%) majority of the population would live in cities and the rest would live in rural areas. After more than a century of industrial and urbanization activities, it is predicted that the majority of the world's population will live 10 times more in urban areas than in rural areas. At the same time, the quality of life of the population will increase as well as increase in per capita income as well as the rate of life expectancy will also increase (Akimzhanova, Ilyassova, Nukusheva & Rustembekova, 2018).

Third, the world’s climate has never been truly stable. This condition has persisted since the cold season and has been hot since the ice age (ice-age). Minimum sea level has also shown significant differences. We are now in the middle of the warm-up era. Human activity that causes global warming to occur rapidly (Ngowi, 2001).

It is generally known that the terms eco-friendly building refer to the building's relationship with the environment. However, there are also authors who use various definitions to explain the concept of building sustainability such as intelligent building (intelligent building), high performance building, green building, engineering smart building and sustainable building. All these definitions will refer to environmental aspects that involve reducing pollution, reducing energy consumption, and reducing damage to the environment (Darko & Chan, 2018). According to Filipenko and Abakumov (2017), environmentally friendly buildings also known as sustainable buildings (sustainable building) is a structure designed to meet objectives such as preserving the health of occupants, increasing productivity, low energy, water and resource use effectively and reduce impact on the environment as a whole.


According to Zubizarreta, Cuadrado, Orbe and Garcia (2019) have defined eco-friendly buildings as a concept of integrated and holistic approach in terms of location, place, design, specifications, energy consumption and resources in order to reduce the impact on the environment. This condition refers to the building that is comfortable to occupy, does not have a negative impact on the health of the occupants and less impact on the environment.

According to Telichenko and Benuzh (2014), design by integrating various parties in the early stages of development projects is to obtain quality and environmentally friendly buildings. An environmentally friendly building is a building that has no impact on the environment, built in a sustainable area, with a sustainable design, which makes the occupants comfortable to live and work in it in a sustainable manner. The design of environmentally friendly buildings is based on its
ability to optimize resources efficiently. In other words, the design of this building can reduce the health problems of the occupants, increase the ability to work, reduce the use of energy, water and other resources in turn will reduce the impact on the environment. In addition, the use of building materials can also be expanded by introducing the concepts of recycled, renewable and reused for the building materials. The building materials used are of good quality, do not affect the health of consumers, moreover the cost of construction will be saved.

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Sustainable construction or green construction that is gaining attention among construction industry players is a construction concept that promotes environmentally friendly, economic, and social development (Hasif Rafidee, Mohd Nazaruddin & Mohd Nasrun, 2018). However, the implementation of this concept also faces challenges and requires strong support from various parties. This is clear because sustainable construction requires certain practices in construction especially in terms of the selection of materials that have been labeled green, environmentally friendly resources, construction methods and design. It is also important in ensuring that efforts to improve performance, reduce project load on the environment, reduce waste of resources and more environmentally friendly construction can be achieved holistically. In addition, the systematic process is also a key pillar in ensuring the smooth implementation of infrastructure construction either under the supervision of the government or the private sector.

There are several construction procurement systems commonly used in construction projects, including conventional systems, design and construction, project management and also systems based on cooperative relations. Typically, the selection of a procurement system depends on the needs of the client, the type of project, the level of risk borne by the client, the resources and organizational structure involved in the construction project. It can be said that most construction projects in the government sector use conventional procurement methods by open tender, selective or direct negotiations. The main feature of conventional and phased conventional acquisition methods between the design and construction processes is seen as a major factor in the duration of this procurement process to be long and long. The communication gap between the consultants and the contractors involved also contributes to the occurrence of disputes in construction projects that use this conventional procurement system.

Table 1
Factors Affecting Eco-Friendly Design Elements

<table>
<thead>
<tr>
<th>Variables</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td>0.001***</td>
</tr>
<tr>
<td>Education</td>
<td>0.000***</td>
</tr>
<tr>
<td>Jobs sector</td>
<td>0.000***</td>
</tr>
<tr>
<td>Jobs type</td>
<td>0.911</td>
</tr>
<tr>
<td>Jobs status</td>
<td>0.000***</td>
</tr>
<tr>
<td>Sustainable</td>
<td>0.003***</td>
</tr>
<tr>
<td>LEED</td>
<td>0.609</td>
</tr>
<tr>
<td>Essential</td>
<td>0.006***</td>
</tr>
<tr>
<td>Eco-friendly</td>
<td>0.000***</td>
</tr>
<tr>
<td>Quality</td>
<td>0.055*</td>
</tr>
<tr>
<td>Problem</td>
<td>0.615</td>
</tr>
<tr>
<td>Global warming</td>
<td>0.000***</td>
</tr>
<tr>
<td>Praktical</td>
<td>0.779</td>
</tr>
<tr>
<td>Profit</td>
<td>0.000***</td>
</tr>
<tr>
<td>Energy saving</td>
<td>0.000***</td>
</tr>
<tr>
<td>Collaboration</td>
<td>0.021**</td>
</tr>
<tr>
<td>Allocation</td>
<td>0.000***</td>
</tr>
<tr>
<td>PBT</td>
<td>0.378</td>
</tr>
<tr>
<td>Rules</td>
<td>0.102</td>
</tr>
<tr>
<td>Guide</td>
<td>0.000***</td>
</tr>
<tr>
<td>Encouragement</td>
<td>0.000***</td>
</tr>
<tr>
<td>Conducive</td>
<td>0.000***</td>
</tr>
<tr>
<td>Insentive</td>
<td>0.026**</td>
</tr>
<tr>
<td>Programme</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

R² = 0.813
Sig = 0.000

Note:
*** = significant at 1%
** = significant at 5%
* = significant at 10%
Based on this situation, government green procurement (Government Green Procurement) has been introduced to overcome the problem in conventional procurement, especially in the government sector. The government's green procurement guidelines to be strengthened are the government's efforts in promoting the use of green or sustainable products and services in the country. Apart from that, it is also one of the government's steps in achieving the main thrust in the Construction Industry Transformation Plan (CITP) 2016-2020 towards more sustainable development. With the existence of green procurement, it is expected to signal to all industry players that the need to emphasize the concept of green is important to address the problem of environmental pollution that occurs as a result of development processes that do not care about previous environmental impact. The implementation of procurement of products and services based on needs is also an effort to prevent waste from continuing to occur. The government's efforts to strengthen this innovative procurement practice should be commended. It clearly proves that the government is serious about improving the quality of environmental conservation and community life in a comprehensive manner. This initiative not only focuses on the environment but also encourages the effective use and production of green products.

CONCLUSION

This study was conducted based on its importance that is first, this study can examine more deeply related to the issue of global warming, climate change and environmental problems. The community has tried to find a way to alleviate this problem. Various methods and concepts have been explored, among them in the aspect of applying green interior design. Second, this study can provide knowledge in the application of environmentally friendly interior decoration, especially among designers who are directly involved in the construction industry. They need to be exposed to the features of environmentally friendly buildings, cost effectiveness and even reduce resource depletion. Third, this study can help policy makers, government authorities, academics and even the public (stakeholders) to update and make improvements to existing legislation and encourage developers, contractors and consultants to carry out sustainable development. This is in line with the government's recommendation that encourages sustainable development accompanied by the Green Technology Policy launched by the government.

REFERENCES

A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING PROGRAMME ON KNOWLEDGE AND SKILLS REGARDING AUTOMATED EXTERNAL DEFIBRILLATION (AED) AMONG STAFF NURSES IN SELECTED HOSPITALS OF JALANDHAR, PUNJAB

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ABSTRACT

Introduction: Defibrillation is a definitive treatment for life-threatening cardiac arrhythmias, ventricular fibrillation and pulse less ventricular tachycardia. Defibrillation consists of delivering a therapeutic dose of electrical energy to the affected heart with a device called a defibrillator. This depolarizes a critical mass of the heart muscle, terminates the arrhythmia, and allows normal sinus rhythm to be reestablished by the body's natural pacemaker, in the sinoatrial node of the heart. The current statistics of the cardiac emergency prevalence, indispensable role of defibrillator in managing the emergency conditions and the lack of proper knowledge and skill in handling defibrillators necessitates the focus in to the proposed study.

Material and method: A one group pre-test post-test pre experimental design has been used to attain the objectives of the present study. Total sample for the study used were 50 staff nurses selected by convenient sampling technique. Three tools were used to collect the data in the study i.e. demographic data, structured knowledge questionnaire and skill rating scale. The data was collected from subject in selected hospital of Jalandhar, after explaining them the purpose of study.

Results: The present study revealed that overall mean knowledge score obtained by the staff nurses in pre test was 14.42 with standard deviation 2.40 where as the overall mean knowledge score obtained by the subjects in the post-test was 20.70 with standard deviation 2.87.

The present study revealed that overall mean skill score obtained by the subjects in pre test was 24.70 with standard deviation 3.14 where as the overall mean skill score obtained by the subjects in the post-test was 50.62 with standard deviation 4.49.

Conclusion: The improvement means score for overall knowledge was 6.28 with the calculated 't' value 22.50. The improvement means score for overall skill was 25.92 with the calculated 't' value 33.45.

Thus it indicates that there is a significant difference between the pre test and post test knowledge and skill scores. Therefore the structured teaching programme is effective in increasing the knowledge and skill level of staff nurses regarding Defibrillation and AED.

KEY WORDS: Defibrillation, AED, Knowledge, Skill, Staff Nurses

INTRODUCTION

Defibrillation is a definitive treatment for life-threatening cardiac arrhythmias, ventricular fibrillation and pulse less ventricular tachycardia. Defibrillation consists of delivering a therapeutic dose of electrical energy to the affected heart with a device called a defibrillator. This depolarizes a critical mass of the heart muscle, terminates the arrhythmia, and allows normal sinus rhythm to be reestablished by the body's natural pacemaker, in the sino-atrial node of the heart.
Defibrillators can be external, trans venous, or implanted, depending on the type of device used or needed. Some external units, known as Automated External Defibrillators (AEDs), automate the diagnosis of treatable rhythms, meaning that lay responders or bystanders are able to use them successfully with little, or in some cases no training at all.1

The AED is highly specific and sensitive in recognizing the shockable and non-shockable rhythms. The shockable rhythms are ventricular tachycardia (VT) and ventricular fibrillation (VF). The non-shockable rhythms are pulseless electrical activity (PEA) and asystole. Therefore, it is essential to quantify and qualify the cardiac rhythms while patients experience cardiac arrest to further justify the employment of AED in hospital setting.2

Cardiac arrhythmias are some of the conditions which carry life threatening risks leading to heart failure or death, where early actions can play a great role in bringing back a patient from the clutches of death.3

NEED OF THE STUDY
Heart attack is the third commonest cause of death next to only cancer and road accidents in India. Every year 2.5 million people suffer from coronary artery disease & 1.5 million die of it in India. It is estimated that by 2025 every one out of four heart attacks in the world will be an Indian.4

The American heart association (2005) reported that the chance of survival decreases from 7% to 10% for every minute that passes without defibrillation when a shock able rhythm is present. When shock is delivered within 3-5 min, the survival rate of sudden cardiac arrest secondary to ventricular fibrillation can range from 48-74%.The correlations between delaying defibrillation and survival are further strengthened from findings of initial survival rates of nearly 100% when a shock for ventricular fibrillation was delivered within 1-2 min after cardiac arrest in an in-patient setting.5

The current statistics of the cardiac emergency prevalence, indispensable role of defibrillator in managing the emergency conditions and the lack of proper knowledge and skill in handling defibrillators necessitates the focus in to the proposed study.

Taniguchi T, Omi W, Inaba H. found that more than 90% of nurses and medical students declined to perform AED defibrillation because they did not know what an AED is and/or how to use it; 57% refused to defibrillate because they did not know how to use one correctly.6

It is essential that all health care professionals and students are regularly trained in the practice of defibrillation. In most cases of cardiac arrest, the chances of a favorable outcome depended not only on efficient BLS, but also on the early defibrillation. In a hospital environment, the first responders are most likely to be members of the nursing staff. The potential advantage of these personal being able to perform early defibrillation, as well as BLS is considerable.

OBJECTIVES OF THE STUDY

1. To assess the pre test level of knowledge and skill among the staff nurses regarding Automated External Defibrillation
2. To assess the post test level of knowledge and skill among the staff nurses regarding Automated External Defibrillation
3. To assess the effectiveness of teaching programme among staff nurses regarding Automated External Defibrillation.
4. To compare the mean pre test and post-test score of knowledge and skill regarding Automated External Defibrillation among staff nurses.
5. To determine the association between pre test post test level score of knowledge and skill with selected demographic variables.

MATERIALS AND METHODS

Research design
A one group pre-test post-test pre experimental design has been used to attain the objectives of the present study.

Research setting
The present research study was conducted in selected hospitals of Jalandhar, Punjab.

Variables

Independent Variable: Structured teaching programme on Automated External Defibrillation.
Dependent Variables: Staff Nurse’s knowledge and skill on Automated External Defibrillation.
Socio demographic variables: Age, Gender, professional qualification, Work Experience, In-service education, Previous knowledge about AED, Previous exposure to cardiac emergencies and performed Defibrillation in past.

Conceptual framework
A conceptual framework deals with concepts assembled together by virtue of their relevance and the research problem which provides a certain frame of reference for clinical practice, research and education.7 Conceptual frame work selected for this study was based on general system theory as capsulated by Von Ludwig Bertalanffy: in this theory main focus is on the discrete parts and their interrelationship.
Target population
The target population of the present study was the staff nurses working at selected Hospital of Jalandhar, Punjab. Once the eligibility of sample was established, written informed consent was obtained by.

Sample size
The sample for the present study composed of 50 staff nurses working at selected Hospital of Jalandhar, Punjab.

Sampling Technique
Convenient sampling technique was adopted to select the samples for the present study at selected Hospital of Jalandhar, Punjab based on inclusion criteria to collect data.

Inclusion and Exclusion Criteria

Inclusion criteria
1. Staff Nurses who are willing to participate in the study.
2. Both male and female Staff Nurses are included.

Exclusion criteria
1. Staff Nurses who are not responding to questionnaire.
2. Staff Nurses who are not available at the time of data collection.

Description and development of tools
Data tools are the devices that a researcher uses to collect data.
The tool consist of demographic profile and a self administered closed ended, structured questionnaire to assess the knowledge of staff nurses regarding automated external defibrillation and rating scale to assess the skill of staff nurses regarding automated external defibrillation.
The tool consist of three parts.

Part A - Demographic variables
Consists of items seeking information regarding socio-demographic characteristics of staff nurses such as age, gender, professional qualification, work experience, in-service education, previous knowledge about AED, previous exposure to cardiac emergencies and performed defibrillation in the past.

Part B – Knowledge items on Defibrillation and automated external defibrillation
The structured questionnaire is used for knowledge it consists of 30 knowledge items which contain:
- Part I: Items related to general information about heart 1-13
- Part II: Items related to defibrillation and automated external defibrillation.14-30

Scoring of the Items
There were 30 knowledge items. Each item has three options with one accurate answer. The score for correct response to each item was “one” and for incorrect response was “zero”. Thus for 30 items maximum obtainable scores were 30 and minimum was zero.

To find out the association between the selected socio-demographic variables and knowledge scores, respondents are categorized into five groups as below:

Part C – Skill aspect on automated external defibrillation.
The rating scale is used for Skill aspect on automated external defibrillation. It consists of 15 practice items on automated external defibrillation.

Scoring system for Nurses Skills:
Each item has five responses i.e.
1. Always
2. Frequently
3. Sometimes
4. Rarely
5. Not at all
Always has 4 point, frequently has 3 point, sometimes has 2 points, rarely has 1 point, and not at all has 0 point.
The total score of nurses’ skills was calculated and classified as follows:

Construction of the Teaching Programme:
The structured teaching programme was developed based on the previous assessment of nurses knowledge and skills, available resources and review of relevant literature.
## RESULTS

Table- 1: Frequency and Percentage Distribution of Socio-Demographic Characteristics of Staff Nurses.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Socio-Demographic characteristics</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. &lt; 25 years</td>
<td>12</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>b. 26 - 35 years</td>
<td>13</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>c. 36 - 45 years</td>
<td>16</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>d. &gt; 46 years</td>
<td>09</td>
<td>18%</td>
</tr>
<tr>
<td>2.</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Male</td>
<td>06</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>b) Female</td>
<td>44</td>
<td>88%</td>
</tr>
<tr>
<td>3.</td>
<td>Professional qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) GNM</td>
<td>39</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td>b) Basic BSc Nursing</td>
<td>04</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>c) Post Basic BSc nursing</td>
<td>07</td>
<td>14%</td>
</tr>
<tr>
<td>4.</td>
<td>Work experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) &lt; 1 years</td>
<td>24</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td>b) 1 - 3 years</td>
<td>17</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>c) 4 – 6 years</td>
<td>06</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>d) &gt; 6 years</td>
<td>03</td>
<td>6%</td>
</tr>
<tr>
<td>5.</td>
<td>In service education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Attended</td>
<td>13</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>b) Not attended</td>
<td>37</td>
<td>74%</td>
</tr>
<tr>
<td>6.</td>
<td>Previous knowledge about AED</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Knowledge</td>
<td>11</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>b) No knowledge</td>
<td>39</td>
<td>78%</td>
</tr>
<tr>
<td>7.</td>
<td>Previous exposure to cardiac emergency</td>
<td>13</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>b) No exposure</td>
<td>37</td>
<td>74%</td>
</tr>
<tr>
<td>8.</td>
<td>Performed Defibrillation in past</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Never</td>
<td>42</td>
<td>84%</td>
</tr>
<tr>
<td></td>
<td>b) Once</td>
<td>04</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>c) More than once</td>
<td>02</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>d) Seen not performed</td>
<td>02</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table- 2: Comparison of mean pre and post test level score of knowledge among staff nurses

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Maximum score</th>
<th>Mean</th>
<th>Mean %</th>
<th>SD</th>
<th>Mean</th>
<th>Mean %</th>
<th>SD</th>
<th>Mean difference</th>
<th>&quot;t&quot; value</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information about Heart</td>
<td>13</td>
<td>6.22</td>
<td>47.84</td>
<td>±1.57</td>
<td>8.54</td>
<td>65.69</td>
<td>±1.84</td>
<td>2.32</td>
<td>6.823</td>
</tr>
<tr>
<td>Defibrillation and AED</td>
<td>17</td>
<td>8.20</td>
<td>48.23</td>
<td>±1.81</td>
<td>12.16</td>
<td>71.52</td>
<td>±2.20</td>
<td>3.96</td>
<td>9.801</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>14.42</td>
<td>48.06</td>
<td>±2.40</td>
<td>20.70</td>
<td>69.00</td>
<td>±2.87</td>
<td>6.28</td>
<td>22.50</td>
</tr>
</tbody>
</table>

Maximum knowledge score = 30  
Minimum knowledge score = 0
Table 2 depicted the Comparison of mean pre and post test level score of knowledge among staff nurses. It showed that total mean pre test knowledge score before administering the structured teaching programme was 14.42 and total mean post test score was 20.70 after administering the structured teaching programme with mean difference of 6.28 and computed “t” value 22.50.

Table – 3: Comparison of mean pre and post test level score of skill among staff nurses

<table>
<thead>
<tr>
<th>LEVEL OF SKILL</th>
<th>Maximum score</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Mean difference</th>
<th>“t” value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean %</td>
<td>SD</td>
<td>Mean</td>
<td>Mean %</td>
</tr>
<tr>
<td>Defibrillation and AED</td>
<td>60</td>
<td>24.70</td>
<td>41.16</td>
<td>50.62</td>
<td>84.36</td>
</tr>
</tbody>
</table>

Maximum score of skill = 60
Minimum score of skill = 0

Table 3 depicted the Comparison of mean pre and post test level score of skill among staff nurses. It showed that total mean pre test knowledge score before administering the structured teaching programme was 24.70 and total mean post test score was 50.62 after administering the structured teaching programme with mean difference of 25.92 and computed “t” value 33.452.

Table – 4: Association of Pre Test level of knowledge Scores with Socio-demographic Variables

<table>
<thead>
<tr>
<th>Socio-Demographic characteristics</th>
<th>Frequency (f)</th>
<th>Level of knowledge</th>
<th>χ² Table value</th>
<th>df</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excellent</td>
<td>Good</td>
<td>Average</td>
<td>Poor</td>
<td>Very poor</td>
</tr>
<tr>
<td>Age group</td>
<td>4.19</td>
<td>5.35</td>
<td>6</td>
<td>0.651NS</td>
<td></td>
</tr>
<tr>
<td>1) &lt; 25 years</td>
<td>12</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>2) 26 - 35 years</td>
<td>13</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>3) 36 - 45 years</td>
<td>16</td>
<td>0</td>
<td>1</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>4) &gt; 46 years</td>
<td>09</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Gender</td>
<td>12.1</td>
<td>12.42</td>
<td>2</td>
<td>0.002*</td>
<td></td>
</tr>
<tr>
<td>1) Male</td>
<td>06</td>
<td>0</td>
<td>3</td>
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<td>1</td>
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<tr>
<td>2) Female</td>
<td>44</td>
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<tr>
<td>Professional qualification</td>
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<td>5.98</td>
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<td>0.224NS</td>
<td></td>
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<tr>
<td>1) GNM</td>
<td>39</td>
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<td>2</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>2) Basic BSc Nursing</td>
<td>04</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3) Post Basic BSc nursing</td>
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<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
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<td>10</td>
</tr>
<tr>
<td>2) 1 - 3 years</td>
<td>17</td>
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<td>1</td>
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</tr>
<tr>
<td>3) 4 – 6 years</td>
<td>06</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>4) &gt; 6 years</td>
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<td>1</td>
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<tr>
<td>Previous knowledge about AED</td>
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<td>23</td>
<td>15</td>
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</table>
Table 4 depicted the Association of pre test knowledge score with socio demographic variables of staff nurses. The study showed that there was significant association between pre-test level of knowledge and only one of the demographic variables. Performed defibrillation in the past chi square value (38.8) is more than its table value (22.46). Whereas, there was no association between pre-test level of knowledge score with other demographic variables such as age, gender, professional qualification, work experience, in service education, previous knowledge, previous exposure to cardiac emergencies.

Table - 5: Association of Pre Test level of skill Scores with Socio-demographic Variables

<table>
<thead>
<tr>
<th>Socio-Demographic characteristics</th>
<th>Frequency (f)</th>
<th>level of knowledge</th>
<th>$\chi^2$</th>
<th>Table value</th>
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<th>P Value</th>
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<tbody>
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<td>Excellent</td>
<td>Good</td>
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<td>Poor</td>
<td>Very poor</td>
</tr>
<tr>
<td>1) &lt; 25 years</td>
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<td>2) 26 - 35 years</td>
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</tr>
<tr>
<td>4) &gt; 46 years</td>
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<td>2) 1 - 3 years</td>
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<tr>
<td>3) 4 – 6 years</td>
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<td>0</td>
</tr>
</tbody>
</table>

Ns-Not significant

*Significant at p≤0.05 level
Table 5 depicted the Association of pre test skill score with socio demographic variables of staff nurses. The study showed that there was significant association between pre -test level of skill and six of the demographic variables. Age chi square value (5.37) is more than its table value (5.35), professional qualification chi square value (4.78) is more than its table value (4.67), work experience chi square value (11.90) is more than its table value (11.62), in service education chi square value (21.8) is more than its table value (13.82), previous knowledge about AED chi square value (18.40) is more than its table value (13.82), Performed defibrillation in the past chi square value (23.70) is more than its table value (22.46). Whereas, there was no association between pre -test level of skill score with other demographic variables such as gender and previous exposure to cardiac emergencies.

Table 5

<table>
<thead>
<tr>
<th></th>
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<th>2) Not attended</th>
<th>1) Knowledge</th>
<th>2) No knowledge</th>
<th>1) Exposure</th>
<th>2) No exposure</th>
<th>1) Performed</th>
<th>2) Coronary ( \text{OR} )</th>
<th>3) More than once</th>
<th>4) Seen not performed</th>
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</tr>
</tbody>
</table>

Ns-Not significant

*Significant at \( p \leq 0.05 \) level

It showed that mean pre-test level score of knowledge regarding Defibrillation and AED was 8.20 (48.23%) and mean pre-test level score of knowledge regarding General information about Heart was 6.22 (47.84%) and total score was 14.42 (48.06%).

The findings of the study showed that mean pre-test level score of skill regarding Defibrillation and AED was 24.7 (41.16%)

**Post test level of knowledge and skill among the staff nurses regarding Automated External Defibrillation**

The present study reveals that overall mean knowledge score obtained by the staff nurses in pre test was 14.42 with standard deviation 2.40 whereas as the overall mean knowledge score obtained by the subjects in the post-test was 20.70 with standard deviation 2.87.
The present study reveals that overall mean skill score obtained by the subjects in pre test was 24.70 with standard deviation 3.14 where as the overall mean skill score obtained by the subjects in the post-test was 50.62 with standard deviation 4.49.

The improvement means score for overall knowledge was 6.28 with the calculated ‘t’ value 22.50. Thus it indicates that there is a significant difference between the pre test and post test knowledge scores. Therefore the structured teaching programme is effective in increasing the knowledge level of staff nurses.

The improvement means score for overall skill was 25.92 with the calculated ‘t’ value 33.45. Thus it indicates that there is a significant difference between the pre test and post test skill scores. Therefore the structured teaching programme is effective in increasing the skill level of staff nurses.

**Association between pre test post test level score of knowledge and skill with selected demographic variables**

The study showed that there was significant association between pre-test level of knowledge and only one of the demographic variables. Performed defibrillation in the past chi square value (38.8) is more than its table value (22.46).

The study showed that there was significant association between pre -test level of skill and six of the demographic variables. Age chi square value (5.37) is more than its table value (5.35), professional qualification chi square value (4.78) is more than its table value (4.67), work experience chi square value (11.90) is more than its table value (11.62), in service education chi square value (21.8) is more than its table value (13.82), previous knowledge about AED chi square value (18.40) is more than its table value (13.82), Performed defibrillation in the past chi square value (23.70) is more than its table value (22.46).

**ACKNOWLEDGEMENT**

The foundation stones for a balanced success are honesty, character, integrity, faith, love and loyalty. The success was possible due to the collective efforts of so many personalities to whom we express our gratitude.

This present thesis is the end product of hard work and effort of all those who have helped and guided to give concrete shape to our plan and made them presented in the form of this dissertation. Throughout the writing of this dissertation we have received a great deal of support and assistance from authorities of Desh Bhagat University School of Nursing, Mandi gobindgarh, Distt Fatehgarh Sahib; Punjab.

**CONFLICT OF INTEREST**

Authors declare no conflict of interest.

**REFERENCES**

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SYNTHESIS, CHARACTERIZATION AND EVALUATION OF NOVEL PYRIDINE DERIVATIVES

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1SRAM Collee of Pharmacy, Tundla, Firozabad, U.P.

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Akansha Kushwa3
3Rajiv Academy for Pharmacy, Mothura, U.P.

Sonali Paliwal4
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Damini5
5SRAM Collee of Pharmacy, Tundla, Firozabad, U.P.

ABSTRACT

A novel series of Imidazo[1,2-a]pyridine derivatives linked to secondary amines were synthesized from 2-(Fluorophenyl)-6-methylH- IMIDAZO[1,2-a]PYRIDINE. All the synthesized compounds have been characterized by using elemental analysis, FT-IR, 1H NMR, 13C NMR spectroscopy and further supported by mass spectroscopy. Purity of all the compounds has been checked on thin layer chromatographic plate and HPLC technique. All the synthesized compounds were tested for their antibacterial and antifungal activity (MIC) in vitro by broth dilution method with two Gram-positive bacteria, two Gram-negative bacteria and two fungal strains. The biological activities of the synthesized compounds have been compared with standard drugs Ampicillin and Greseofulvin. The compounds exhibited significant antibacterial and moderate antifungal activities. These compounds can be further exploited to get the potent lead compounds. The detailed synthesis and the antimicrobial screening of the new compounds are reported.

KEYWORDS: Imidazo[1,2-a]pyridine, Secondary amine, Antibacterial activity, Antifungal activity.

INTRODUCTION

Imidazo[1,2-a] pyridines, a novel class of pharmaceutical compounds exhibit a broad range of biological activities. Besides, imidazo[1,2-a] pyridine scaffold is found in a number of marketed drug formulations, such as zolimidine (an antiulcer drug), zolpidem (ahypnotic drug), and alpidem (a nonsedative anxiolytic). As a result, numerous reports have described the structural modifications of this scaffold with the aim of developing novel therapeutic agents. It has long been known that imidazo [1, 2-a] pyridine derivatives exhibited diverse biological activities like antibacterial,[1,2] Antitumor,[3,4] Antiinflammatory,[5,6] antiviral,[7,8] anti malarial,[9] antifungal,[10, 11] antimicrobial,[12] antiprotozoal[13,14] and antitubercular[15] agents.

Considering the above observations and in connection to previous publications involving the synthesis of new biologically active heterocycles. Thus the efficient synthesis novel series of imidazo[1,2-a]pyridine derivatives linked to secondary amines compounds still represent highly pursued target.

EXPERIMENTAL

Material and Methods

Melting points were determined in open capillary tubes and are uncorrected. Formation of the compounds was checked by TLC on silica gel-G plates of 0.5 mm thickness and spots were located by iodine and UV light. All compounds were purified by recrystallization with suitable organic solvents. IR spectra were recorded on Brooker-ALPHA FT-IR instrument using KBr pellet method. Mass spectra were recorded on Shimadzu GC-
Synthesis of 2-(4-Fluorophenyl)-6-methylH-imidazo[1,2-α]pyridine: A solution of 5-methylpyridin-2-amine (1.08 g, 0.01 mol) in methanol (10 ml) was added to 2-chloro-1-(4-fluorophenyl)ethanol (1.72 g, 0.01 mol) and the reaction mixture was refluxed with stirring for 6 hour in the presence of catalytic amount of triethylamine. After the completion of reaction, cool the content, the solid separated was filtered and dried in vacuo. Yield 68%, M.P 192°C, Anal. Calcd. For C13H11FN2: Require: C, 74.32, H, 4.90, N, 12.38%; Found: C, 74.30, H, 4.89, N, 12.35%. MS: m/z = 226.

General procedure for the preparation of 2-(4-Fluorophenyl)-6-methyl-3-(N,N-dialkylamine-4-ylmethyl)imidazo[1,2-α]pyridines (IP-1 TO IP-10): To a solution of 2-(4-fluorophenyl)-6-methylH-imidazo[1,2-α]pyridine (2.26 g, 0.01 mol), formaldehyde (0.3 g, 0.01 mol) and different secondary amine (0.01 mol) in methanol (20 ml) was added and the reaction mixture was refluxed with stirring in the presence of 1 drop concentrated HCl. After completion of reaction, cool the reaction mass and a small quantity of water was added and the resulting crude product was filtered and washed with diethyl ether. The organic layer was washed with water, dried over anhydrous Na2SO4 and the resulting product was recrystallized from methanol. Yield 68%, M.P. 192°C, Anal. Calcd. For C13H11FN2: Require: C, 74.32, H, 4.90, N, 12.38%; Found: C, 74.30, H, 4.89, N, 12.35%. MS: m/z = 226.

N-Ethyl-N’-[2-(4-fluorophenyl)-6-methylimidazo[1,2-α]pyridin-3-yl]methyl)ethanamine (IP-2): Purity by HPLC: 99%; IR (KBr): 3072, 2980, 2862, 1603, 1554, 1434, 1456, 1119, 1035, 820 cm⁻¹; 1H NMR (400 MHz, CDCl3): δ ppm 0.99-1.03 (t, J = 7.08 Hz, 6H, CH3), 2.29 (s, 3H, CH3), 2.46-2.52 (q, J = 7.2 Hz, 4H, CH2), 3.98 (s, 2H, CH2), 6.99-7.02 (m, 1H, ArH), 7.06-7.09 (m, 2H, ArH), 7.52-7.54 (d, J = 10.56 Hz, 1H, ArH), 7.74-7.78 (m, 2H, ArH), 8.10 (s, 1H, ArH). 13C NMR (100 MHz, CDCl3): δ ppm 13.11, 21.68, 50.93, 52.18, 115.50, 118.60, 119.90, 122.20, 123.20, 128.50, 130.80, 130.99, 131.06, 131.10, 144.48, 144.60, 161.80, 164.12; MS: m/z = 311 [M⁺]; Anal. Calcd. For C13H17F3N2C: 73.78, H, 7.12, N, 13.49. Found: C, 72.53; H, 7.03; N, 13.33%

2-(4-Fluorophenyl)-6-methyl-3-[(4-phenylpiperazin-1-yl)methyl]imidazo[1,2-α]pyridine (IP-3): IR (KBr): 3080, 2968, 2835, 1599, 1574, 1481, 1463, 1134, 1043, 850 cm⁻¹; MS: m/z = 300 [M⁺]; Anal. Calcd. For C20H22FN3C: 74.97; H, 6.29; N, 13.99. Found: C, 74.21; H, 6.07; N, 13.75%

2-(4-Fluorophenyl)-6-methyl-3-(piperidin-1-yl)methyl]imidazo[1,2-α]pyridine (IP-4): IR (KBr): 3076, 2961, 2863, 1645, 1542, 1453, 1378, 1143, 1037, 832 cm⁻¹; MS: m/z = 325 [M⁺]; Anal. Calcd. For C17H22F2N3C: 74.78; H, 6.86; N, 12.99. Found: C, 74.05; H, 6.77; N, 12.71%

N’-[2-(4-Fluorophenyl)-6-methylimidazo[1,2-α]pyridin-3-yl]methyl]-N-isopropyl propan-2-amine (IP-5): IR (KBr): 3084, 2967, 2857, 1605, 1559, 1462, 1376, 1134, 1054, 845 cm⁻¹; MS: m/z = 339 [M⁺]; Anal. Calcd. For C17H27FN2C: 73.71; H, 7.59; N, 12.26%

2-(4-Fluorophenyl)-6-methyl-3-[(4-ethylpiperazin-1-yl)methyl]imidazo[1,2-α]pyridine (IP-6): IR (KBr): 3078, 2959, 2886, 1612, 1551, 1487, 1389, 1144, 1046, 848 cm⁻¹; MS: m/z = 353 [M⁺]+; Anal. Calcd. For C17H26F2N3C: 71.56; H, 7.15; N, 15.90. Found: C, 71.34; H, 7.01; N, 15.72%

2-(4-Fluorophenyl)-6-methyl-3-[(4-piperazin-1-yl)methyl]imidazo[1,2-α]pyridine (IP-7): IR (KBr): 3097, 2956, 2872, 1611, 1534, 1456, 1451, 1129, 1034, 865 cm⁻¹; MS: m/z = 339 [M⁺]+; Anal. Calcd. For C17H26F2N3C: 70.98; H, 6.85; N, 16.56. Found: C, 70.83; H, 6.74; N, 16.47%

2-(4-Fluorophenyl)-6-methyl-3-[(pyrrolidin-1-yl)methyl]imidazo[1,2-α]pyridine (IP-8): IR (KBr): 3082, 2954, 2868, 1614, 1559, 1446, 1471, 1139, 1043, 870 cm⁻¹; MS: m/z = 309 [M⁺]+; Anal. Calcd. For C17H26F2N3C: 73.76; H, 6.52; N, 13.58. Found: C, 72.32; H, 6.29; N, 13.45%
2-(4-Fluorophenyl)-6-methyl-3-{[2-methylpiperidin-1-yl]methyl}imidazo[1,2-a]pyridine (IP-9): IR (KBr): 3046, 2964, 2834, 1621, 1558, 1448, 1356, 1126, 1048, 837 cm⁻¹; MS: m/z = 337 [M]+; Anal. Calcd for C₂₁H₂₃FN₃O: C, 74.75; H, 7.17; N, 12.45. Found: C, 74.36; H, 7.09; N, 12.31%.

2-(4-Fluorophenyl)-6-methyl-3-{4-methylpiperidin-1-yl}methyl]imidazo[1,2-a]pyridine (IP-10): IR (KBr): 3089, 2956, 2885, 1625, 1545, 1446, 1426, 1146, 1023, 842 cm⁻¹; MS: m/z = 337 [M]+; Anal. Calcd for C₂₁H₂₃FN₃O: C, 74.75; H, 7.17; N, 12.45. Found: C, 74.36; H, 7.09; N, 12.31%.

Scheme 1: Synthesis of novel series of imidazo[1,2-a]pyridine derivatives

Table 1: Physical constant of synthesized novel series of imidazo[1,2-a]pyridine derivatives linked to secondary amines

<table>
<thead>
<tr>
<th>Compound</th>
<th>Substitution (Ar)</th>
<th>M.F</th>
<th>M.W</th>
<th>M.P (℃)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP-1</td>
<td>Morpholine</td>
<td>C₁₉H₂₀FN₃O</td>
<td>325.28</td>
<td>183-185</td>
</tr>
<tr>
<td>IP-2</td>
<td>Diethylamine</td>
<td>C₁₉H₂₂FN₃</td>
<td>311.39</td>
<td>147-148</td>
</tr>
<tr>
<td>IP-3</td>
<td>1-Phenylpiperazine</td>
<td>C₂₅H₂₅FN₄</td>
<td>400.49</td>
<td>192-194</td>
</tr>
<tr>
<td>IP-4</td>
<td>Piperidine</td>
<td>C₂₀H₂₂FN₃</td>
<td>323.40</td>
<td>198-199</td>
</tr>
<tr>
<td>IP-5</td>
<td>1-Methylpiperazine</td>
<td>C₂₁H₂₆FN₃</td>
<td>339.44</td>
<td>124-126</td>
</tr>
<tr>
<td>IP-6</td>
<td>1-Ethylpiperazine</td>
<td>C₂₁H₂₅FN₄</td>
<td>352.44</td>
<td>223-224</td>
</tr>
<tr>
<td>IP-7</td>
<td>Diisopropylamine</td>
<td>C₂₀H₂₃FN₄</td>
<td>338.42</td>
<td>173-175</td>
</tr>
<tr>
<td>IP-8</td>
<td>Pyrrolidine</td>
<td>C₁₉H₂₀FN₃</td>
<td>309.38</td>
<td>144-145</td>
</tr>
<tr>
<td>IP-9</td>
<td>2-Methylpiperidine</td>
<td>C₂₁H₂₄FN₃</td>
<td>337.43</td>
<td>153-155</td>
</tr>
<tr>
<td>IP-10</td>
<td>4-Methylpiperidine</td>
<td>C₂₁H₂₄FN₃</td>
<td>337.43</td>
<td>134-136</td>
</tr>
</tbody>
</table>

BIOLOGICAL EVALUATION

Preparation of Culture Media
Nutrient broth was used as growth medium for bacteria and Sabouraud dextrose broth for fungi. Nutrient broth was prepared by dissolving 13gm of dehydrated powder (HI-media) in 100ml of distilled water. Sabouraud dextrose broth was prepared by dissolving 4gm of dextrose and 1gm of peptone in 100ml of distilled water. The media were sterilized by autoclaving at 15lbs pressure for 20 minutes.

Preparation of Stock Culture
Stock cultures were obtained by aseptically transferring a loopful of test organisms to 100ml of sterile broth and incubated for 24 hours at 37℃.

Standardization of Stock Culture
Stock cultures were placed in the incubator (37℃ for bacteria and 24℃ for fungi) and shaken well. One ml of stock cultures was aseptically transferred to 9 ml of sterile water containing 0.05% tween 80. This was mixed with using a cyclomixer and serially diluted from 10⁻¹ to 10⁻¹⁰. From each dilution, 0.2ml was taken and spread on sterile nutrient agar plates for bacteria and Sabouraud dextrose agar plates for fungi, which were incubated for 18 hours. After incubation, the numbers of colonies in the plate were counted. The number of colonies for a plate that was formed from the maximum dilute tube was noted. The number of microorganisms in stock were then calculated and expressed as colony forming units per ml (cfu/ml). By back calculation the stock culture was found to contain 15 × 10⁷ cfu/ml.
Preparation of Working Stock Culture

Stock culture (0.1ml) was diluted with nutrient broth (100ml) and Sabouraud dextrose broth (100ml) respectively to obtain 10^5 cfu/ml. This was then used for further in vitro screening.

Preparation of Drug Dilutions

Solutions of the title compounds in DMSO (1mg/ml) were prepared and used for screening their antimicrobial activity.

Antimicrobial Screening

Synthesized compounds were subjected to antimicrobial screening by estimating the minimum inhibitory concentration (MIC) by adopting serial dilution technique. Test was carried out on four bacterial strains, namely *Staphylococcus aureus* (MTCC 96), *Staphylococcus pyogenus*, *Pseudomonas aeruginosa* (MTCC 1688), *Escherichia coli* (MTCC 443) and two fungal strains, namely *Candida albicans* (MTCC 227) and *Aspergilla niger* (MTCC 282).

Determination of MIC

The study involved a series of six assay tubes for each title compound against each microorganism. The entire test was done in duplicate. To the first assay tube, 1.8ml of seeded broth and 0.2ml of title compound (1mg/ml) was added and mixed thoroughly and the two fold serial dilution was done up to the sixth tube containing 1 ml of seeded broth. The additions of the drug solution and serial dilution were done under strict aseptic conditions. Solvent control, negative control (growth control) and drug control were maintained during the experiment. The assay tubes were incubated at 37°C and 25°C respectively for 24 hours for bacteriae and fungi. The lowest concentration, which apparently caused complete inhibition of growth of microorganisms, was considered as the minimum inhibitory concentration (MIC). The MIC values of the test compounds are recorded in Table-2.

Table-2: Antimicrobial activity of novel series of imidazo[1,2-al]pyridine derivatives linked to secondary amines

<table>
<thead>
<tr>
<th>Compound</th>
<th>Antibacterial Activity</th>
<th>Minimal Inhibitory Concentration (μg/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>S.aureus</em></td>
<td><em>S.pyogenus</em></td>
</tr>
<tr>
<td>IP-1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>IP-2</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>IP-3</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>IP-4</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>IP-5</td>
<td>250</td>
<td>200</td>
</tr>
<tr>
<td>IP-6</td>
<td>100</td>
<td>62.5</td>
</tr>
<tr>
<td>IP-7</td>
<td>200</td>
<td>500</td>
</tr>
<tr>
<td>IP-8</td>
<td>500</td>
<td>250</td>
</tr>
<tr>
<td>IP-9</td>
<td>200</td>
<td>500</td>
</tr>
<tr>
<td>IP-10</td>
<td>500</td>
<td>200</td>
</tr>
<tr>
<td>Ampicillin</td>
<td>250</td>
<td>100</td>
</tr>
<tr>
<td>Greseofulvin</td>
<td>NT</td>
<td>NT</td>
</tr>
</tbody>
</table>
RESULTS AND DISCUSSION

A solution of 5-methylpyridin-2-amine to 2-chloro-1-(4-fluorophenyl)ethanone in presence of methanol and refluxed with stirring for 6 hour in the presence of catalytic amount of triethylamine gives 2-(4-Fluorophenyl)-6-methylH-imidazo[1,2-a]pyridine. The solution of 2-(4-Fluorophenyl)-6-methylH-imidazo[1,2-a]pyridine and formaldehyde with different secondary amine in methanol and refluxed in the presence of concentrated HCl, extracted with ethyl acetate forms the titled compounds.

The data recorded in Table 2 indicated that compounds IP-1, IP-2 and IP-6 are more potent towards the Staphylococcus aureus. Compounds IP-4, IP-7 and IP-9 are moderately potent towards the Staphylococcus aureus. Compound IP-6 is more potent towards the Streptococcus pyogenes. Compounds IP-1 is moderately potent towards the Streptococcus pyogenes. Compound IP-7 is more potent towards the Escherichia coli. Compounds IP-2 and IP-6 are moderately potent towards the Streptococcus pyogenes. Compound IP-7 is more potent towards the Escherichia coli. Compounds IP-2 and IP-6 are moderately potent towards the Pseudomonas aeruginosa. All these compounds are compared with the standard reference (Ampicillin) for their antibacterial activities. Compounds IP-1, IP-2, IP-7 and IP-8 are more potent towards the Candida albicans. Remaining compounds except IP-4 are moderately potent.

CONCLUSION

In this study, novel series of imidazo[1,2-a]pyridine derivatives linked to secondary amines were synthesized and evaluated for their antimicrobial activities. Results revealed that the compounds exhibited significant in-vitro activity. Compounds IP-1, IP-2 and IP-6 are more potent against all the bacterial strains. Compounds IP-1 and IP-8 are more potent against all the fungal strains. Remaining compounds also showed moderate to weak antimicrobial activities. The study would be a fruitful matrix for the development of novel series of imidazo[1,2-a]pyridine derivatives linked to secondary amines for further bio-evaluation.

ACKNOWLEDGEMENT

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REFERENCES

7. Chaouni-Enabdallah A et al, 3-Benzamido, ureido


A STUDY ON THE MULTIPLE INTELLIGENCE LEVELS OF SCHOOL-GOING ADOLESCENT OF GOVERNMENT AND PRIVATE SCHOOL IN WEST BENGAL

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India

ABSTRACT

No two individuals are alike in the universe. Students have to meet many challenges like cognitive ability, efficient methods of learning, concentration, intelligence, learning environment, and students' progress. If any student wants to reach his or her goals or aims. Intelligence refers to the capacity to solve problems and the Capacity to adjust in the society. The current study focused on the different types of intelligence of school-going adolescents in these circumstances and the main aim of the study was to find out the multiple intelligence levels of school-going adolescents of government and private school in the present day. A cross-sectional survey technique was adopted with the help of a convenient sampling technique among 299 sample units. spss v21 used for data analysis. The findings of the study revealed that school-going adolescents had much concern about their future, and it had both government and private school students. Significant differences were found in gender variations on multiple intelligence at 0.05 level statistically.

INTRODUCTION

In our everyday life when we talk about a student, we must comment that the students is extremely intelligent or isn't intelligent. All such comments are supported by our observation of the performance of the individual considerations compared to others. Howard Gardner in 1983 introduces the multiple Intelligence theory to define them more accurately and to address the question of whether methods that claim to measure intelligence are truly scientific. In his conception, a student who masters multiplication on intelligence. Multiple intelligence is useful when we want to solve a complex problem or gain an argument, or an abstract idea, or experience something.

The multiple intelligence most burning interesting topic for many researchers after developed the multiple intelligence theory by Howard Gardner. Evolutionary psychology is the well-developed theory explaining sex differences (Wood & Eagly, 2002[1]). Because males and females tend to have different social roles, they become psychologically different to adjust to their social roles (Eagly & Wood, 1999[2]). This research also trying to know the difference in multiple intelligence among male and female students. Making use of these multiple intelligences can help us restructuring our learners to understand and develop their unique way of understanding and this empowers that person with great self-esteem and enthusiasm.

According to Gardner in his Multiple Intelligence Theory, there are 8 intelligence types. In his opinion on this theory, Gardner defended that, every individual is born with various types of intelligence and they can be improved by appropriate education, enriched media, and good support. Also says these types of intelligence could be improved by an individual’s upbringing (Gardner, 1993). According to Gardner, these intelligence types are-

1. Visual-Spatial Intelligence
2. Logical-Mathematical Intelligence
3. Verbal-Linguistic Intelligence
4. Musical –Rhythmic Intelligence
5. Bodily-Kinesthetic Intelligence
6. Social-Interpersonal Intelligence
7. Self-Oriented Internal Intelligence
8. Naturalist Intelligence

(Gunes and Gokcek, 2010) Gardner (1999), has put forth that there is one more intelligence type as 9th that he qualified as “Existential Intelligence” which shows...
itself with an individual’s answers given to the questions about, death, eternity, and existence. The remarkable things about this theory are that each person’s intelligence interacts with each other, not alone. (Gardner, 2004; Gullu & Tekin, 2009; Sakallì, 2009).

REVIEW RELATED LITERATURE

Despite a lot of research works done on Multiple intelligence in the past, Multiple intelligence profiles of junior Secondary school students. The most similar study revealed that there is a significant difference between multiple intelligence levels of government school students and private school students. Girls have more multiple intelligence levels than boys. Government school students excel in three areas i.e., logical, interpersonal, and intrapersonal than the private school students. Boy students are good at spiritual/naturalistic intelligence (Anitha. S.T et al. 2013). [1]. Another study found that male students significantly possessed stronger in logical-mathematical intelligence, bodily-kinesthetic intelligence, and interpersonal intelligence, meanwhile, female students were significantly stronger in musical intelligence, interpersonal intelligence, and existential intelligence (Nuri, E. et al. 2014).[2]. Another study revealed that multiple intelligence like visual-spatial, verbal-linguistic, and interpersonal statistically significant and were able to predict academic 12 performance achievement, whereas musical intelligence was a tunable negative predictor for academic performance achievement of students (Ahvan, R.Y. et al. 2016).[3]. Some study shows that there is no substantial change concerning gender, locality, groups, and board of institution in their mean score of multiple intelligence and learning style. The correlation is not significant with the multiple intelligence and learning style (S. J, et al. 2017). [4]. Geeta, N. et al. (2017) [5] Do the study on 2228 students and she was concluded that the logical intelligence of students of graduated parents was higher than the students of nongraduate parents. Another interesting study was performing in china and the researcher revealed that the multiple intelligences predominantly fall equally in all the nine categories of multiple intelligence. The result from the t-test revealed that there is a significant difference between age, educational status and marital status of the respondents with their multiple intelligences and the result from the correlation revealed that there is a significant relationship between overall multiple intelligence of the respondent and their sections of multiple intelligence. (A. A, et al. 2016). [6].

The above summary of the previous researches on multiple intelligence displayed a clear picture of students with different types of intelligence. The present study has been tried to investigate the multiple intelligence of adolescent students in West Bengal at Kolkata, which has not been examined before. The contemporary studies on Multiple Intelligence Levels of Adolescent Students of Government and Private School in West Bengal indicate that there are still wide knowledge gaps, improvement of the situation of attribution style among school students is one of the social agendas in India. There are no major studies available in this area, particularly on the adolescent students of the school level in West Bengal. Various researchers revealed that different factors are responsible for multiple intelligence among school-going students. Among them, the gender variable of the school-going students is major trust areas of present-day research, and therefore, realizing this necessity the researcher tried to include these variables in the present study as background variables.

RESEARCH QUESTIONS

Particularly, a huge knowledge gap is noticed in the present researcher problem. Hence the researcher focuses area of the study on multiple intelligence among adolescent students. Based on the identification of resilience among the school-going children, flowing research at questions were identified: -

1. What is the present status of the multiple intelligence among the school-going adolescents in West Bengal?
2. What are the differences in the rate of prevalence of multiple intelligence among the school going adolescents concerning gender and government or private school variable in West Bengal?

DELIMITATION OF THE STUDY

The present study was delimited to the following:

1. The study sample consisted of students belong to age 14-17 years at age.
2. Only the Kolkata district was selected for the study.
3. The present study delimited to 299 samples from urban areas of the Kolkata district.
4. The sample group of students was studying at the secondary level only.
5. The study sample was collected from 6 schools only.
6. The present study delimited to the 8 dimensions of multiple intelligence.

OBJECTIVES OF THE STUDY

1. Given the basic research question and delimitation of the study, the following objectives were identified:
2. To find out the difference of multiple intelligence among the school going adolescents based on gender variable.
3. To found out the multiple intelligence between the government and private school students.
4. To find out the rate of prevalence of various dimensions of multiple intelligence like 20 Linguistic Intelligence (LiI), Logical Intelligence (LoL), Bodily-Kinesthetic Intelligence (BKI), Musical Intelligence (MI),
Spatial Intelligence (SI), Interpersonal Intelligence (II), Intrapersonal Intelligence (INI), Naturalistic Intelligence (NI), among the school going adolescents based on gender variable.

THE HYPOTHESIS OF THE STUDY
Given the basis of research questions and objectives of the study the following Null Hypothesis was formulated:

H01: There is no significant difference between males and females in government and private schools based on multiple intelligence mean scores.

H02: There is no significant difference in the mean score of linguistic intelligence between the government and private school-going adolescents based on their gender.

H03: There is no significant difference in the mean score of logical intelligence between the government and private school-going adolescents based on their gender.

H04: There is no significant difference in the mean score of Bodily-Kinesthetic Intelligence between the government and private school-going adolescents based on gender.

H05: There is no significant difference in the mean score of Musical Intelligence between the government and private school-going adolescents based on gender.

H06: There is no significant difference in the mean score of Spatial Intelligence between the government and private school-going adolescents based on gender.

H07: There is no significant difference in the mean score of Interpersonal Intelligence between the government and private school-going adolescents based on gender.

H08: There is no significant difference in the mean score of Intrapersonal Intelligence between the government and private school-going adolescents based on gender.

H09: There is no significant difference in the mean score of Naturalistic Intelligence between the government and private school-going adolescents based on gender.

H010: There is no significant difference between Government and private school-going adolescents based on multiple intelligence mean scores.

STUDY DESIGN
A cross-sectional survey framework was designed in this study with the help of a convenient sampling technique. The sample consisted of an adolescent in terms of those people, who were currently studied at any institution or organization; they were going to at any Govt. or Private school. The study was implemented on a total number of 299 sample units. Multiple intelligence had been identified as dependent factors in the study and what variations of gender and school had been seen on it. Description of Multiple Intelligences Test (MIT) based on a free publication provided by Personality Max (2011), where used as a data collection tool and there was a total of 80 items. Microsoft excels used for data tabulation and spss-v21 for data analyses.

HYPOTHESIS TESTING
To test the null-hypotheses H01 to H010, T-test, and have been used.

H01: There is no significant difference between males and females in government and private schools based on multiple intelligence mean scores.

---

Table 1 presenting the independent sample t-test.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>T</th>
<th>df</th>
<th>MD</th>
<th>p</th>
<th>Std. Error</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>211</td>
<td>94.36</td>
<td>18.302</td>
<td>1.516</td>
<td>297</td>
<td>3.519</td>
<td>0.131</td>
<td>2.322</td>
<td>NS* (p&gt;0.05)</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>90.84</td>
<td>18.290</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 1 shows that independent sample t-test comparing the mean scores of Multiple Intelligence male students to be mean scores of Multiple Intelligence of female students found no significant difference between the mean of the two groups \( t(297) = 1.516, p=.131 \). The mean of the male students was higher (M=94.36, SD=18.302) than the mean of female students (M=90.84, SD=18.290).
To test the null hypotheses H02 to H09 t-test have been used.

Table 2: presenting the independent sample t-test.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>T</th>
<th>DF</th>
<th>MD</th>
<th>P value</th>
<th>Std. Error Difference</th>
<th>Remarks</th>
</tr>
</thead>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>211</td>
<td>11.29</td>
<td>3.261</td>
<td>-0.45</td>
<td>297</td>
<td>0.20</td>
<td>0.648</td>
<td>0.437</td>
<td>NS* (p &gt; 0.05)</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>11.49</td>
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<tr>
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<td>211</td>
<td>11.25</td>
<td>3.755</td>
<td>2.07</td>
<td>297</td>
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<td>0.039</td>
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<tr>
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<td>211</td>
<td>12.46</td>
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<tr>
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<td>0.023</td>
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<td>0.124</td>
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i. An independent sample t-test comparing the mean scores of Linguistic Intelligence male and female students found no significant difference between the mean of the two groups [t (297) = -0.457, p=0.648]. The mean score of the male students was lower (M=11.29, SD=3.261) than the mean score of female students (M=11.49, SD=3.845).

Therefore, the null hypothesis is rejected and it can be concluded that there is no significant difference in Linguistic Intelligence (LUI) of the school-going adolescents based on gender variable.

ii. An independent sample t-test comparing the mean scores of Logical Intelligence male and female students found a significant difference between the mean of the two groups [t (297) = 2.078, p=0.039]. The mean score of the male students was significantly Higher (M=11.25, SD=3.755) than the mean of female students (M=10.31, SD=3.049).

Therefore, the null hypothesis is rejected and, it can be concluded that there is a significant difference in the Logical Intelligence of school-going adolescents based on gender.

iii. An independent sample t-test comparing the mean scores of Bodily-Kinesthetic Intelligence male and female students found a significant difference between the mean of the two groups [t (297) = 3.169, p=0.002]. The mean of the male students was significantly Higher (M=12.46, SD=3.143) than the mean of female students (M=11.16, SD=3.444).

Therefore, the null hypothesis is rejected and it can be concluded that there is a significant difference in the Bodily-Kinesthetic Intelligence of the school-going adolescents based on gender.

iv. An independent sample t-test comparing the mean scores of Musical Intelligence male and female students found no significant difference between the mean of the two groups [t (297) = 1.807, p=0.072]. The mean of the male students was significantly Lower (M=9.36, SD=4.008) than the mean of female students (M=11.22, SD=3.786).

Therefore, the null hypothesis is rejected and it can be concluded that there is a significant difference in the Musical Intelligence of school-going adolescents based on gender.

v. An independent sample t-test comparing the mean scores of Spatial Intelligence male and female students found no significant difference between the mean score of the two groups [t (297) = 1.057, p=0.072]. The mean of the male students was quite higher (M=13.86, SD=3.557) than the mean score of female students (M=13.05, SD=3.581).

Therefore, the null hypothesis is rejected and it can be concluded that there is no significant difference in
spatial Intelligence of the school-going adolescents based on gender.

vi An independent sample t-test comparing the mean scores of Interpersonal Intelligence male and female students found no significant difference between the mean of the two groups \( t (297) = 1.689, p=0.092 \). The mean score of the male students was Higher (M=12.60, SD=3.642) than the mean score of female students (M=11.82, SD=3.618).

Therefore, the null hypothesis is accepted and it can be concluded that there is no significant difference in the Interpersonal Intelligence of school-going adolescents based on gender.

vii An independent sample t-test comparing the mean scores of intrapersonal Intelligence male and female students found a significant difference between the mean of the two groups \( t (297) = 2.291, p=0.023 \). The mean score of the male students was significantly Higher (M=13.19, SD=3.630) than the mean of female students (M=12.14, SD=3.661).

Therefore, the null hypothesis is rejected and it can be concluded that there is a significant difference in the Intrapersonal Intelligence of school-going adolescents based on gender.

viii An independent sample t-test comparing the mean scores of Naturalistic Intelligence male and female students found no significant difference between the mean of the two groups \( t (297) = 1.542, p=0.124 \). The mean score of the male students was Higher (M=10.35, SD=3.525) than the mean of female students (M=9.67, SD=3.269).

Therefore, the null hypothesis is accepted and it can be concluded that there is no significant difference in the Naturalistic Intelligence of the school-going adolescents based on gender.

To test the null hypotheses Ho10 t-test has been used.

<table>
<thead>
<tr>
<th>Table 3: Presenting the Independent Sample T-Test.</th>
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<tbody>
<tr>
<td><strong>Independent Samples T-Test of Gender Wise Multiple Intelligence</strong></td>
</tr>
<tr>
<td><strong>Medium</strong></td>
</tr>
<tr>
<td>Bengali</td>
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<tr>
<td>English</td>
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</tbody>
</table>

Calculated scores of Table 3 displayed the mean score difference of Multiple intelligence upon government and private school. Mean scores of total multiple intelligence of government and private school-going adolescents found a statistically significant difference between the two groups \( t = 4.141, p<0.05 \). Therefore, Ho10 null hypothesis is rejected and it seemed that there is a significant difference exists between government and private school-going adolescents on their Multiple intelligence.

**MAJOR FINDINGS**

- Taking into consideration Gender, the Multiple Intelligence mean score of the male students (94.36) is more than Female students (90.84) and the difference found between them was statistically to be not significant (p>0.05).
- The linguistic Intelligence mean score of the Male (11.29) students is lower than Female (11.49) students and the difference between found was statistically not significant (p>0.05).
- The logical Intelligence mean score of the Male (11.25) students is more than Female (10.31) students and the difference found was statistically significant (p>0.05).
- Interpersonal Intelligence mean score of the Male students (12.60) is more than Female students (11.82) and the difference found was statistically not significant (p>0.05).
- Intrapersonal Intelligence mean score of the Male students (13.19) is more than Female students (12.14) and the difference found was statistically significant (p<0.05).
- Naturalistic Intelligence mean score of the Male students (10.35) is more than Female students (9.67) and the difference found was statistically not significant (p>0.05).

**DISCUSS AND CONCLUSION**

The study investigated the overall degree of Multiple Intelligence concerning the Gender variable and made a comparative study of the degree of Multiple Intelligence between male and female students belonging to the age group of 14 to 17 years in the Kolkata circle. This study also estimated the prevalence rate of different dimensions of Multiple Intelligence among school-going adolescents, which are very common in adolescent children i.e. Linguistic Intelligence (LiI), Logical Intelligence (LoI), Bodily-Kinesthetic Intelligence (BKI), Musical Intelligence (MiI), Visual-Spatial Intelligence (ViS), and Naturalistic Intelligence (NaI).
Intelligence (MI), Spiral Intelligence (SI), Interpersonal Intelligence (II), Intrapersonal Intelligence (IN) and Naturalistic Intelligence (NI) and Overall Multiple Intelligence with the same respect to gender variable.

The main objective of the study was to provide a generalized assessment of multiple intelligence of school-going adolescents aged 14-17 years and to provide a comparative status between male and female students studying in different private and govt. school in urban areas. In the present study, the Multiple Intelligence mean score of the male students is more than Female students and the difference found between them was statistically to be not significant. In a similar study, it has been seen there was no significant difference between male and female adolescent students concerning multiple intelligence (Vidhya Nathan, 2017).

In the present study, based on gender variable it can be said that a significant difference was found to be a significant difference in logical intelligence, bodily-kinesthetic, and Intrapersonal Intelligence; and the male students are more inclined than female students in this mindset. Another side, the female students showed more intelligence in Musical intelligence than the male students; and the difference was found statistically to be significant. The educational policy framers, administrators, teachers, and teacher educators may adopt some realistic measures or strategies in the light of the present study. All of us have a common mission to provide multiple intelligence among school-going adolescents. We have to achieve that as early as possible.

REFERENCES

THE FACTORS EFFECTING SHIFT OF INDIAN CUSTOMERS FROM TV SERIES TO WEB SERIES- THE FUTURE OF OTT SERVICES IN INDIA

Mr. Pramit Gupta
Candidate of Marketing,
Indian Institute of Social Welfare and Business Management

ABSTRACT
The study investigates what factors made Indian consumers to shift towards web series from TV series. It also discussed the future of OTT services in India and gives an idea about India's acceptance of web series as a primary video consumption platform. This study was conducted before the lockdown period and does not have its effects on its result. It gives answers to several questions like OTT's capability of replacing Televisions in India. The study will also contribute to marketers in getting connected with the consumers promoting the OTT services. The study was executed by using quantitative methodology of research. Using the questionnaire research method, a survey was conducted to a target group of 120 people from all over India irrespective of gender, age and place of stay. Their responses are carefully analysed and interpreted followed by a conclusion.

KEYWORDS- OTT- Over the top Services, Media, Subscriptions, Piracy, webseries

INTRODUCTION
We are living in the Internet world. Everything is possible with the help of Internet and mobile gazettes. Peoples are more addicted to Internet and Mobile gazettes.

Over-The-Top (OTT) content is becoming a big buzzword in today’s technology and systems enabled environment. In this digital era, Over the Top (OTT) content has emerged among millenials as the new standalone digital multi-media platform where multi-cable or direct broadcast satellite television do not distribute or control content, leading to media and consumer autonomy of consumption. Viewers will now have complete autonomy in terms of choosing their own content and pricing, keeping in mind the exact type and amount of content they want to view. Another major trend emerging in television content viewing is the emergence of OTT platforms by individual media houses. This trend is primarily fuelled by increase in the number of devices that support these platforms along with tremendous rise in the number of internet and mobile data subscribers. The rise of OTT platforms has also seen growth with the steady but positive increase in the number of people who are wanting and demanding both ‘Produced-for-TV’ as well as exclusive freshly brewed content on demand anytime of the day, thus making it one of the biggest opportunities in the video and content sector in the entertainment industry.

Currently, India has more than 11 OTT platforms with the major one’s being HotStar by Star Network, VooT by Viacom18, Sony Liv by Sony, Spuul, Netflix, Eros Now, and Hoop. Factors like digitization, reduced mobile data costs, high speed internet, and multiscree penetration across geographies and classes and fixed line broadband growth, forecast huge potential in the sector of OTT services in India, which is likely to grow manifold in the coming years.

The aim of this research is to understand and analyse the reasons why Indians have a trend to shift towards web series from traditional tv series. It would also find out the realistic situation of India towards accepting web series as a replacement of Television series.

OBJECTIVE OF THE STUDY
Television series dominated the Indian market as a source of daily Entertainment starting from Hum Log in the early 1980s with many popular hits like Buniyaad, Ramayan, Mahabharat, Shaktimaan, Kyu ki Sash Bhi kabhi bahu thi and many more. The streets remained deserted while those tv series were telecasted in those days with millions of viewers. But we have seen with the emergence of OTT platforms like Netflix, Amazon Prime, Alt Balaji etc web series
have become immensely popular in recent years starting from 2015 onwards.

So here the objectives of my study are:
- To find the reasons for the popularity of web series
- To find what Indians are preferring Web series or TV series
- To explore the factors that made Indian Consumers to shift towards web series from TV series
- The future of Over the Top(OTT) services in India
- To learn the limitations of web series to reach the total audience of India
- To discuss effective Marketing and Promotional strategies of the web series

REVIEW OF LITERATURE

In India, the digital revolution in India is largely driven by smartphone penetration, the roll out of 4G, reducing data costs and thereby increasing time spent on mobile phones. Digital advertising is thus expected grow at a faster clip as against the traditional media over the next three years.

An increase in the usage of smartphones in India has stirred a new era of video consumption on the personal media device. The penetration of smartphones in India is projected to grow to 520mn by 2020 and broadband penetration will increase from 14% currently to 40% in 2020. (Ernst & Young, 2016). This rise will be instrumental in a drastic shift of media consumption from traditional to digital. There has been a decline in the percentage of Indian Consumers who prefer watching shows on TV from 47% to 10% over the last one year. (Accenture, 2015).

The global mobile traffic is expected to increase nearly sevenfold from 2016 to 2021. As per the data available till February 2017, mobile devices accounted for 49.74% of web page views worldwide with Asia and Africa leading the pack. (Statista). In India, 59% consumers watch advertisements in digital media than TV commercials. (Deloitte, 2017).

The share of digital advertising in India is projected to double in the next 3 years from 12% currently to 24% in 2020. As per the data available till January 2017, mobile devices accounted for 79% of web page views in India. (Statista). Internet access is mainstreaming among Indian consumers and the use of mobile is intensifying. More people spend more time online using a variety of digital tools and sites for content consumption. India at present is the third biggest country in terms of internet users in the world with as many as 121 million Indians accessing internet. There has been 25% growth in Indian internet users over a year. 59% of the Indians access the internet via their mobiles. The average time spent on social media is 3 hours and 70% of Internet users watch online videos. (Statista). An average mobile web user in India consumes 6.2 hours of media daily which includes 102 minutes of mobile media and 79 minutes of online media consumption. Social media and entertainment including both music and video. 21% of the total time is spent by youth on audio and video entertainment. (Deloitte, 2017).

Among the Social media platforms, Facebook and Twitter account for 47% and 42% of overall videos watched online. The remaining 11% belong to OTT services like Hotstar, Netflix, Amazon Prime video, Jio TV and VOOT. There are 24 million OTT users in India. According to a report on digital advertising by Dentsu Aegis Network, the Indian digital advertising industry, currently pegged at around Rs 8,202 crore, is slated to see a growth at 32% CAGR to reach Rs 18,986 crore by 2020. The report also forecasts that digital media spends, currently contributing 15% of the total advertising pie, will reach 24% of the entire market by 2020 according to an EY report, ‘Digital Opportunity: India Media and Entertainment’. Also, the digital video market is expected to be worth Rs 160 crore by 2022, according to Media Partners Asia. This shows the possible growth potential of brand placement on various digital platform including web series. Currently, the share of digital is less than 5% of the total digital ad spends in India.

According to Kureshi (2010) product placement research in traditional media like television and film is decreasing as product placements appear in newer media like computer, video, digital, online, and simulation games. Earlier examples of product placement were more focused on the mediums of film and television earlier and now on world web platforms. Garcia-Pujadas (2010) states that are a tool of brands to connect and relate with different publics.

But is web series the future of entertainment in India? According to outlook India the projected numbers definitely point in that direction. India is set to be among the world’s top 10 OTT video markets by 2020 with revenue of around Rs 5,595 crore. And there are big names such as America’s Netflix and Amazon Prime Video, production houses like Balaji Telefilms’s ALTBalaji and Eros Now, along with broadcast networks like Star India’s Hotstar and Sony Entertainment Television’s SonyLIV. In 2017, Erricson Consumer Lab predicted that by 2020, about 50 per cent of all TV and video viewing would take place on a mobile screen— tablets, smart phones, laptops—an increase of 85 per cent since 2010. Additionally, virtual reality would also become mainstream with one in three consumers becoming a VR user by 2020. Driving this boom will be the young Indian.

Now here we have to see and analyse why Indians are shifting towards web series from...
television series. Does India ready to accept digital platforms totally. What are the limitations of Digital platforms to reach mass audience in a country like India where 66% is the rural population. This report would answer to all that questions and give a fair idea of the future of OTT services in India.

**METHODOLOGY**

The research was conducted from just before lockdown. The methodology adopted in this research is qualitative in nature. The research used survey in the form of questionnaire to a group of people. The questionnaire was then forwarded to a certain group of people through social media like WhatsApp and Facebook. Their responses are recorded and analysed. In-dept interviews are also conducted in some cases. The requirements of the research was to use laddering technique and understand the root-cause analysis of consuming content in OTT platform. This method is usually helpful in obtaining reasons and causes through an in-depth conversation on current video viewing patterns, behaviours, beliefs, norms, attitudes, and practices that might have influence on their OTT content usage. The tool of qualitative research was a carefully prepared questionnaire consisting of ice breaking, generic and specific questions. The points in the questionnaire helped the interviewer to converge the research to a certain direction. Here deductive research approach is being followed. The findings and analysis justified the research questions and the objectives of this research. The research design used here is conclusive.

**SAMPLE SIZE AND TECHNIQUES**

Data is recorded in the form of questionnaire given by the researcher through social media to the target population.

A sample size of 120 people has been taken for data analysis. Those 120 people from all over India residing in cities, towns and villages. Their age group ranges from 18 years to above 60 years.

**RESULTS**

![Figure 1](https://example.com/figure1.png)
Analysis of the features of web series which the respondents think better than TV series

Fig 2

Fig 3

Fig 4
Interpretation: This the correlation between different features of web series which the respondents believe are greater than that of TV series with their significance values. It is to be noted that mostly all the features like 24X7 availability, on demand supply, easy access from mobile, content availability, option to download all episode and able to see foreign series are positively correlated to each other. It means that most people give higher ratings to these features. Only the feature cheaper than TV subscriptions has negative correlation with all the other features. It means that people do not believe that web series has cheaper subscription rate than TV series. It is also clear with the above picture of Rotated component matrix that two factors have been formed with the factor analysis (PCA with varimax rotation). All the above features except cheaper option is one component and the cheaper option is another component. Hence, we can say Factor 1 comprises the positive feature of web series and Factor 2 which has an opinion about cheaper subscription is the negative.

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<td>Option_Orderdemand</td>
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<td>Option_Cheaper</td>
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ANALYSIS OF THE REASONS OF STICKING WITH TV SERIES FOR THE CUSTOMERS WHO PREFERENCES TV SERIES

Interpretation: The respondents ranks the features according to their likability on TV series. Factor analysis has been done with PCA method. It is seen from the above diagram that cumulative variance became 74% in two components. So two factors have been extracted. The rotated component matrix shows the factor loadings. It is noted that one factor has features like price of the TV subscriptions, easy operations and love to watch in presence of family. Factor 2 has content of the tv series and No risk of online theft. The factor loading of feature price is highest (.864) in Factor 1 and Factor loading...
of content (0.87) is highest in Factor 2. Love to watch tv series (-0.845) and no risk of online theft (-0.756) has lowest loadings. It means that customers mostly prefer tv series because of the content and cheaper price of TV subscriptions.

**DISCUSSION**

After doing analysis and interpreting the results it is been found out that customer’s preference of watching a series either through web or television varies with several parameters. Gender and age is one of such factors. It is seen that gender and preference has significant relationship with Males watching mostly web series and females mostly prefers television series. Age is also one of the factors having significance with the preference. Youngsters with age ranges 10-19 years and 20-29 years mostly prefers to watch web series. Senior customers of age 40-60 and above 60 prefers to watch television series. Only 14% of the respondents do not prefer to watch any series. Also, other parameters like location, internet speed and time spend on internet has significant relation on customer’s preference. Mostly customers from cities prefers to watch web series. Users with high internet connection and who spends more time in internet prefers web series. Thus, preference of customers greatly relies on internet speed and time spend on internet. Majority of respondents prefers watching web series followed by people preferring TV series. A small portion of people does not watch any series. Major reason of not watching web series is that they don’t have any time to watch.(Refer fig 3)

Among the OTT services most people prefer Netflix followed by Amazon prime. Hotstar is most popular Indian OTT platform. From the pricing point of view customers generally look for lower price subscriptions of below Rs 100 per month. This is one of the reasons which people dislike web series in terms of pricing.(Refer fig 6) and is the reason behind sticking towards TV series.(Refer Fig 8) In case of piracy web series are pretty popular. It is found out that 40% of the respondents download and watch web series through piracy for example downloading through torrent. There is a significant relationship between the amount willing to spend by the respondents and their piracy rate. People who are willing to spend less than Rs100 per month for web series subscriptions do not have a legitimate subscription account on OTT and they download web series through torrent sites. When questioned about privacy most users have a neutral view on the fact that they watch web series because it would guarantee more privacy than tv series. But interestingly a major portion of the respondents also believe the fact that web series had more privacy to watch than tv series. It is observed that most users have been watching web series for about 1-2 years proving the booming popularity of web series in these two years. Most people frequently watch web series in a month and words of mouth from friends and online advertisements are the popular promoters of spreading web series names among the viewers. The viewers who prefer web series believe that content of the web series and its 24X7 availability is more advantageous and superior to television series. (Ref Fig 1). The respondents also like the features like on demand supply, ability to download all the episodes at one time features of web series. (Ref Fig 1) Most people disliked the long commercial breaks in the television series and the schedule timing of television series.(Ref Fig 2). 91% of the people recommend their favourite web series to others giving evidence of effective marketing through words of mouth. The respondents who watches Television series believes that content of television series is better than web series. But they also highlighted the fact that lower price of TV channels also is one of the reasons for their likings towards TV series. A majority of these people also keen to watch web series in smart televisions. People who do not watch any series stated that time is the major constraint for them not to watch any series. But interestingly when they were asked what would they prefer if they watch any series in future majority of them votes for watching web series thus ensuring a better future for OTT platforms.

**CONCLUSION**

This research is an attempt to study not only the reasons of shifting of Indian customers towards web series but also to discuss about the future of Over the Top (OTT) services in India. The study was conducted over a group of 120 people irrespective of their gender, age and places of stay. The study was conducted before the lockdown so it has no effect on the result. Out of 120 people, 76(63%) prefers web series followed by 27 people preferring television series. Youngsters are very much keen on preferring web series in contrast to middle agers and seniors preferring T.V series.

The superior content of the web series and its 24X7 availability triggered the people to shift towards web series. Also, majority of people like OTT’s ability to download all the episodes of web series at a time, on demand supply of series and its accessibility to anywhere. People find these features missing in TV series. The long commercial breaks and scheduled timing of television series are mostly disliked by the people. Majority of people also believes that the content of TV series is far inferior to the web series. These are the factors that mainly motivated the Indian people to shift towards web series.

The promotion of web series mainly takes place through word of mouth and through online advertisements. YouTube trailers are also one of the major players in promotion. More than 90% of the respondents recommend their favourite web series to...
others. The marketing strategy of the web series should be to make exciting trailers for YouTube in order to create curiosity among the viewers.

Now coming to the pricing feature of web series. Unfortunately, many Indians cannot afford the subscription rates of OTT services. Majority of people willing to pay less than Rs 100 per month as a subscription fee. Netflix, one of the popular OTT platforms has lowest subscription value of Rs 199 per month. This results in increase of piracy of the web series through torrent which could be a hindrance and alerting situation for the OTT services. On the contrast one of the popular reasons of watching TV series by a section of people is the cheaper subscription rate of TV channels. So, OTTs must need a proper pricing plan in order to sustain in the competition.

We see that customers from the cities mostly prefers to watch web series. But in the larger picture if we consider the scenario of whole country the picture is different. The number of television viewers in India is 836 million in 2018 in comparison with Hotstar (the leading OTT service in India) having 60 million subscribers. So, there is a huge difference. Yes, web series are gaining popularity over the last few years in comparison to 30 years history of Television but still there is a lot more to go. All of this study has been done before lockdown period. And the lockdown has sparked the viewership of OTT platforms which is definitely a good sign. The future of OTT services lies mostly in the hands of internet penetration rate which is 25% in rural areas. Considering the fact that most Indian population (65%) resides in rural areas, the OTT services should have to wait for long time to reach there. It is also proved from this study that people from the rural areas are still preferring TV series. In conclusion, with the internet and mobile penetration increasing by the day, the future of OTT looks bright. Although a section of people has started investing a lot of time and money on OTT platforms, it is difficult to say that it will replace television as a primary video consumption platform for the whole country in near future.

Managerial Implications

The majority of Indian customers are price sensitive and a major portion of unemployed youths prefers watching web series through piracy. They are not willing to pay higher subscription rates. So, the OTT companies should make the price reasonable and affordable. Strict regulations should be there in order to protect from piracy. Proper market survey should be there where new businesses would like to happen. Penetrations to rural areas and catering their preferred series is also recommended for the OTT companies. A joint venture with broadband companies with subscription offers is recommended as a tool of promotion.

Scope of Further Research

This research currently only covers the consumer’s point of view in terms of the consumption of video on the OTT platforms and Televisions. Also, this research was done before lockdown so definitely perspective of consumers have also changed. Lockdown sparked the viewership of webseries many folds. A lot of research work can be done for example on what type of genre Indian people are liking in this contemporary time- which content should be more acceptable and enjoyable for the Indian people. For that purpose proper segmentation should be done with different clustering methods in order to segment the market and target the customers. Advertising model analysis can be done for sales promotional strategies and different quantitative marketing decision models can be formulated in this OTT sector. Research can also be done to find some innovative and creative ideas for an OTT service to adapt in order to attract customers, finding ways to convert senior people to shift from TV to web, penetration to rural India etc.

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INFORMATION COMPETENCE AS AN INTEGRAL DYNAMIC CHARACTERISTIC OF LEARNERS

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ABSTRACT
This work concretizes the essence and structure of the concept of information competence as an integrative quality of an individual, defines its components within the framework of educational activities.

KEYWORDS: competence, information competence, information and communication technologies, educational process.

INTRODUCTION
One of the most important tasks of the school is the upbringing of a creative, cultural, active personality who will be able to find his place and express himself, to navigate in a constantly changing, complex, progressing reality with its increasing volumes of information. All the knowledge, abilities and skills acquired by a person in the process of learning and growing up are just the means that he will have to use in future activities. But in all areas of our activity, one of the fundamental tools with which we carry out it is communication and the information obtained with its help. The lack of the necessary skills in communicative techniques for obtaining information by any participant in the educational process leads to a distorted transmission and reception of knowledge, opinions and feelings, ideas. Therefore, information competence should be considered one of the main factors in the formation of a student's personality.

The formation of information competence at the present stage of the development of education should be considered as one of the priority tasks of teaching and development of schoolchildren, as an integrative personality quality, which is the result of the reflection of the processes of selection, assimilation, processing, generation and transformation of information into a special type of subject-specific knowledge, which allows taking, develop, implement and predict optimal solutions in various fields of activity, including educational.

MAIN PART
Information competence is studied by researchers in two senses, both broad and narrow. In a broad sense, it is the ability to carry out analytical processing of information, to apply information technologies, to solve search and information problems, using library resources as an information retrieval system - to interact with information using information technologies.

In the narrow sense - the ability to use technical and methodological means of information technology for the search, processing, presentation, transmission of information [12].

I. A Zimnyaya defines the concept of “information competence” as “reception, delivery, processing of information, skills in working with multimedia technologies, as well as possession of skills in working with Internet resources” [9].

S.V. Trishina understands information competence as “knowledge, skills, abilities and ways of working in the field of information technology, which are aimed at solving professional problems” [17]. Accordingly, information competence is “certain knowledge, abilities, skills and methods of activity acquired during training, aimed at effective decision-making in professional and educational activities using information technologies” [5].

Issues related to information competence have been researched in the works of modern foreign scientists (Elaine Allen, Jeff Seaman, Betty Collis, Hirumi, Palloff and Pratt, Claire McDonnell, Roisin Donnelly), who believe that information competence is designed to enable students to cope with increasing
amount of information, critically evaluating the information received. Scientists pay special attention to the technological component (web 2.0, e-learning platforms, content delivery, etc.) [18, 23] and forms of organization of the educational process: e-learning (e-learning) [25, 33], blended-learning (mixed technology training) [26, 32], case study (case study) [27, 28].

The main trend is the transition from local education to global education, which is based on massive open online courses [20, 21, 22, 24]. Special attention of researchers is paid to the problems arising in the interaction with students and ways to solve them, the preparation of teaching materials for teachers in the field of using information technology in educational activities [19, 29, 30, 31].

Information competence is an integrative quality of a person, which is the result of the reflection of the processes of selection, assimilation, processing, generation and transformation of information into a special type of subject-specific knowledge, which allows to make, "develop, implement and predict optimal decisions in various fields of activity. In accordance with the standards of the new generation, a personality-oriented approach is currently used in teaching, which puts the child's personality, its intrinsic value, originality, and the subjective experience of everyone at the forefront.

Agreeing with the opinion of A.D. Arnautov, we will classify information competence as key for a modern specialist in the conditions of the formation of a digital society, which ensures the productivity of his activities in various fields [2]. Based on the requirements for key competencies proposed by A.V. Khutorskoy, let us substantiate our judgment.

Indeed, information competence is used and allows solving problems in different spheres of human activity based on the ability to search, process and apply information.

This characterizes multifunctionality and interdisciplinarity as requirements for core competencies. The multidimensionality of information competence is associated with the fact that its implementation uses intellectual abilities, including abstract thinking, critical thinking, reflexive processes. The above allows us to classify information competence as a key competence for a person in a digital society.

The analysis of scientific research has shown differences in the opinions of scientists regarding the amount and content of the components included in the structure of competence. The strategy of modernization of general education in the structure of competence highlights the integrative nature of knowledge and skills, the focus of the content of education on the result, and intellectual components.

The five-component structure of competence is distinguished by I.A. Winter: motivational, cognitive, behavioral, value-semantic, emotional-volitional components [9].

E.V Borytko distinguishes 3 components in the structure of competence, adding experience to the cognitive and volitional components. From our point of view, the structure of competence presented in the studies of S.I. Osipova, I.L. Savostyanova, I.V. Yanchenko [14], including motivational-value, cognitive, activity, reflexive-evaluative.

Indeed, any competence is an activity characteristic, and a motivational-value aspect is distinguished in the structure of any activity. The success of the activity is facilitated by knowledge of general normative strategies and some experience in its implementation, which determines the cognitive and activity components.

Let us analyze the characteristics and structure of information competence, considered as the basic concept of research. The study of the considered concept is devoted to the works of scientists: V.V. Bondar, D.S. Ermakova, E.F. Morkovina, S.V. Trishina, A.V. Khutorskoy and others [7, 13, 17]. According to S.V. Trishina and A.V. Khutorskoy "the structure of information competence includes the following components: cognitive - is a system of acquired knowledge necessary for the creative solution of professional problems; activity-creative - contributing to the formation and development of students of various ways of activity necessary for self-realization in professional activity; personal - reflected in the personal qualities of the subject and responsible for the semantic)" [16].

D.S. Ermakov identifies the following "elements in the structure of information competence:"
- cognitive, which combines the skills of working with information and knowledge about the goals of information work, as well as about the principles of activity, limitations and capabilities of hardware and software methods of information processing;
- Need-motivational, which is responsible for the presence of interest and motivation to study ways of working with information and means of information and communication technology; promotes awareness of the need to work with information to extract knowledge, including with the help of information technology;
- Value-semantic, actualizes in the awareness of the social and personal significance of information and the use of information and communication technologies, backbone;
- Emotionally strong-willed, reflected in such personality traits as perseverance, decisiveness, endurance, organization;
- Practically - active, combines the skills and abilities of using information and communication
technologies with the experience of creative activity [6]. Information competence of a person, from the point of view of E.V. Petrova "enters into close interaction with the information competence of society, which, interacting, enrich each other and develop jointly" [15].

In addition, special attention is paid to the presence of pedagogical reflection, which is present in the work of S.L. Surmenko and V.V. Kotenko [11]. A distinctive feature of V.V. Brezhnev, is the presentation of the motivational component in conjunction with value relationships, which includes "the attitude and request for information - awareness of the value of working with information, motivation to search for meaningful information, understanding the value of using information technology, striving for self-education, targeting when working with information, the need to work with information, the formation of the subject position of the student, orientation in the information environment, readiness to use information resources as a source of knowledge" [3].

The interaction of these two components in the context of the development of modern information technologies is acceptable. At the same time, special attention is paid to the communicative component of information competence, "which is responsible for the critical assessment of the results of activities with information, self-control and communication in the course of information work" [10].

In this regard, based on the analysis of the considered components of information competence, which are highlighted by the considered scientists, within the framework of this study, we have determined the structure of information competence of students, including the following components: motivational-value; information technology; communicative; reflective.

The highlighted components of information competence are complementary and define the integration of personal qualities and the activity component. The motivational-value component presupposes the interconnection of motives, values and problems associated with the development of modern information technologies. The motives include interest in mastering information technologies for personal and professional purposes, awareness of the importance of informatization in the modern world, where there is a social significance of information as a resource and information technology means, as tools for interacting with it. Values include awareness of the role of information competence in the educational process of a university, compliance with ethical norms and rules for the use of information and communication technologies, understanding the importance of information competence in professional activities, and the willingness to use information resources as a source of knowledge. In addition, there are certain problems of the readiness of students to master new technologies, which are associated with an emerging new environment in which there is a system of rules that requires a certain amount of time to adapt.

The development of a positive attitude towards information technology is associated with overcoming the psychological barrier when working in a new learning environment. The implementation of this criterion is achieved through the inclusion of students in the electronic information and educational environment, the active use of various types of information in educational activities, the effectiveness of which can be achieved through the organization of blended learning.

The information technology component includes cognitive and activity components and is aimed at mastering modern technologies that a student needs in their professional activities. This component is aimed at gaining knowledge of working in the electronic information and educational environment, and the ability to update and apply them in practice, based on the use of e-learning and distance learning technologies in the educational process [1].

Within the framework of this component, the development and practical application of the means and tools necessary for the implementation of an effective search for information on the network, work with programs for processing text and audiovisual information takes place.

The communicative component includes interaction with people based on the observance of the rules of communication within the electronic information and educational environment, the ability and willingness to use various methods, forms and means of communication in local and global networks, including the practical implementation of performances with multimedia support, the desire for development communication capabilities [4].

The reflexive component as a means of "feedback", which allows students to carry out self-analysis of their activities, which is necessary to work with the means of the electronic information and educational environment. Reflection is based on the analysis of their own activities within the electronic information and educational environment, which undoubtedly contributes to the development of information competence.

**CONCLUSIONS**

Summing up, it should be noted that information competence in a broad sense can be understood as a person's ability to fully comprehend the realities of the information society and use all the opportunities provided to him, the ability to comprehensively adapt and self-actualize in the information society. It is also necessary to take into
account the downside - the more informationally competent a person is, the more necessary and in demand he is in the information society. Information competence is not something originally set, it can be acquired and improved; a prerequisite for this is appropriate education. Without using all the educational opportunities that modern information and communication technologies provide us, it is impossible to prepare a specialist whose qualifications would correspond to the rapidly changing realities of life.

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LOGIC ELEMENTS IN THE E-LEARNING ENVIRONMENT AND SOME CONSIDERATIONS REGARDING THEIR APPLICATION

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ABSTRACT
In this article, we will discuss some of the important sections of mathematics—the main concepts of the science of mathematical logic—reasoning (true or true value-taking sentences) and the information on their actions, their application in other sciences, logical formulas and language interpretation of laws, the use of the electronics Workbench (EWB) program in the teaching of mathematical logic elements.

KEYWORDS—reasoning, reasoning disjunction, conjunction, implication, equivalence, reasoning negation, the truth table of the predicate, logical laws, tautology.

I. INTRODUCTION
Mathematics is one of the most ancient sciences with a long history of development. Mathematics is the basis of knowledge of the universe, and it is very important in revealing the specific laws of events around us. We all know that mathematics develops a person's worldview, broadens his thinking, teaches him to think correctly, draw the right conclusions, strengthens the mind, develops attention, and nurtures perseverance and will.

Teaching mathematics in close connection with other disciplines allows students to form secular knowledge so that they can work effectively in any field in the future.

Modern, advanced educational technologies and non-traditional methods of teaching are being introduced into the educational process. Based on this, we would like to share some ideas from the methods developed by Mathematics in teaching the elements of mathematical logic.

Today, in the learning process, the teacher must not only impart a certain amount of knowledge, but also teach students to independently acquire new information and process it creatively. In this situation, serious attention should be paid to the problem of formation of mathematical and logical literacy in students of higher educational institutions.

It is no secret that as a result of practical skills, mathematics plays a leading role in all areas. Therefore, higher education, including the humanities, pays special attention to this science.

Humanities students face certain difficulties in mastering mathematics for a number of reasons, including the difficulty of mastering pure mathematical concepts. Therefore, it is very important that students of the humanities understand the information, knowledge, examples and problems that are given in the process of teaching mathematics. It is also important to understand the relationship between the disciplines of mathematics and the humanities and to apply it in practice.

The data presented is one of the attempts to show the relationship between the disciplines of mathematics and the humanities, the considerations of one of the most important concepts in mathematics, the operations on them, the laws of logic and their application in other disciplines.

II. MAIN PART
Selecting a Template (Heading 2)(TNR-10, Italic,Bold)

Mathematical logic is a branch of mathematics that deals with statements that can be used to determine whether a statement is true or false. Such statements are called considerations. Comments are denoted by the letters A, B, C, .... Comments on (conjunction, "and", "and"), v (disjunction, "or", "or"), ⇒ (implication, "if ...., then ..." "if ... then ..."), ⇔ (equivalent," ... necessary and sufficient to be ...."," ... if and only if ...") binary logical operations and unar the denial of action ¬ (negative, "... not") is established.
A, B, C, ..., refers to a complex reasoning that is formed by combining considerations in a certain order by means of logical connectors of negation, disjunction, conjunction, implication, and equivalence. Logical formulas are a mathematical model of reasoning in natural language.

In this language, simple words can be used with the help of conjunctions "and", "or", "if ..., then ..., "... necessary and sufficient for ...". It means to make a statement.

For example: 1) A: "Student Boltaev is studying physics"; B: "Student Boltaev is learning mathematics", C: "Student Boltaev is going to study at a prestigious university".

In that case we have:

\( A \land B: \) "Student Boltaev is studying physics and mastering mathematics."

\( A \lor B: \) "Student Boltaev is studying physics or mastering mathematics."

\( A \Rightarrow B: \) "If a student Boltaev is studying physics, then he will learn mathematics"

\( A \land \neg B: \) "Student Boltaev is studying physics and not mastering mathematics."

\( A \Rightarrow \neg B: \) "If a student Boltaev is studying physics, then he will not learn mathematics."

\( A \land B \Rightarrow C: \) "If a student Boltaev is studying physics and mastering mathematics, he will enter a prestigious university."

\( C \Rightarrow A \land B \) "If a student Boltaev entered a prestigious university, he studied physics and mastered mathematics."

Similarly, "If I graduate from university, I will enter a master's degree or work in my field." This feedback is expressed in the form A B C.

As another example ((\( A \Rightarrow B \)) \( \land (B \Rightarrow C) \)) \( \Rightarrow (A \Rightarrow C) \) let us explain the law of logic: Let A be B and B be C. In that case it follows from A to C.

The above examples show that the laws of mathematics, especially its branch of mathematical logic, are widely used in all disciplines.

We have also considered examples of the direct application of logical formulas and laws in the field of humanities education. It is also possible to work on a sentence (formula) involving the implications of comments ("if ..., then ..."), \( A \Rightarrow B \)

Consideration is called a theorem in mathematics. The condition of Theorem \( A \) is called the conclusion of Theorem B. Theorem \( B \Rightarrow A \) formed by substituting the conditions and conclusions of Theorem is called the inverse theorem. Theorem \( \neg A \Rightarrow \neg B \) formed by denying the conditions and conclusions of the theorem is called the opposite theorem to the given theorem, and finally, \( \neg B \Rightarrow \neg A \) the theorem is called the inverse theorem. There are many examples of the application of theorems and their types in philology.

A: "The sentence consists of two or more simple sentences" and B: "The sentence is a compound sentence". In that case, comment \( A \Rightarrow B \) reads, "If a sentence consists of two or more simple sentences, it is a compound sentence." As you know, this sentence represents the rule of the compound sentence in the native language, and this statement takes on a true value.

Comment \( B \Rightarrow A \) reads, "If a sentence is a compound sentence, it consists of two or more simple sentences." This consideration is also true.

\( A \Rightarrow \neg B \) comment reads, "If a sentence does not consist of two or more simple sentences, there is no compound sentence." Obviously, this comment is also true.

The \( \neg B \Rightarrow \neg A \) comment reads, "If a sentence is not a compound sentence, it does not consist of two or more simple sentences." This consideration is also true.

An example of this is the rule that words are adjectives.

\( A \Rightarrow B \) comment "If the word" how, how? "If he answers the questions, then quality is the word."

"All aspects of this consideration are true.

Let's look at another example. Let's take a look at the true value of "If it rains, the earth gets wet." The comment can also be read as "A comes from B" or "A is, so is B." Comment \( B \Rightarrow A \) for the true value "If it rains, the earth will be wet" (\( A \Rightarrow B \)) "If the ground is wet, it will rain." appears. This assumption is false because the ground can get wet even when water is sprinkled. Giving this example will give you the impression that not everything that is implicated is true. In determining whether the third view is true or false, there is a need to pay attention to the requirements of correct thinking and correct conclusions. \( \neg A \Rightarrow \neg B \) "If it doesn't rain, the ground won't get wet" (lie). Many students make the mistake of estimating the value of this consideration. Finally, \( \neg B \Rightarrow \neg A : \) "If the ground is not wet, it will not rain" (true).

The following illustrations, given as examples, are sure to arouse students' interest and teach them to think correctly.

In the process of analyzing the "if any person is a student, the university is subject to internal regulations" approach, students give different opinions that contradict each other (try to analyze).

Here is another important rule. Always \( A \Rightarrow B \) (theorem) and \( \neg B \Rightarrow \neg A \) (theorem opposite to inverse theorem) feedback have the same value, feedback \( B \Rightarrow A \) (inverse theorem) and \( \neg A \Rightarrow \neg B \) (theorem opposite to the given theorem) students will be able to identify their own mistakes in drawing conclusions if they are informed that they have the same value.
Coverage of modern information and pedagogical educational technologies, the use of advanced foreign experience in the teaching of elements of mathematical logic in the field of "mathematics". To reveal the content of the section of elements of mathematical logic in the subject "Mathematics" with the help of information and communication technologies; It is important to use programs such as Electronics Workbench (EWB) to teach the elements of mathematical logic in mathematics. When using the Electronics Workbench (EWB) to teach the elements of mathematical logic, the following is done:
- obtain results by directly entering mathematical logic operations;
- compile a truth table of formulas with the given elements of mathematical logic;
- restore the appearance of logical formulas when given by the truth table;
- Check the equality of formulas by creating a table.
For example, Electronics Workbench (EWB) can be used to calculate the negation of feedback A.

CONCLUSION
Highly intelligent, able to think independently, well-educated, enlightened, strong-willed, able to think, to draw conclusions on the basis of logic, to weigh everything he does and says on the scales of reason and logic - Education of perfect people is the most important requirement of today. In such people, thinking, which is the highest form of mental activity, consisting of knowing reality, is strongly formed.

The laws of logic, which are the laws of thinking, ensure the correctness of thinking. They represent the formation and interrelationships of concepts, considerations, and inference, which are forms of thinking. Following the laws of logic allows you to think correctly, clearly, precisely, consistently, without contradictions. Clarity, consistency, and avoidance of contradictions are the hallmarks of right thinking. Since these are the signs that form the basis of logical laws, we have tried to consider each of them separately.

Considerations, which are one of the basic concepts of mathematical logic in the article, and the binary logical operations based on them - disjunction, conjunction, implication, equivalence of considerations; denial of unar practice; information on logical formulas, laws and their application in other sciences, information on their interpretation, examples and problems showing the relationship between mathematics and the humanities.

In short, today's students need to be educated in accordance with modern requirements. After all, in the age of new technologies, boys and girls are born with a number of common qualities. Nowadays, teaching the elements of mathematical logic in an e-learning environment allows students to broaden their horizons and increase their knowledge of the elements of mathematical logic.

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A STUDY ON CONSUMER’S PERCEPTION AND PREFERENCE TOWARDS GREEN PRODUCTS

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ABSTRACT

The term ‘green’ indicates purity. Green means pure in quality and fair or just in dealing. For example, green advertising means advertising without adverse impact on society. Concept of green marketing concerns with protection of ecological environment. According to the American Marketing Association Green Marketing of products that are presumed to be environmentally safe. At present green marketing is widely becoming a phenomenon throughout the world as concerns towards environment have begun in the past few decades. Every year the populations of people who are turning towards green brands or environmental friendly products are increasing thus magnifying the phenomenon. Green or Environmental marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment. (Polonsky, 1994). Today “Green” marketing has moved from a trend to a way of doing business and businesses that sell should recognize the value of going green and incorporating this message into their marketing program and communicating the Green concept to their consumers.

KEYWORDS: Green products, green marketing, consumer perception, consumer’s preference

INTRODUCTION

The green movement has been expanding rapidly in the world. With regards to this consumers are taking responsibility and doing the right things. Consumer awareness and motivation continue to drive change in the market place, notably through the introduction of more eco-friendly products. Compared to consumers in the developed countries, the Indian consumer has much less awareness of global warming issues. Successful marketing has always been about recognizing trends and positioning products, services and brands in a manner that supports buyer intention.

The term ‘green’ indicates purity. Green means pure in quality and fair or just in dealing. For example, green advertising means advertising without adverse impact on society. Concept of green marketing concerns with protection of ecological environment.

According to the American Marketing Association Green Marketing of products that are presumed to be environmentally safe. At present green marketing is widely becoming a phenomenon throughout the world as concerns towards environment have begun in the past few decades. Every year the populations of people who are turning towards green brands or environmental friendly products are increasing thus magnifying the phenomenon. Green product selection often involves trade-offs between multiple environmental impacts. Green products are energy efficient, durable and often have low maintenance requirements. They are free of ozone depleting chemicals, toxic compounds and don’t produce toxic by-products. They are often made of recycled materials or content or from renewable and sustainable sources.

Green or Environmental marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment. (Polonsky, 1994). Today “Green” marketing has moved from a trend to a way of doing business and businesses that sell should recognize the value of going green and incorporating this message into their marketing program and communicating the Green concept to their consumers. Green Marketing is the holistic management process responsible for identifying and satisfying the requirements of customers and society, in a profitable and sustainable way. Green Marketing is not just one of the processes of marketing activities; it is a larger picture which takes about developing and sustaining consumer’s eco-friendly attitudes and behaviours.
REVIEW OF LITERATURE
Katiyar Shilpi (2015), attempts to throw light on the conceptual issues associated with green marketing. The study is based on secondary data. The study concludes that Green marketing will come with drastic change in the world of business if all nations will make strict roles because green marketing is essential to save world from pollution. It also reveals that green marketing assumes even more importance and relevance in developing countries like India.

Varghese Anu and J.Santhosh (2015), conducted a study to find out the impact of eco-friendly products on consumer behavior in Kollam district, Kerala. The study was designed as descriptive in nature based on survey method. Both primary and secondary data was used for study. Sample for the study was around 80 consumers selected on convenience basis. The study reveals that one should know the importance of being nature friendly. Environmental sustainability has become an essential ingredient to doing business responsibly and successfully. So constant efforts should be taken by Government, NGOs, Educational Institutions, Business Houses and society at large to create awareness among consumers to promote eco-friendly buying behavior.

Digel Aman and Dr.Yazdanifard Rashad (2014), focused on what makes green marketing successful, consumer’s behavior and their perceptions towards green products, the reason why marketers decided to adopt green marketing and how marketers can implement the green marketing mix. The study is descriptive in nature. The study reveals that nowadays people are more concerned about the environment and they are worried whether the natural resource could be sustained for the upcoming generation. Even if the eco-friendly products were found as expensive, they preferred green marketing.

Dr. Shruti P. Maheshwari (2014), focused to investigate consumer beliefs and attitudes on green products, consumer awareness on the availability of environmentally friendly products and influence of marketing efforts put by marketers with reference to consumers. The study is based on both primary and secondary data. The study was carried out in various cities of Madhya Pradesh (India). One hundred and twenty women consumers, with an age ranging from 21 to 45 years were approached with a structured questionnaire. The study confirms that the consumers are not exposed enough to green product marketing and brands to promote and sell products that are environmentally friendly and function effectively.

Kaur Supreet (2014), focuses on how people respond to greener products and what impact does green marketing creates in minds of consumers. Based on both primary and secondary data. The study comprised of 60 respondents. It reveals that going green can save our planet from pollution, global warming and threat of ozone depletion.

Bhatia Mayank and Jain Amit (2013), provides a brief review of environmental issues and identifies the green values if the consumers, their level of awareness about environmental issues, green products and practices. This study highlights the consumer's perception and preferences towards green marketing practices and products with the help of a structured questionnaire. The study is based on both primary and secondary data. It was conducted on 106 respondents. The results of analysis reveals the view that overall green values, awareness about green products and practices and the perception regarding seriousness of marketing companies towards green marketing had positive significant impact on consumer persuasion to buy and prefer green products over conventional products.

OBJECTIVES
1. To identify the factors that influences consumers to buy green products.
2. To understand the issues faced by consumers in connection with green marketing practices.

RESEARCH METHODOLOGY
The process used to collect information and data for the purpose of making business decisions. The methodology may include publication research, interviews, surveys and other research techniques, and could include both present and historical information. There are several important aspects to research methodology. The Methodology is the general research strategy that outlines the way in which a research project is to be undertaken and, among other things, identifies the methods to be used in it.

Here, Primary data are considered as the questionnaire to which the statistical methods are applied for the purposes of analysis and interpretation. Sample size of this study is 100 respondents. The data collected were classified and presented using tables and graphs. The data analysis has been done by using appropriate mathematical and statistical tools such as percentage, weighted average, chi-square method and Likert 5 point scale.
DATA ANALYSIS AND INTERPRETATION

Objective 1. To identify the factors that influences consumers to buy green products.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy</td>
<td>46</td>
<td>50</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>29.47</td>
</tr>
<tr>
<td>Good for environment</td>
<td>48</td>
<td>47</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>29.53</td>
</tr>
<tr>
<td>Good quality</td>
<td>37</td>
<td>43</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>27.8</td>
</tr>
<tr>
<td>Better than normal products</td>
<td>29</td>
<td>46</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>26.93</td>
</tr>
<tr>
<td>Reasonably priced</td>
<td>19</td>
<td>22</td>
<td>43</td>
<td>13</td>
<td>3</td>
<td>22.73</td>
</tr>
<tr>
<td>Easily accessible in stores</td>
<td>17</td>
<td>29</td>
<td>33</td>
<td>20</td>
<td>1</td>
<td>22.73</td>
</tr>
<tr>
<td>Well promoted</td>
<td>17</td>
<td>26</td>
<td>32</td>
<td>17</td>
<td>8</td>
<td>21.8</td>
</tr>
</tbody>
</table>

Source: Primary Data

Table 1 reveals the personal opinion of the respondents regarding the various factors influencing them to buy green products. Table shows that about 46% of the respondents strongly agreed with the statement green products are healthy, 50% agreed and the remaining 4% have neutral opinion with the same. The statement green products are good for environment is strongly agreed by 48% of the respondents, 47% agreed and 5% have a neutral opinion with the same.

About 37% of the respondents strongly agreed with the statement green products are of good quality, 43% agreed and remaining 20% have a neutral opinion. The statement green products are better than normal products are strongly agreed by 29% of the respondents, forty six per cent agreed and 25% have a neutral opinion with the same. About nineteen per cent of the respondents strongly agreed with the statement that green products are well promoted, twenty six per cent agreed, thirty two per cent have a neutral opinion, seventeen per cent disagreed and remaining eight per cent strongly disagreed with the same.

In order to analyse the opinion of the respondents regarding various factors influencing their purchase decision, ranking method is adopted. And for that weighted average for each statement is calculated and the same is arranged in ascending order. So it is identified that the statement good for environment occupied first rank, healthy got second rank, good quality occupied the third rank, the statement better than normal products occupied fourth rank, the statements reasonably priced and easily accessible in stores got fifth rank and the sixth rank goes to the statement that green products are well promoted.

Objective 2. To understand the issues faced by consumers in connection with green marketing practices.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of awareness</td>
<td>14</td>
<td>42</td>
<td>34</td>
<td>7</td>
<td>3</td>
<td>23.8</td>
</tr>
<tr>
<td>Very expensive</td>
<td>17</td>
<td>39</td>
<td>37</td>
<td>6</td>
<td>1</td>
<td>24.33</td>
</tr>
<tr>
<td>Not promoted properly</td>
<td>13</td>
<td>45</td>
<td>37</td>
<td>5</td>
<td>-</td>
<td>24.44</td>
</tr>
<tr>
<td>Lack of confidence in using green products</td>
<td>10</td>
<td>17</td>
<td>37</td>
<td>29</td>
<td>7</td>
<td>19.6</td>
</tr>
<tr>
<td>Not easily available in shopping outlets</td>
<td>11</td>
<td>35</td>
<td>40</td>
<td>11</td>
<td>3</td>
<td>22.67</td>
</tr>
<tr>
<td>Labels of green products are not informative</td>
<td>13</td>
<td>25</td>
<td>50</td>
<td>10</td>
<td>2</td>
<td>22.47</td>
</tr>
<tr>
<td>about the product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data
Table 2 reveals the personal opinion of the respondents regarding the various problems faced by consumers while purchasing green products. Table shows that about fourteen per cent of the respondents strongly agreed that unawareness is the major problem, forty two per cent agreed, thirty four per cent have neutral opinion, seven per cent disagreed and remaining three per cent strongly disagreed with the same. The statement green products are very expensive is strongly agreed by seventeen per cent of the respondents, thirty nine per cent agreed, thirty seven per cent have a neutral opinion, six per cent disagreed and one per cent strongly disagreed with the same.

The statement green products are not promoted properly is strongly agreed by ten per cent of the respondents, seventeen per cent agreed, thirty seven per cent have a neutral opinion, twenty nine per cent disagreed and seven per cent strongly disagreed with the same. The statement lack of confidence in using green products are strongly agreed by ten per cent of the respondents, seventeen per cent agreed, thirty seven per cent have a neutral opinion, twenty nine per cent disagreed and seven per cent strongly disagreed with the same. About eleven per cent of the respondents strongly agreed with the statement green products are not easily available in shopping outlets, thirty five per cent agreed, forty per cent have a neutral opinion, eleven per cent disagreed the statement and the remaining three per cent strongly disagreed with the same. The statement labels of green products are not informative is strongly agreed by only thirteen per cent of the respondents, agreed by twenty five per cent, fifty per cent have a neutral opinion, ten per cent disagreed the statement and remaining two per cent strongly disagreed with the same.

In order to analyze the opinion of the respondents regarding various problems while purchasing green products, ranking method is adopted. And for that weighted average of each statement is calculated and the same is arranged in ascending order. So it is identified that the statement labels of green product are not informative occupied first rank, green products are not promoted properly got second rank, green products are very expensive occupied the third rank, the statement lack of confidence in using green products occupied fourth rank, the statement green products are not easily accessible in stores got fifth rank and the sixth rank goes to the statement lack of awareness about green product.

TESTING OF HYPOTHESIS

| Level of awareness about green products and spending pattern of respondents | Spending pattern |
|---|---|---|---|---|
| | 0-10% | 10-30% | 30-50% | Above 50% | Total |
| Very high | 0 | 5 | 1 | 0 | 6 |
| High | 3 | 11 | 6 | 2 | 22 |
| Average | 25 | 29 | 2 | 1 | 57 |
| Low | 8 | 1 | 1 | 0 | 10 |
| Very low | 2 | 3 | 0 | 0 | 5 |
| Total | 38 | 49 | 10 | 3 | 100 |

Source: Primary Data

H₀: There is no significant relationship between level of awareness and spending pattern of respondents on green products.

H₁: There is significant relationship between level of awareness and spending pattern of respondents on green products.

Table 3.1

<table>
<thead>
<tr>
<th>Result of chi-square test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Table value</td>
<td>21.026</td>
</tr>
<tr>
<td>Calculated value</td>
<td>15.6113</td>
</tr>
<tr>
<td>Degree of freedom</td>
<td>12</td>
</tr>
<tr>
<td>Level of significance</td>
<td>0.05</td>
</tr>
<tr>
<td>Result</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Since the computed value (15.6113) is less than table value (21.026), the null hypothesis is accepted. So we can say that there is no significant relationship between level of awareness and spending pattern of respondents on green products.

FINDINGS

46% of the respondents strongly agreed with the statement green products are healthy. In order to analyse the opinion of the respondents regarding various factors influencing their purchase decision, ranking method is adopted. And for that weighted average for each statement is calculated and the same
is arranged in ascending order. So it is identified that the statement good for environment occupied first rank, healthy got second rank, good quality occupied the third rank, the statement better than normal products occupied fourth rank, the statements reasonably priced and easily accessible in stores got fifth rank and the sixth rank goes to the statement that green products are well promoted. labels of green product are not informative occupied first rank, green products are not promoted properly got second rank, green products are very expensive occupied the third rank, the statement lack of confidence in using green products occupied fourth rank, the statement green products are not easily accessible in stores got fifth rank and the sixth rank goes to the statement lack of awareness about green product. There is no significant relationship between level of awareness and spending pattern of respondents on green products.

CONCLUSION

Green marketing is an emerging concept which is found to be more beneficial than traditional marketing. It has become very inevitable to encourage the production and distribution of eco-labeled or green products and services. Green marketing involves product modification and production process and packaging which will be beneficial for the environment. From the study it was concluded that people have only average level of awareness about green products. They are aware of the benefits of green products for health as well as for the environment. Lack of perception was found among the respondents regarding the various brands and symbols or certifications of green products. Respondents claim that they are highly concerned about the environment. So the main factor which influences them to buy green products is that they are good for environment as well as healthy. The study revealed that consumers were facing various problems while purchasing green products. Majority of them have the opinion that eco-friendly products have to be promoted properly.

REFERENCE

RESPECTFUL MATERNITY CARE (RMC): SAFE MOTHER HOOD

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ABSTRACT
Pregnancy and childbirth are the momentous events in the lives of every woman worldwide and represents a time of intense vulnerability. The concept of “Respectful Maternity Care (RMC)” has evolved and expanded over the past few decades to include diverse perspectives and frameworks. RMC is not only a crucial component of quality of care; it is a human right. A women’s relationship with maternity care providers and the maternity care system during pregnancy and childbirth is vitally important. In 2014, WHO released a statement calling for the prevention and elimination of disrespect and abuse during childbirth, stating that “every woman has the right to the highest attainable standard of health, including the right to dignified, respectful care during pregnancy and childbirth.” Traumatic childbirth experience can have many negative effects, including poor mother-baby bond, unwillingness to breastfeed and poor quality of life. As facility-based birth and the use of skilled birth attendants continue to rise, a focus on quality and RMC remains critical for improving global maternal health.

KEY WORDS: Safe Motherhood, maternity care, disrespect, abuse, childbirth

INTRODUCTION
Childbirth is the most important event in women’s life and every woman need and deserve to receive respectful care during the labor and childbirth.1 The concept of “safe motherhood” is usually restricted to physical safety, and childbearing is also an important passage from woman to mother, with deep personal and cultural significance for a woman and her family. Because motherhood is specific to women, issues of gender equality and gender violence are also at the core of maternity care.2

There are several studies throughout the globe that attempted to explore the components of RMC during labor and birth from the laboring women’s and providers’ perspectives. These components generally include providing safe and timely care, nurturing positive interactions between midwives and women, protecting confidentiality, maintaining an active role in the labor process, obtaining the women’s consent before performing procedures, providing information regarding procedures to women, respecting patient privacy, and promoting freedom of choice as it related to position for labor and birth.1

UNIVERSAL CHILDBIRTH RIGHT
1. Everyone has the right to freedom from harm and ill-treatment.
2. Everyone has the right to information, informed consent, and respect for their choices and preferences, including companion of choice during maternity care and refusal of medical procedures
3. Everyone has the right to privacy and confidentiality. No one is allowed to share
4. Everyone is their own person from the moment of birth and has the right to be treated with dignity and respect
5. Everyone has the right to equality, freedom from discrimination and equitable care.
6. Everyone has the right to healthcare and to the highest attainable level of health.
7. Everyone has the right to liberty, autonomy, self-determination and freedom from arbitrary detention.
8. Every child has the right to be with their parents or guardians.
9. Every child has the right to an identity and nationality from birth.
10. Everyone has the right to adequate nutrition and clean water.\(^3\)

**MIDWIVES PERSPECTIVES**

A qualitative study on Midwives’ perspectives of respectful maternity care during childbirth was conducted in 2018 in two non-teaching public hospitals in Tehran, Iran. 24 semi-structured interviews were conducted with midwives, who had more than one year work experience in labor and childbirth units, through a purposive sampling method. Three themes were extracted including “showing empathy”, “women-centered care” and “protecting rights”. Showing empathy reflects that “establishing a friendly relationship” and “being with women”. Women-centered care encompassed “keeping women safe” and “participating in decision making”. Protecting rights reflected a need for “safeguarding dignity” as well as “giving equal care” and “preparing appropriate environment”.

Iranian midwives considered respectful maternity care a broader concept than just preventing mistreatment. Providing supportive care through friendly interaction with women was the first step for providing respectful maternity care.\(^1\)

**WOMEN PERSPECTIVES**

Child birth is a special moment for parents, families and communities but can also be a time of intense vulnerability for women to be exposed to disrespectful and abusive behavior while at the health facilities.

A cross sectional study on compassionate and respectful maternity care during facility based childbirth was conducted in Bahir Dar, Ethiopia in 2017. Four public health centers and one referral hospital was randomly selected. A structured and pre-tested interviewer administered questionnaire was used to collect the data from 284 study participants using a systematic random sampling technique by allocating a proportion to each health facility. This study showed a high prevalence of disrespect and abuse during facility childbirth in Bahir Dar town, Ethiopia. Being from rural area, having complications during delivery and mothers who gave birth through caesarian section were more likely to be exposed to disrespect and abuse than other women.\(^2\)

Thus, the notion of safe motherhood must be expanded beyond the prevention of morbidity or mortality to encompass respect for women’s basic human rights, including respect for women’s autonomy, dignity, feelings, choices, and preferences, including companionship during maternity care.\(^1\)

A systematic review and meta-analysis were conducted to identify various forms of ill-treatment, determinants, and pooled prevalence of disrespectful maternity care in India. After quality assessment, seven studies were included. Individual study prevalence ranged from 20.9% to 100%. The overall pooled prevalence of disrespectful maternity care was 71.31%. Pooled prevalence in community-based studies was 77.32% which was higher as compared to studies conducted in health facilities, this being 65.38%. The highest reported form of ill-treatment was non-consent (49.84%), verbal abuse (25.75%) followed by threats (23.25%), physical abuse (16.96%), and discrimination (14.79%). Besides, other factors identified included lack of dignity, delivery by unqualified personnel, lack of privacy, demand for informal payments, and lack of basic infrastructure, hygiene, and sanitation. The determinants identified for disrespect and abuse were sociocultural factors including age, socioeconomic status, caste, parity, women autonomy, empowerment, comorbidities, and environmental factors including infrastructural issues, overcrowding, ill-equipped health facilities, supply constraints, and healthcare access.

The high prevalence of disrespectful maternity care indicates an urgent need to improve maternity care in India by making it more respectful, dignified, and women-centered. Interventions, policies, and programs should be implemented that will protect the fundamental rights of women.\(^5\)

A descriptive cross-sectional study was conducted among 150 mothers admitted to the maternity ward of Nepal Medical College and Teaching Hospital using a purposive sampling technique. Data were collected through an interview technique by using a validated tool containing 15 items each measured on a scale of 5. In total, 84.7% of the women reported that they have experienced overall RMC services and, they also revealed that they have experienced disrespectful care in various forms such as being shouted upon (30.0%), being slapped (18.7%), delayed service provision (22.7%), and not talking positively about pain and relief during childbirth (28.0%). Likewise, length of stay, parity, and time of delivery were found as factors that influenced friendly care and timely care respectively. Even though RMC emphasizes eliminating disrespectful and abusive environment from health facilities, 15.0% of participants perceived that they have not experienced overall RMC services. So, the health facility should focus on these interventions which ensure that every woman receives this basic...
human dignity during one of the most vulnerable times in their lives.\(^5\)

Disrespect and abuse (D&A), a concept closely related to obstetric violence, has been documented in many different countries across the globe. In a 2010 landscape analysis, Bowser and Hill described 7 categories of disrespectful and abusive care during childbirth: physical abuse, non-consented clinical care, non-confidential care, non-dignified care, discrimination, abandonment and detention in health facilities. A 2015 systematic review updated this framework to include: Physical abuse, Sexual abuse, Verbal abuse, Stigma and discrimination, Failure to meet professional standards of care. Poor rapport between women and providers, Health system conditions and constraints.

Some evidence suggests that ethnic minorities are at greater risk of experiencing D&A during facility-based childbirth. Other factors that might influence a woman’s risk include socioeconomic status, parity, age and the partner’s race. Being multiparous has been found to be a protective factor, which may suggest that past experience helps patients avoid disrespectful treatment, or that disrespectful treatment is normalized by past experiences among certain groups, such as women of color, young women, and those with economic, social or health challenges.\(^6\)

Studies have reported significantly high prevalence of D&A among women during pregnancy and childbirth in Nigeria, but little is known about women’s perceptions and experiences of D&A during maternity care in the country.

Five focus group discussions with a sample of 32 women were conducted as part of a qualitative phenomenological study. All the women received maternity care in health facilities in Benue State, Nigeria and had experienced at least one incident of disrespect and abuse. Audio-recorded discussions were transcribed and analyzed using a six-stage thematic analysis using NVivo11. The participants perceived incidents such as being shouted at and the use of abusive language as a common practice. Women described these incidents as devaluing and dehumanising to their sense of dignity. Some women perceived that professionals did not intend to cause harm by such behaviours. The women highlighted the importance of accessing health facilities for safe childbirth and expressed that the experiences of D&A may not impact their intended use of health facilities.\(^7\)

**INFECTION CONTROL PRACTICES**

Postpartum infections result in maternal morbidities which include a wide range of maternal complications such as septicemia, endotoxic shock, peritonitis or abscess formation leading to surgery and compromised future fertility. Sepsis accounts for approximately 10% of all maternal deaths. Puerperal sepsis causes at least 75000 maternal deaths every year, mostly in low-income countries. Infections during pregnancy are relatively prevalent, which are a result of alterations in pregnant women’s cell-mediated immunity.\(^7\)

An Observational Study was being conducted to Understand Infection Risk during Childbirth in Kogi and Ebonyi States, Nigeria in six healthcare facilities. In each, five women were observed from the onset of labor through to delivery of the placenta. Hand hygiene infection risk was estimated for all procedures requiring aseptic technique compared against adherence to proper hand hygiene protocol and potential recontamination events. Hands were washed with soap and sterile gloves applied with no observed recontamination before only 3% of all observed procedures requiring aseptic technique. There was no significant difference in hygiene compliance between midwives and doctors nor facilities or states. Adherence to proper hygiene protocol was observed more in morning compared to afternoon and night shifts. This study highlights that hand hygiene remains a barrier to delivering high-quality and safe care in health facilities. Improving hygiene practices during labor and delivery will require strategies that extend beyond infrastructure provision.\(^8\)

Another cross-sectional study was conducted on Infection control practices and program management in Labor and Delivery units in Zahedan, southeast Iran between March to September 2014 in teaching and non-teaching hospitals. A 108-item semi-structured questionnaire was used for data collection on 88 midwives. The evaluation scores for all aspects of infection control were suboptimal; infection control program management 38.1% to 71.4%, healthcare workers post-exposure measures 58.5% to 92.7%, medical waste management 73.9% to 87.0% and infection control related standard infrastructures and equipment’s 55.9% to 82.8%. The midwives mean scores for attending infection control training courses and hand hygiene were less than 40% of the maximum score, but the mean scores for normal vaginal deliveries scrub, and equipment’s and instruments hygiene practices were generally above 70%. Thus, the results of this study revealed a need for development of appropriate policies and protocols for infection control practices in labor and delivery units and also midwives training on clean delivery practices.\(^8\)

**COVID-19 PANDEMIC**

Respectful maternal care assumes great significance in times of a pandemic. Many cases have been reported by the media about pregnant women being denied admissions to hospitals, of being referred from one facility to another, with some even delivering by the roadside.
Currently, women may shy away from accessing facilities due to fear of COVID-19 infections, and this may be compounded by fear of disrespect, discrimination and abuse, which is a more powerful deterrent to the use of skilled care than geographic and financial obstacles. It has taken years for India to get to the point where women from all socio-economic sections of society decide and opt for institutional deliveries instead of home births, and these gains must not be lost.

Women’s experiences with maternity caregivers can empower and comfort them, or inflict lasting damage and emotional trauma. A woman’s positive or negative memories of childbirth experiences stay with her throughout her lifetime. Studies shows that violating women’s rights during childbirth leads women to distrust health care providers and facilities. Such women are not only less likely to seek out maternity care— such as postnatal and emergency obstetric care—but other health services as well, such as family planning.10

EXPERIENCE SHARED BY PATIENTS

Aruna, a young mother was forced to do the cleaner’s job after her delivery: “I had just given birth and the pain was still too much to bear. They forced me to clean the floor of the labor room. I feel there is nothing worse than being a woman”. 

Contrary to common perception, even the wealthy and advantaged are sometimes not immune to being denied timely care and choice of a companion during labor and delivery, both essential components of respectful maternity care.

Television actress Chhavi Mittal has gone on record to say that she was denied a birth companion during her delivery, which, as per the guidelines of Government of India, should be ensured to a woman in labour. Other women have shared that “…When I could tolerate the pain, I asked for my mother, but I was refused and asked me to try on my own. I was not even allowed to hold my mom’s hand”.10

NATIONAL NURSING AND MIDWIFERY COMMISSION BILL, 2020

In December 2018, the Government of India took a landmark policy decision to launch the Guidelines for Midwifery Services in India and to provide midwifery services through midwife-led care units (MLCUs) in all its LaQshya facilities by creating a specialist cadre of Nurse Practitioners in Midwifery (NPMs). The vision to have quality midwifery care for all mothers is grounded in the principles of respectful maternal care. These guidelines include the introduction of midwifery model of care for low-risk deliveries in midwifery-led units of public health facilities. The guidelines also lay emphasis on the requisite skills of NPMs in line with international standards and competencies. They also include guidelines for education and training of midwifery educators. In addition, they provide an understanding to integrate this model of care in the current public health system to contribute to achieving the SDGs.

SOMI, Society of Midwives, India makes the following suggestions for inclusion in the NNMC Bill 2020 and some are listed below—

1. Separate Midwifery Commission for Indian Midwifery or at least an exclusive Board for Midwifery Education and Practice constituted with eminent midwifery and public health leaders of the Country on par with international standards.
2. Initiating steps for launching of Direct Entry Midwifery Degree programme and Post Graduate programme with independent practice provisions.
3. Separate Cadre and career pathway and career progression from the position of Midwives to independent practitioners and Midwifery leaders.
4. Licensure for independent practice by NPMs who have been trained under different projects and pilot interventions to set up the first MLCUs as envisaged by Govt. of India.
5. Scope of Practice of Midwives to be clearly defined to run Midwife Led Care Units and Collaborative Midwifery Practice Units with adequate legal frame work.
6. Separate Register for Midwives at state and National level
7. To introduce nomenclature of community midwives for all ANMs with definite guidelines for upgrading them with training rather than creating a new category as Midwifery Associates.
8. Multi task responsibility of Nurses and midwives make dilution of skill. Therefore the skills and scope of practice of nurse and midwife should be clearly defined and sustained.

All nurses need not study midwifery, and midwives need not go through all the medical surgical and adult nursing knowledge and skills which they will never use in their practice. It is essential to clearly demarcate the education, practice scope and regulation of midwives as separate entities in the health system.11

CONCLUSION

Respectful maternity care (RMC) is a rightful expectation of every woman. On the contrary, problems such as disrespect, abuse, ill-treatment, and demand for informal payments, infrastructural issues such as lack of water supply, sanitation, electricity,
and crowded rooms are prevalent globally. Another problem highlighted is that women either receive services “too much and too soon or too little and too late.” Many women experience a lack of respectful and abusive care during childbirth across the globe.

Disrespectful care is therefore a topic of public health concern and has an effect on utilization of services, affects the progress of the country in terms of healthcare, and affects the mothers physically as well as psychologically.4

Health institutions face several challenges with an increased number of women delivering in a health facility. It necessitates a greater effort to upgrade the level of care provided to mothers along with their rights to noble and dutiful care.5

The White Ribbon Alliance, released the first charter on components of RMC including “respect for women's autonomy, dignity, empathy, privacy, confidentiality, feelings, choices, and preferences, including companionship during maternity care and continuous care during labor and childbirth and also prevention of harm and ill-treatment.”4

RMC will help in achieving the Sustainable Development Goals, namely good health, well-being and reduced inequalities.4 Respectful care during childbirth has been described as “a universal human right that encompasses the principles of ethics and respect for women’s feelings, dignity, choices, and preferences.”

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METROPOLITAN LIFE REPRESENTED IN SELECTED NOVELS

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ABSTRACT
The books under this research manage metropolitan Mumbai, the City of dreams. Mumbai has genuinely enchanted numerous individuals inside and outside India. Be it the travel industry, be it Bollywood or its natural beauty or business practices, it is the most preferred free enterprise center of India. Mumbai is the capital city of Maharashtra situated in Central India. Mumbai is a multi-social city and is the focal point of India's media outlet; it is the fourth biggest crowded city on the planet. One can observe elegant territories like Cuffparade and Juhu and furthermore the destitution stricken slums of Dharavi, one of biggest slums on the planet. It is home to the corporate powerhouses, RBI, BSE, NSE. It is the storage facility to rich and superb old style legacy in Elephanta caverns, Siddhivinayak sanctuary, Museum and so on. It is to be seen that the name of the city was changed to Mumbai by the party in power in 1996. In this way, both the names have been utilized for investigations in the section.

METROPOLITAN LIFE IN ‘LOVE AND LONGING IN BOMBAY’BY VIKRAM CHANDRA

There are five stories in the collection ‘Love and Longing in Bombay’. Each is titled by a Sanskrit word which alludes to some theme to which the story relates. Every story is encircled by crafted by an old man Subramaniam, a retired government worker. He takes a seat at the bar and relates his accounts to everyone of those present in the bar. He figures out how to discover the creative mind of Ranjit Sharma, who is the fundamental storyteller. The basic storyteller all through the work ties the narratives with Hindu idea. It is a fine case of narrating and tale weaving and afterward one sees a scope of Bombay life and flavors and tastes of the city. The perusers witness visionaries, laborers, criminals and the immense variety of issues and battles they face; a few of the issues uncover the huge range of powers which are pervasive in the cutting edge world. The first part of the book ‘Dharma’ is about proper conduct. It is the story of Jago Antia a fighter, who returns home to his home to find that it is haunted.

ARMED FORCE LIFESTYLE

The military is kept up by the nation which is a very much prepared and well prepared military assistance which assume helpful job in the protection of the nation. They lead an existence of control and are confident to impart in others, a longing for national help. They are given an intense preparing as Jago Antia had been following a hard routine with his cadets. He showed praiseworthy boldness when he lost his leg in the combat zone. He was harmed in a mine assault and his right knee was twisted. He realized he needed to order his cadets and there was no opportunity to squander. He cut off off his leg bearing all the agony. He had won numerous battles and numerous trophies. He was regarded by his individual fighters as they stated, That is the reason his neighborliness, his meticulousness, fragile way he took care of his fork, what's more, his moderate grin, and these Jago eccentricities were imitated by even the cadets at the Academy.(Love and longing in Bombay,pag 6)

SUPERSTITIOUS CONVINCIONS

Some beliefs have been drilled in Indian culture from past occasions. It is to a great extent credited to the absence of instruction. Soothsaying plays an significant job in the lives of individuals in India. India, being the center point of differing societies and customs, is additionally home to a bunch odd notions. Penances, horoscopes, strict talks are drilled and followed in Indian culture. The faith in powerful components frames the essence of the story. Jago Antia returns to his home in Bombay in the wake of encountering an intense agony in his
amputated leg. He finds ghost stories encompassing the house. The neighbors are certain about the house being haunted. They avoid it out of dread. His friend and servant is hesitant to go after him into the house. At last, an individual who comprehends about spirits and supernaturalism is called for dealing with the issue. He educates Antia that apparition could be some family member and Antia does what is vital with the goal that the ghost can find happiness thereafter.

The subsequent part is titled 'Shakti' which portrays the capacity of the ladylike innovative power to set up her character. It manages the narrative of Bijlanis furthermore, Boatwallas. It gives a brief look at complexities of love. Sheila is a lady who loves a short, dumpy and an ugly man. She has a voracious desire to vanquish Dolly Boatwalla who experiences predominance at Kitty Parties and Club Culture.

**KITTY PARTY CULTURE IN A METROPOLITAN CITY**

A Kitty party is typically a social event of housewives, where the gathering is held in one woman's home. It incorporates food, fun and tattling. The pattern has moved now to clubs which had been before limited to the exclusive class. Presently, the people who have a place with the working class are looking for the participation of the club. They give ultra modern facilities like pools, dance parties, different games to play, food and beverages. The enrollment of the clubs is available to the entire families. Kitty parties in metro cities wipe out dissimilarity of caste and colour. In the story, Sheila began cocktail parties where she welcomed her extraordinary visitors from upper class including, Dolly Boatwalla which was a tremendous achievement yet Dolly Boatwalla remained disconnected. At that point, Bijlanis needed the participation of Malabar Gymkhana as their son wished to play there yet they were denied authorization which led to Bijlanis opening up of another club, which was known as the Shanghai club. It was tremendously sort after club yet at that point, Boatwallas were not allowed to become members. The club culture has been progressively acknowledged in the current urban areas as they give recreation to busy people to make most of their free time, the way they need.

**CAT FIGHTS IN ELITE METRO SOCIETY**

The battles among Bijlanis and Boatwallas structure the centre of fascination in the story. Sheila, who is of the higher society wants her fight to remain at exceptionally top consistently. She is resolved not to be bowed somewhere around the games played by the other lady encompassing her.

Bijlanis enhanced their assets and put into transportation and plastics other than mixies. Bijlanis consider assuming control over the matter of Boatwallas. The offspring of both the families are infatuated while Dolly is against the relationship however Sheila through her scheming and tricky endeavors, figures out how to turn into the most noteworthy lady of high society. The marriage of the children is fixed and both the families are at long last together.

**MAIDS, DOMESTIC HELP-A FEATURE OF METROPOLITAN LIFE**

Domestic assistance nowadays are elusive. They originate from the far off towns where day to day environments are troublesome. In the metro communities likewise, they face an intense life which is demanding and without charms. Like in the novel under study, the house keeper Ganga, worked for twelve houses with no break. She came back home by 7:30 p.m. At that point she was occupied with her family issues. She used to live in a little Kholi and had her daughter to take care. At the point when she was purchasing another Kholi, she took an advance from her mistress, which she needed to pay back in portions. She was a widow yet boldly, dealt with all circumstances; even she wedded her daughter in a wealthy family. Bijlanis helped her to incredible lengths to guarantee their maid's needs are fulfilled. In the present day situation in metropolitan cities, the rich families require full time domestic help. The exclusive class keeps the maids secure. Dolly Boatwalla had the propensity for flaunting, which was impacted by her selection of western beliefs.

**LOVE MARRIAGES IN METRO LIFE**

Love marriages are a common feature in metropolitan life. Despite the inclinations and successive demands by the guardians, the youths try not to pay any notice. Sheila's son Sanjeev and Dolly's daughter Roxanne fall in love over the span of the story. The families are not keen on the relationship particularly, the Boatwallas. Dolly takes her daughter to London, while Sanjeev loses interests throughout everyday life and falls into sorrow. In the event that the requests of the couple are not met, most couples flee with their partners. In numerous societies, love marriages are restricted. Indeed, the families punish the couple who bring disrespect to the family by fleeing. There are new social characteristics noticeable in the metropolitan arena which produces a lot of new connections but restrictions on love marriages is still prevalent in metropolitan cities which is a feature of Indian culture. The subsequent part is 'Kama' which manages erotic joys. A cop has found a crime and isn't happy with the inspection, so he willingly volunteers to determine the case. It places him into
potential harm as his activities are disapproved of by his bosses and furthermore lead him towards obscure domains, where some surprising disclosures are made.

**MATRIMONIAL DISPUTES IN A METROPOLITAN LIFE**

Strained relations in marriage have become a typical marvel in metropolitan cities. The unfulfilled needs and wants in an undesirable relationship turns into the reason for question which can pull down one's life. Sartaj Singh, the hero reveals the tangled story of affection and treachery, which exists among a couple. He uncovers the mystery of Chetan Bhai Patel's private life. All the while, Singh additionally experiences his own devils of want when his ex re-enters his life. One feels the throb of Sartaj Singh over the separation of his marriage as he can't sign the legal documents. Sartaj Singh reviews his past. Sartaj was a legend in his school days; while Megha, his spouse was rich and pretty. They got hitched yet Megha couldn't figure out the nature of his job while Sartaj lacked tolerance to make her understand; so the differences sneaked in. While fathoming the case, Sartaj figures it out his mix-ups which has cut off his association with Megha. He gets that they are not made for one another and lastly signs the divorce documents.

**WORKS CITED**

METHODOLOGICAL APPROACHES AND THEIR VALUE IN TEACHING SPECIALTIES

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ANNOTATION
Today, all higher education institutions are increasingly using the distance learning system. The advantage of this function is that it does not require distance and time, in other words, it can be done according to the wishes and desires of the user. Distance education in its broadest sense is an opportunity for distance learning using modern technologies, in which information and communication technologies and the Internet play a key role.

KEY WORDS: interactive, audio, video, internet forum, alternative, interactive, competence.

INTRODUCTION
In our country, theoretical and practical work is underway to increase spirituality, improve the national education system, strengthen the national base, bring it to world standards through modernization.

Currently, in the process of improving the education system, much attention is paid to the training of mature, versatile, independent, strong-willed, purposeful and proactive personnel. In this regard, completely new rules have been introduced for the types of training. A regulatory and legal framework has been created for training and reforming the lifelong education system.

The laws on education and the National Program for Personnel Training set the task of training highly qualified personnel in the continuous education system, instilling in them a scientific worldview, a creative approach to work, and the formation of high labor discipline [1,2].

Solving these problems means training highly qualified, competitive personnel who are able to use new methods and technologies in the education system.

The renewal of production technologies, the transformation of scientific discoveries and technologies into a direct productive force requires that teachers of natural sciences in higher educational institutions independently and regularly deepen, update, supplement and expand their knowledge [3].

Curricula and scientific programs today need to be coordinated in vocational schools and higher educational institutions. The development of curricula for specialized disciplines in accordance with the requirements of the time, from simple to complex, the creation of additional educational and didactic materials on each topic will help develop students' theoretical knowledge, practical skills and abilities.

The creation and implementation of a new generation of textbooks in the educational process that meet the requirements of modern education, in order to create sufficient knowledge and skills for students of specialized disciplines is a modern requirement [4].

FEATURES OF THE SPECIALTY
An important condition for improving the professional training of personnel in modern socio-economic conditions is the organization of the education system based on the achievements of modern science, technology and technology.

One of the urgent tasks of the education system today is the widespread use of modern pedagogical technologies and achievements in teaching, their introduction into the education system and the application of the experience of developed countries in the education system of our country.

The quality of training qualified specialists in educational institutions is largely determined by the effective teaching of specialized subjects [5, 6]. The fact that the study of special disciplines is more practical and closer to production shows that it differs from general education. Industrial practices are interconnected with specialties. The choice of teaching methods and the setting of learning objectives in special disciplines also require specificity. One of the leading components of the
specialty is "Methodology of work". Therefore, it is necessary to conduct an in-depth didactic analysis when creating textbooks in specialties and when determining the content of training, organizing the educational process, choosing effective teaching methods.

Specialization disciplines cover specific areas of production, including processes that directly provide in-depth, comprehensive knowledge that reflects the characteristics of a particular specialty and the development of related skills and competencies.

Such disciplines include various sectors of the national economy: agriculture, industrial enterprises, mechanical engineering, transport, communications, folk crafts, culture and art, etc. Sciences that directly demonstrate their specific properties, including their parts.

The introduction of advanced technologies, new technologies and scientific advances in production, the development of not only individual sectors of the economy, but all sectors (construction, mechanical engineering, agriculture, industry, communications, services, etc.) and management, organization, and the economy [7].

Therefore, changes and innovations in technology and technology require from each specialist a broad outlook and deep knowledge, as well as the ability to perform a variety of tasks.

The content of the specialty should correspond to the description of a specific area or specialty, that is, it should include the methods of activity that the student is engaged in in the profession. In order to form students' vocational-polytechnic and vocational-technical concepts, it is necessary to adhere to the polytechnic principle in determining the content of the specialty. Professional polytechnic concepts include: the structure of equipment and structures in a specific industry, the basics of operation and design, production technology, automation of technological processes, the scientific foundations of organizing professional activities, economic factors of labor activity in the industry and soon. If a student needs to study many types of machines and equipment, basics of their calculation, design, repair or technological processes in the subject of specialization, then the educational material should include a sample from the field. Designs of machines and equipment, operating procedures or schematic diagrams for the implementation of existing technological processes, on the basis of which students should be able to discover the features of modern designs of machines and technological processes [8].

RESEARCH METHODS USED IN TEACHING SPECIAL SUBJECTS

The theoretical method is the study and analysis of literature, as well as research based on pedagogical experience. Literature is based on books and journals, articles and patents, scientific developments, collections and catalogs, as well as information from the Internet.

Tracking - commonly used to monitor student learning through natural observation, to record changes in their behavior and attitudes, and to identify appropriate educational interventions.

The method of communication is a type of survey that requires serious preparation of the researcher, since it is used in the form of oral conversation in direct contact with a person, in the form of free communication without recording the answers of the interlocutor [9].

The pedagogical research method is the process by which the researcher obtains information from others about any aspect or event of the pedagogical experience. A question implies a logically thought-out system of questions, their clear wording and a relatively small number (3-5). It may also require a definite answer ("yes", "no").

Testing method is a method of collecting written responses in bulk. Test development (questionnaires) is a complex scientific process. Ultimately, the reliability of the survey results depends on the content of the questionnaires, the form of the asked questions, the number of completed questionnaires. Usually, the test question data is structured in such a way that it allows the computer to work with mathematical statistics.

The experiment-verification method - on the basis of this experience, determine the process of applying scientific hypotheses or practical work related to the educational process.

The method of analysis and statistics - in the field of education, including the constant growth of allocated funds, textbooks and teaching aids, equipment, visual aids, didactic materials, teacher training, construction of educational institutions, etc. Contracts and their proceeds are determined statistically [10].

Methods of Mathematics and Cybernetics - Translation from one language to another using computational mathematics and cybernetics machines in theory, practice of teaching, program learning and machine control, enhancing learning, evaluating processes such as improving learning efficiency, differentiated and individualized learning.

PRINCIPLES OF TEACHING SPECIAL SUBJECTS

Teaching principles are the basic rules for teaching theory that a teacher must follow when organizing the educational process.

There is a set of learning principles in education that includes

i. Beginning:
ii. The principle of communication between theory and practice in teaching;
iii. The principle of the exhibition;
iv. The principle of the educational nature of training;
v. Scientific principle;
vi. The principle of systematic and consistent learning;
vii. The principle of comprehensibility of teaching;
viii. Principle of using samples;
ix. The principle of taking into account the individual characteristics of students;
x. The principle of sustainability of knowledge, skills and competencies;
xi. The principle of didactic reduction;
xii. Awareness and activity of students in learning.

It is recommended that you adhere to these principles when teaching special subjects.

**Principle of activity** - A student learns well and masters when he acts independently. Therefore, the educational process should be organized in such a way that the student is more active.

Students should actively participate in each lesson as the student learns to do something more consciously, and this knowledge is increasingly ingrained in their memory. As a result, the student learns better and deeper, remembers and becomes more interested. Some skills, such as independence and individual learning, can only be achieved this way. For this, the teacher must have very good methodological skills and abilities.

Practice is an important part of student practice. Based on the theoretical knowledge gained, they develop work skills and competencies in their chosen field. At the same time, theoretical knowledge is supplemented and concretized.

The educational exhibition - the visualization of teaching confirms that students can consciously assimilate knowledge and form scientific ideas and concepts only if they have a certain emotional and practical experience directly related to the perception of the studied processes, objects and events. This principle requires the use of various senses in the learning process: sight, hearing, touch, and so on. The more fully the subject is perceived, the fuller and deeper its knowledge will be by the students [11].

The principle of using examples is that the teacher should always try to choose good examples to explain the content of the educational material. A good model, typical examples from practice, both good and bad products clearly show what the quality of the expected result will be or not.

The principle of didactic reduction - the educational material can be reduced to the required amount, so that the student assimilated knowledge at a high level. If the volume of educational material is very large, it is necessary to choose the parts that are directly related to the specialty and science. General and complex tasks should always be simplified didactically, but the meaning should not be changed. Therefore, if it is necessary to convey only basic knowledge, it is important to explain the material as simply as possible and not to disturb the student with too much material. An experienced teacher can explain complex processes in simple words.

**CONCLUSION**

In conclusion, we note that the role of methodological support in the acquisition of in-depth knowledge and skills in the field of specialization in each area is very high. When preparing a mature specialist, it is necessary to use innovative pedagogical technologies for each specialty; in a sense, it is incorrect to conclude that a natural science teacher prepares mature professionals in their field, since the teacher has a high level of methodological knowledge and skills. ... only if he has the ability to synthesize methods for the subject of each passing subject, this subject will be mastered by the student at a high level, and the expected result will contribute to his development.

**RECOMMENDED LITERATURE**

8. Alimov, Azam A., Kakhramon T. Olimov, and AlisherKbGaffarov. "Preparing Future Teachers of


TESTING OF OVERSULFATED CEMENT BASED ON NATURAL POUZZOLANE

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ABSTRACT

Currently, cement plants face a major environmental problem due to greenhouse gas emissions during the production of Portland clinker. In order to mitigate this negative impact on the environment, this study aims to partially or completely replace conventional cement with a new type of cement that has properties similar to conventional cements. To enhance local mineral resources, the use of natural pouzzolane is adopted. As this binder is obtained by a mixture of activated natural pouzzolane, gypsum, lime and a small amount of conventional cement, the work is to determine the optimal parameters to obtain the best result, and the value for money. The property of the natural pouzzolane needs to be improved by thermal activation to obtain better activity, a treatment of 2 hours at 500°C was carried out. Then several tests were carried out by varying the different parameters that can influence the characteristics of the cement developed. The best composition determined is 65% pouzzolane, 15% cement, and 5% gypsum. A comparative study was carried out to classify this new type of cement. From a mechanical performance point of view, this oversulphate cement is able in the medium term to compete with the conventional cements produced by the company HOLCIM, and even outperform it in the longer term. In addition, the cost of production and the selling price are lower than those of conventional cements. So the use of this cement in the field of civil engineering can be considered, it has potential and contributes to the reduction of greenhouse gas emissions. Even if the results are sufficient, a thorough study is still needed to improve this type of cement.

KEYWORDS: pouzzolane, clinker, oversulfated cement

1- INTRODUCTION

Currently, the world is facing a major problem because of climate change: the global temperature is rising, the precipitation is decreasing and this is leading to a decrease in farmers' agricultural income. A 1% increase in temperatures leads to a 3.6% drop in farm incomes [1].

One of the main causes of this change is the massive production of greenhouse gases. It is heavy industries such as the cement industry that emit the most emissions. The production of one tonne of cement causes the release of one tonne of CO₂, 55% of emissions come from the decarbonization process and 45% from combustion [2].

Despite the harmful consequences of cement production, the development of infrastructure and habitats cannot do without its use.

Research is currently being carried out to solve this problem as well as the search for other types of cement or the most commonly used conventional cement substitute binders.
Research is mainly focused on the development of new cement substitute materials. Supersulfated cement is part of this alternative cement. Supersulphated cement is a cement whose main composition is blast furnace slag.

For the particular case of Madagascar, it does not have steel industries that can produce blast furnace slag, yet it possesses other raw materials that are abundant and can be used for the manufacture of such cement. This inspired us to research the development of oversulfated cement based on natural pouzzolane.

Research has already been carried out on the use of natural pouzzolanes to make road hydraulic binder.

In this work, they sought to valorize a paper mill fly ash, an industrial by-product from paper recycling, and a natural pouzzolane as the main components of new road hydraulic binder.

Extensive physical, chemical and mineralogical characterizations of these materials were carried out, and their reactivity to lime and gypsum was evaluated using a new chemical quantification method developed to assist in the formulation of road hydraulic binder.

This method, which has yet to be optimized, has nevertheless made it possible to extract formulations of road hydraulic binder from the pouzzolane or the flying stationery ash without clinker [3].

In our case, the objective of this work is to obtain a new type of cement that can compete with local cements by valuing local natural resources and combating climate change.

Our job is to see if natural pouzzolane can replace the blast furnace slag, which is conventionally used in the manufacture of oversulfated cement.

We will also check whether the production of this type of cement reduces the emission of greenhouse gases and whether the price of the resulting cement is cheaper compared to that of conventional cement.

2- METHODOLOGY

2.1- Materials

The materials used in this work are

- Ball shredder: capacity: 15l, Power 1400w, 220V

- four : Maximum temperature: 1100oC

- Press
The study was carried out at the CNRIT Research Laboratory, Ankatso Technical Block, National Public Works Laboratory and building (LNTPB), and Mining Laboratory.

2.2- Methods

To verify that oversulfated cement made from natural pouzzolane can replace conventional cement, we will adopt the following methods:
Step 1: preparation of natural pouzzolane;
2iem steps: testing of oversulfated cement production;
3iem steps: comparative studies.

2.2.1- Preparation of natural pouzzolane

As a raw material, we used natural pouzzolane from Ivohitra. Ivohitra is located in the rural commune of Antsirabe. The term pouzzolane refers to all natural and artificial materials rich in silica and alumina capable of reacting at room temperature with lime. The natural pouzzolane is nothing but volcanic projections. Before any test, the natural pouzzolane must be characterized and prepared, the main objective of this operation is to know the activity of the natural pouzzolane and to correct its characteristics if necessary.

The preparation steps are:
- Grinding the pouzzolane
- Characterization of the pouzzolane
- Activation of natural pouzzolane

2.2.1.1- Grinding of the pouzzolane

The grinding was carried out at the Materials and Civil Engineering Laboratory of the CNRIT. The pouzzolane was ground and sifted until a powder of less than 80 degrees, a diameter used for mineral additives, was obtained.

2.2.1.2- Characterization of natural pouzzolane

Chemical analyses were carried out to determine the chemical characteristics of natural pouzzolane. The chemical characteristics we are interested in are the content of silica, alumina, iron oxide and especially the lime content.

2.2.1.3- Activation of natural pouzzolane

This is the most important step in the preparation of natural pouzzolane. To activate the pouzzolane, the thermal activation method was chosen. The pouzzolane is brought to different temperatures. The temperature is then maintained for 1 hour. The purpose of activation is to make a crystallized material amorphous. In this state, it is able to combine more easily with lime by presenting hydraulic properties by formation of aluminates and silicates. The tests were carried out with the temperatures: O°C, 500°C, 600°C and 700°C.

Two methods have been adopted:
1st method: only the pouzzolane that is brought to different temperatures
2nd method: the pouzzolane is mixed with lime before cooking.

2.3- Production tests

The stage of the manufacture of oversulfated cement based on natural pouzzolane.

2.3.1- Determining the different optimal manufacturing parameters
Several tests have been carried out to determine the optimum mixture of oversulfated cement. The method adopted here is to gradually replace the amount of cement with the activated natural pouzzolane starting with the mixture 90% pouzzolane and 10% cement. Here one or two parameters have been varied, the others are set by doing tests of the formulation of the test tubes.

In this study, to improve the characteristics of the resulting cement, gypsum and lime are also used as additives and we also varied their content at the same time as that of cement or pouzzolane.

The gypsums used were taken from Ambondromamy's quarry. Cement is the Manda cement produced by Holcim. It is an artificial portland cement whose resistance class CEM 42.5. Lime is the one produced by Chaumad.

### 2.3.2- Characterization of the resulting product

Mechanical tests were conducted to determine compression resistance and traction resistance of the product.

### 3.1- Chemical characteristics of the pouzzolane

#### Table 1: Chemical Characteristics of Natural Pouzzolane

<table>
<thead>
<tr>
<th>Oxides</th>
<th>SiO₂</th>
<th>Fe₂O₃</th>
<th>Al₂O₃</th>
<th>CaO</th>
</tr>
</thead>
<tbody>
<tr>
<td>% mass</td>
<td>48.8</td>
<td>18.9</td>
<td>9.7</td>
<td>trace</td>
</tr>
</tbody>
</table>

We found that the lime content is very low.

#### 3.1.2- Justification of activation

To verify the activity of the pouzzolane, the mechanical characteristics of the pouzzolane-cement mixture must be determined.

Mix composition: 90% Pouzzolane, 10% cement

#### Table 2: Resistance to compression of mixture natural pouzzolane - cement without activation over time

<table>
<thead>
<tr>
<th>Ages (days)</th>
<th>7</th>
<th>14</th>
<th>28</th>
<th>64</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rc (MPa)</td>
<td>-</td>
<td>0.6</td>
<td>1.7</td>
<td>2</td>
<td>2.5</td>
</tr>
</tbody>
</table>

The compression resistance found from this table is weak, this means that the pouzzolane is not very active and this justifies the need to activate the pouzzolane before its use.

### 3.1.3- Activation of the pouzzolane

The purpose of this step is to determine the optimal conditions and parameters that will achieve the maximum pouzzolanic activity of the natural pouzzolane.

Mix composition: 65% Pouzzolane - 15% Gypsum - 5% Cement - 15% Lime

Temperature change: 0°C, 500°C, 600°C, 700°C

1st method: thermal activation of the pouzzolane only
The histogram shows that the resistance to compression of the resulting product is satisfactory from 500°C. It can be seen that after 500°C the rise in temperature no longer has a large influence on compression resistance, and it has even been seen to decrease. During thermal activation, the color of the pouzzolane varies from black to brown and even brick red if the temperature continues to rise. So the increase in temperature leads to an increase in iron oxidation by turning ferrous oxide into iron oxide.

2nd method: Thermal activation of the pouzzolane-lime mixture
Composition used: 65% Pouzzolane - 15% Gypsum - 5% Cement - 15% Lime
Temperature change: 0°C, 500°C, 600°C, 700°C

For this second method, it has drawbacks. During the preparation of the test tubes, there is an increase in the demand for water during the waste, and the reaction is followed by a strong release of heat. We found that the first method gave the best resistance to compression.

For the rest of our investigations, the temperature of 500°C is then adopted as the activation temperature of the pouzzolane, and only the pouzzolane is activated before mixing.

3.2- Development of cement based on natural pouzzolane
Research focuses on the influence of different parameters on the resistance to compression of the cement developed
The parameters studied are: the content of Pouzzolane, lime, and gypsum, as well as the mode of preservation of the test tubes.

Determining compression resistance is always the factor that determines the quality of the cement obtained.

3.2.1- Influence of simultaneous addition of lime and gypsum on prepared cement

Here we take the mixture 90% Pouzzolane and 10% cement as the base (mix of pouzzolanic cement). The cement content is set at 10%, the other grades are varied, respecting the entire mixture at 100%.

<table>
<thead>
<tr>
<th>Test</th>
<th>Composition (%)</th>
<th>Rc (Mpa)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P</td>
<td>G</td>
</tr>
<tr>
<td>E1</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>E2</td>
<td>80</td>
<td>10</td>
</tr>
<tr>
<td>E3</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>E4</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>E5</td>
<td>60</td>
<td>0</td>
</tr>
</tbody>
</table>

According to the results of Table 3, the E4 test yielded the best result, the mechanical resistance is the highest. The simultaneous presence of gypsum and lime improves compression resistance.

3.2.2- Influence of lime content

Here, the cement and gypsum levels are set at 10%, and the others are varied, always respecting the totality equal to 100%

<table>
<thead>
<tr>
<th>Test</th>
<th>Composition (%)</th>
<th>Rc (Mpa)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>G</td>
</tr>
<tr>
<td>E2</td>
<td>80</td>
<td>10</td>
</tr>
<tr>
<td>E6</td>
<td>75</td>
<td>10</td>
</tr>
<tr>
<td>E7</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td>E8</td>
<td>65</td>
<td>10</td>
</tr>
<tr>
<td>E4</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>E9</td>
<td>55</td>
<td>10</td>
</tr>
</tbody>
</table>

The table shows that the E8 test gave the best mechanical resistance.

3.2.3- Influence of cement content

Referring to the previous results, we kept the P=65% pouzzolane content and the lime content CH-15%

<table>
<thead>
<tr>
<th>Test</th>
<th>Composition (%)</th>
<th>Rc (Mpa)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P</td>
<td>G</td>
</tr>
<tr>
<td>E10</td>
<td>65</td>
<td>20</td>
</tr>
<tr>
<td>E11</td>
<td>65</td>
<td>15</td>
</tr>
<tr>
<td>E8</td>
<td>65</td>
<td>10</td>
</tr>
<tr>
<td>E12</td>
<td>65</td>
<td>5</td>
</tr>
<tr>
<td>E13</td>
<td>65</td>
<td>0</td>
</tr>
</tbody>
</table>

In all the results obtained, the E12 test produced the best result, the composition of which is: 65% of pouzzolane - 5% of gypsum - 15% of cement - 15% of lime.

3.2.4- Influence of the way in which conservation is made

<table>
<thead>
<tr>
<th>Rc (Mpa)</th>
<th>How to preserve</th>
<th>In the water</th>
<th>In the air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rc14</td>
<td>11</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>Rc 28</td>
<td>20.1</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td>Rc64</td>
<td>27.2</td>
<td>17.8</td>
<td></td>
</tr>
<tr>
<td>Rc 90</td>
<td>37.1</td>
<td>19.5</td>
<td></td>
</tr>
</tbody>
</table>
We find that conservation in water gives the best result.

4- COMPARATIVE STUDIES
To classify the oversulfated cement obtained, a comparative study was carried out.

The comparative study was carried out on normal mortar with prismatic test tubes 4x4x16 cm³, we determined the resistance to traction by bending Rt and resistance to compression Rc. Price

Either x the price of Oversulfated Cement

\[ x = 0.65P - 0.05G - 0.15C - 0.15L \]

\[ x = (0.65 \times 160) - (0.05 \times 184) (0.15 \times 540) (0.15 \times 400) \]

<table>
<thead>
<tr>
<th>Cement</th>
<th>Rt (Mpa)</th>
<th>Rc (Mpa)</th>
<th>Price (Ar/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>6</td>
<td>30</td>
<td>255</td>
</tr>
<tr>
<td>Ciment MANDA CPA 42.5</td>
<td>9</td>
<td>50.3</td>
<td>540</td>
</tr>
</tbody>
</table>

Table 7: comparison of mechanical resistance on normal mortar and price.

It is noted that natural pouzzolane-based cement can compete with conventional cement produced by Holcim at the mechanical characteristic level and at the price level. It can then be classified among the resistance class cements 42.5.

5- DISCUSSIONS
This chapter allowed us to set the different parameters for the development of a cement based on natural pouzzolane consisting of a well-defined mixture of natural pouzzolane, gypsum, lime and conventional cement used in Madagascar.

The granulometry of all constituents is less than 80 μ or at most equal to 80μ. This choice is necessary because it is the granulometry adopted for all cements.

In terms of reactivity, the natural pouzzolane used is not very reactive, it required activation treatments, a thermal treatment of 2 hours at 500°C was the most effective. An increase in the temperature of the insulated bearing does not cause any increase, but on the contrary a slight decrease in reactivity, which may be due to a partial reorganization of the crystalline network of certain constituent of the pouzzolane.

By thermally treating a pouzzolane lime mixture, one generally records a decrease in mechanical resistance, the cooking of the mixture does not lead to the combination of lime with the acid constituents of the pouzzolane, it results in the formation of quick lime, which when wasting the mixture hydrates again. This rehydration has two major drawbacks: an increase in demand for waste water, and a strong release of heat. Both of these drawbacks eliminate the use of this kind of activation.

It seems that the simultaneous presence of gypsum and lime is necessary because lime corrects the composition of the pouzzolane and pure gypsum allow for the formation of calcium sulfoaluminate.

The best results are obtained with the composition 65% pouzzolane, 5% gypsum, 15% cement, 15% lime.

The optimal proportions of lime and cement may correspond: the amount that can be combined with the acidic constituents of the pouzzolane for lime, and the amount needed to form calcium sulfoaluminate during hydration of the cement.

Several studies have been carried out on the use of natural pouzzolane as building material. It has been used as an addition to reduce CO₂ emissions and also to reduce the cost of production. The method used is that the natural pouzzolane incorporated into the mortars is exposed to an attack of 5% sulphuric acid. The results show that natural pouzzolane improves the resistance of mortars to acid [4]. For our case, the activation of the pouzzolane was carried out by thermal activation, for them, the pouzzolane content in the mixture is 0, 10, 20 and 30%, for our case, the activation of the pouzzolane was carried out by thermal activation, for them, the pouzzolane content in the mixture is 0, 10, 20 and 30%, for our case, the activation of the pouzzolane was carried out by thermal activation, for them, the pouzzolane content in the mixture is 0, 10, 20 and 30%, for our case, the activation of the pouzzolane was carried out by thermal activation, for them, the pouzzolane content in the mixture is 0, 10, 20 and 30%.
Before the experimental trials, we carried out bibliographical studies to acquire and especially to confirm from the experimental studies the different results of the technical literature. During our study, several parameters influence the behaviours of oversulfated cement test tubes, the most important of which are: the content of pouzzolane, and lime. Experimental trials have shown us that:
- The activation temperature of the pouzzolane is 500°C, with a cooking time of 2 hours;
- The mixture 65% pouzzolane - 15%cement - 15% lime - 5% gypsum gives the best result
- The mechanical performance of oversulfated cement is observed mainly in the long term
- Withdrawal is low
The resulting oversulfated cement can be classified as a resistance class cement 42.5. Its production requires less energy than conventional cement, therefore emits less greenhouse gases.

Our study has allowed us to confirm that it is possible to produce a material based on locally available raw material such as pouzzolane, having characteristics that meet the requirements of the materials used in Madagascar.

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ABBREVIATIONS
P : Pouzzolane ; L : lime ; C : Cement ; G : Gypsum
A CASE REPORT - UTERINE RUPTURE AFTER PREVIOUS CAESAREAN SECTION

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ABSTRACT  
Uterine rupture though a rare complication is life threatening for mother as well as baby. The commonest cause for rupture of a gravid uterus is previous caesarean section. It is important that the risk of rupture of uterus is explained to the pregnant female who has undergone previous caesarean section. The symptoms with which the patient presents can be subjective and vague like pain in abdomen or of acute abdomen. The patient can also come with objective findings like non-reassuring fetal status and loss of fetal station. With previous caesarean section it is important to be vigilant throughout the pregnancy especially in third trimester. It is also imperative that the patient should be educated about the signs and symptoms of rupture uterus so that timely intervention can be done to save the life of mother and the baby. In the present case study, the USG scan revealed that the placenta had shifted and was covering the internal os from fundo-posterior position along with the shift of baby from cephalic presentation to transverse lie. Hence, these cases were suspicious of rupture uterus which causes change in lie as well as presentation of baby.

INTRODUCTION  
With increase in rate of caesarean section worldwide, the risk of rupture of uterus in subsequent pregnancies is increased. (1) Uterine rupture is defined as a full-thickness separation of the uterine wall and the overlying serosa and is associated with clinically significant uterine bleeding, fetal distress, protrusion or expulsion of the fetus and/or placenta into the abdominal cavity. Need for prompt cesarean delivery, Uterine repair or hysterectomy. (2, 3) Previously scarred uterus due to caesarean section is one of the most common and greatest risk factors for uterine rupture of a gravid uterus. (4) The WHO multi-country survey has reported incidence of uterine rupture due to caesarean section globally as 0.5% while for low HDI (Human Development Index) countries like India it is 1%. (1) A study conducted in Raipur, India stated that the incidence of uterine rupture with previous caesarean section was 1.69%. (5) According to a literature review on uterine rupture in developing countries, the proportion of women with prior CS or uterine scar among women who had uterine rupture was up to 64% (6). Though a rare complication uterine rupture is associated with severe maternal and neonatal morbidity and mortality. (2) Other associated risk factors are trauma due to domestic violence, road traffic accidents and obstetric manures like internal version, breech extraction and iatrogenic risk factors such as medical induction or oxytocin stimulation.
(augmentation of labour), intrauterine surgeries, uterine anamolies, grand multiparity, abnormal placentation, prolonged labour, obstructed labour, macrosomia, cocaine abuse, congenital uterine anamoly, inter-pregnancy interval of less than 6 months etc. Most common rupture site in gravid uterus is corneal area and uterine fundus. (7–13)

CASE STUDY
A 24 year old G2P1L1 female with 9 months of amenorrhea came with the complaints of pain in abdomen since morning. The pain was insidious in onset, gradually progressive with no relieving and aggravating factors. There was no history of fever, cold and cough, no bowel and bladder complaints. There was no history of any major illness like Diabetes Mellitus, Hypertension, Bronchial Asthma or Tuberculosis. She had delivered a female child 18 months back by a lower section caesarean section which was done in view of oligohydramnios. She is married since 3 years which is a non-consanguineous marriage and had conceived spontaneously in both the pregnancies. On examination her vitals were stable, the uterus was of term size and was irritable, fetal presentation was cephalic, but the fetal heart sounds were absent on auscultation and Doppler examination. The USG scan was carried out immediately which showed gestational age of 37 weeks 2 days with intrauterine fetal demise and oligohydramnios (AFI – 1.4 cm). The scan showed that placenta was placed fundo-posteriorly with extension along right lateral wall and was completely covering the internal os. A scan done five days prior i.e. on 14/9/20 was normal with cephalic presentation and placenta was fundo-posterior of the infant. She refused to get admitted even after giving advised and later on came with pain in abdomen on 19/9/20 morning. On examinations her clinical findings suggested that the infant was in transverse lie, and the scan showed that the placenta was low lying covering internal os.

With these findings she was immediately taken to the operation theatre where she underwent caesarean section. The surgical findings were that the uterus was ruptured along the lines of previous scar. Also there was shift in position of placenta from fundo posterior to completely covering internal os and changed baby’s position to transverse lie. Dead baby along with placenta were removed from the uterine cavity and the uterine wall was repaired.

DISCUSSION
Because of rare incidence and non-specific presentation uterine rupture is generally a missed diagnosis. The most common complaint of uterine rupture is the abdominal pain. The presence of just abdominal pain is a very non-specific symptom in a pregnant woman to reach to a differential diagnosis. With this non-specific complaint, the clinical diagnosis of rupture uterus is not possible.

In the present case USG scan done in the previous week didn’t show any abnormalities including the amniotic fluid index (11.1), fetal heart rate (120 b/min) and placental position (fundo-posterior). The patient presented with abdominal pain all of a sudden in the morning of 19th September. The USG scan done immediately revealed that the placenta had shifted and was low lying covering the internal os from fundo-posterior position. Also baby got shifted to transverse lie from cephalic. Immediately caesarean section done, where rupture uterus along with dead baby was found.

This patient presented to the OPD with abdominal pain which is the common presentation of ruptured gravid uterus. Anubha Vidyarthi et al (14) reported that the patients with gravid uterine rupture presented with Abdominal tenderness (86%) and Abdominal pain (77.2%) followed by Palpable fetal part (61.4%), Severe vaginal bleeding (7%) and Shock (68.4%).

Findings of Shu-Han You et al (13) were that the patients presented with complaints of non-reassuring fetal heart rate tracing (NRFHT) or acute abdominal pain. Revicky Vladimir et al (19) stated that most consistent early indicator of uterine rupture is the onset of a prolonged, persistent, and profound fetal bradycardia, other signs and symptoms of uterine rupture, such as abdominal pain, abnormal progress in labor, and vaginal bleeding.

Researchers have reported previous caesarean section as one of the most common causes for uterine rupture (13,14,15). Shu-Han You et al (13) reported that the patients who suffered from uterine rupture, almost 80% of them had undergone previous uterine surgery followed by multiparity (63.3%) and advanced maternal age. 33.33% women who suffered from uterine rupture had previous caesarean section, Al Zirqi et al (16) also reported similar findings that 36.4% women with uterine rupture hist of previous caesarean section. Whereas Anubha Vidyarthi et al (14) reported that of all cases of uterine rupture 59.7% had undergone caesarean section.

In the present case study, the women’s inter-delivery period was 18 months. This is again a risk factor for uterine rupture in gravid uterus with previous caesarean section. Bujold et al (17) reported that the interdelivery interval shorter than 18 months was associated with a significant increase of uterine rupture (odds ratio [OR], 3.0; 95% confidence interval [CI], 1.3–7.2). Similar findings were mentioned by Fitzpatrick et al (18) who stated that the women who had an interval of less than 12 months between their last caesarean section and their last menstrual period in their current pregnancy were having odds of 3.12 (95% CI 1.62–6.02) for uterine rupture.
No such similar case of suspicious rupture uterus which had led to change in lie and presentation of baby have been reported till date and hence further research is required. In present case study, risk factors for uterine rupture present were the previous caesarean section, less spacing between two pregnancies i.e. 18 months both were present in the patient.

CONCLUSION

Uterine rupture is an life threatening event in both mother and baby. The incidence of uterine rupture after caesarean section is almost double in developing countries like India than developed countries. This may be attributed to the lack of education and availability of professional care especially to high risk pregnancies like previous Caesarean section. A vigilant ANC care and appropriate education of mothers may lead to timely intervention and prevention in loss of infant and maternal life.

REFERENCES

AUGMENTATION OF AGROMETEOROLOGICAL STATIONS NETWORK IN SOUTHERN LUZON, PHILIPPINES

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ABSTRACT

The Philippines is always visited by typhoons every year which the southern Luzon area is a usual entry point. The study purposely to identify the most suitable locations of additional and to analyze the best sites for agrometeorological stations, their densities, and proper distribution inside the study area. The criteria for designing an augmented station based on World Meteorological Organization (WMO, 2010). The considerations and criteria for citing additional stations in the region are the followings: a) first approximation of admissible distance from existing weather stations; b) agricultural areas; c) climate type; d) slope (within 0-3%); e) distance from water bodies, coastline, and roads. The use of GIS map analysis conforming with all of the designed criteria gave 34 additional weather stations installed in Southern Luzon to augment the existing stations. Therefore, by the addition of 34 stations, the weather information could forecast more accurately and more effectively.

KEYWORDS: Southern Luzon, Agrometeorological station, weather forecast

1. INTRODUCTION

The Philippines has a humid equatorial or tropical maritime climate. Its climates influence by the complex interaction of various factors such as geography and topography, principal air streams, ocean currents, linear systems such as the intertropical convergence zone, and tropical cyclones. These are factors that highly influence the agricultural development of the country. It recognized that weather stations including agrometeorological which play a vital role in the dissemination of precise weather information and to
reduce the impact of meteorological hazards improving capability of disaster prevention and mitigation through providing early warning on severe weather such as typhoons, storms, rainstorms, lightning strikes, squall line winds, as well as line pollution flashover. According to the World Meteorological Organization (WMO, 2010), agrometeorological stations categories depending on their specific purposes within their territory. In general, most of the agrometeorological stations provide meteorological and biological information on weather analyses, forecasts, warnings related to the climatic regime on local agriculture. Therefore, the stations can provide detailed measurements in the very lowest layer of the atmosphere, the soil temperature and moisture, potential evapotranspiration, duration of vegetative wetting, pheno, onset and spread of plant diseases, and so forth. The agrometeorological station plays in the successful implementation of various research and development programs and for sustainable crop production as a significant role (Powell and Reubgard 2016, cited by Alejo, 2018).

For accurate observations at a given time and a true representation of the existing agricultural areas, all agrometeorology stations should be located in farming regions performing with a specific purpose and be dense enough to function as a network station (WMO, 2010). The appropriate distribution of agrometeorology stations can increase the effectiveness of the observations and provide accurate analysis results of the data. According to the WMO Technical Notes, the number of stations within each region should depend on its extent, climatic types and sub-types, and the spatial variations of such factors as the natural vegetation, main crops, and agricultural methods.

The most appropriate sites of agrometeorological stations are necessary to determine the economic, socio, cultural, environmental, and technical sustainability of the project. Gubler et al. (2017) stated that improper siting of the weather stations is one of the sources for inaccuracies in gathering weather data. Systems (GIS) is an important support tool in decision-making that has the capability of operating and analyzing a great variety of spatial data in the determination of suitable AWS sites (Sener et al., 2012). GIS technology is an essential tool used to combine various map and satellite information sources in models that simulate complex natural systems (Rana, 2012).

In the Philippines, climate and weather conditions such as typhoons have a destructive effect on the agricultural and industrial development of the country. Unfortunately, the existing station networks are not sufficient to be able to observe the weather data that contributes to the forecasting of the path of the typhoons and other relevant weather information; therefore, the study aim to identify the most suitable locations of additional and to analyze the best sites of agrometeorological stations, their densities and proper distribution inside the study area.

2. MATERIALS AND METHODS

2.1. Geographical area description

Luzon is the oldest and largest oceanic island in the Philippine archipelago (Vallejo, 2014). It comprises three sections: Northern, Central, and Southern Luzon (including the National Capital Region). Southern Luzon is composed of a series of peninsulas trending southeast for about 150 km. This portion of Luzon includes the National Capital Region (NCR), CALABARZON (Region IV-A), MIMAROPA (Region IV-B), Region 5 (Bicol Region). NCR comprises 16 cities called Metropolitan Manila, the capital region of the Philippines. It is located in the southwestern portion of Luzon and directly below Central Luzon. Region IV-A is in Southwestern Luzon, South, and East of Metro Manila. Its five provinces: Cavite, Laguna, Batangas, Rizal, and Quezon. Region IV-B covers five states: Marinduque, Occidental Mindoro, Oriental Mindoro, Palawan, and Romblon. MIMAROPA is an acronym combination of the Region’s constituent provinces; Mindoro (divided into Occidental and Oriental Mindoro), Marinduque, Romblon, Palawan. It has no land border with another region. Region V compost of six provinces: Albay, Camarines Norte, Camarines Sur, Sorsogon, and the island-provinces of Catanduanes and Masbate. Southern Luzon has a total area of 61,687.98 square kilometers (23817.86 square miles).

2.2. Determination of the location of existing weather station

The locations of existing stations with their specific types and functions are maintained. For standardization purposes, only weather stations managed by the Philippines Atmospheric Geophysical and Astronomical Service Administration (PAGASA) included in the analysis. Project-based weather stations within the area were difficult to access for functionality and data availability. Automatic weather stations (AWSs), either government (project-based) or privately owned, were also excluded for suitability mapping due to similar reasons.

2.3. Suitability criteria

The criteria for designing an augmented station network in Southern Luzon are based on the guidelines for planning a meteorological station network set by the World Meteorological Organization (WMO, 2010). The considerations and criteria for citing additional stations in the region are the followings: a) first approximation of admissible distance from existing weather stations; b) agricultural areas; c) climate type; d) slope (within 0-
The recommended distance between stations on the reference station of the network of meteorological stations belongs to the first group but are serving two purposes—study of long-term climatic changes and correction of data from other stations. These stations should possess the longest possible observational series, should not be relocated, and the allowable distance between stations is 300 to 400 km (flat areas).

The digital elevation model (DEM), 30x30 meters resolution, Landuse/Landcover (LULC), and inland water bodies and coastlines sourced from National Mapping and Resource Information Authority (NAMRIA), Philippines. The road networks downloaded from Open street map data files available for the Philippines (Geofabrik, 2018). Location and status of existing weather stations, the climate type (based on Modified Corona's Classification of Climate) of the provinces of Southern Luzon, were based on the data released by Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA). The climate type base map is sourcing from NAMRIA. Most PAGASA Agromet stations in the country are usually in collaboration with State Universities and Colleges (SUCs). Likewise, additional weather forecasting centers for agricultural purposes should also collaborate with SUCs. The final selected suitable areas resulting from the overall criteria that beyond a 5 km radius from the center of the collaborating institutions are excluded. The reason is the ease of management and maintenance by the SUC with the justification that the off-campus weather station will be part of its extension campus. Weather stations reach a 30 km up to 50 km radius (Bermudez et al., 2017). Hence, for the analysis, the minimum 30 km radius of influence is used. The distance of additional stations from water bodies and coastlines is 100 m (WMO, 2010). The road buffer distance on the accessible distance for flat terrain is estimated to be 500 m (Tardin, 2013). For ease of management and maintenance, a distance of additional stations from collaborating institutions set to a 5 km radius with justification. The minimum area of the proposed additional stations set to 2000 m

### Table 1. Suitability criteria for an augmented network of stations in Southern Luzon

<table>
<thead>
<tr>
<th>Factor</th>
<th>Criteria</th>
<th>Data needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>First approximation of admissible distance between existing weather stations</td>
<td>Reference stations with admissible distance between stations is 300 to 400 km (flat areas); outside its 30 km radius of influence</td>
<td>Coordinates of existing PAGASA weather station</td>
</tr>
<tr>
<td>Agricultural production areas</td>
<td>Suitable agricultural production areas</td>
<td>Landuse/Landcover (LULC) shapefile</td>
</tr>
<tr>
<td>Climate type</td>
<td>Modified Coronas Classification (MCC) Climate type shapefile</td>
<td></td>
</tr>
<tr>
<td>Slope</td>
<td>Within 0 to 3%</td>
<td>Digital elevation model (DEM)</td>
</tr>
<tr>
<td>Distance from water bodies and coastline</td>
<td>Outside 100 m buffer</td>
<td>LULC, water bodies, and coastlines shapefile</td>
</tr>
<tr>
<td>Distance from roads</td>
<td>500 m buffer</td>
<td>Road network shapefile</td>
</tr>
<tr>
<td>Possible collaborating institutions</td>
<td>Within the 5 km radius of the SUCs</td>
<td>Coordinates of SUCs</td>
</tr>
</tbody>
</table>

### 2.4. Geographical (Map) Analysis

Geographical (map) analysis done using a Geographic information system (GIS). The QGIS software is a free and open-source cross-platform desktop geographic information system application that supports viewing, editing, and analysis of geospatial data. The map generated using the different suitability criteria for an augmented network of stations was overlaid with all existing weather stations in Southern Luzon. The type of the proposed additional stations identified. Justifications as to why they need to include in the final augmented network of stations. The GIS mapping framework and procedure for the generation of suitability maps are illustrated in Figure 1.
3. RESULTS AND DISCUSSION

3.1. Location of existing weather station

Existing weather stations identified were stations with categories of synoptic and Agromet only. Other such as airport complex stations and radar stations are excluded because these give weather data, information, and advice for aviation activities and typhoon purposes only. There are 30 functional stations identified within Southern Luzon. The existing weather stations with their station category are summarized in Table 2.

Table 2. Existing weather stations in Southern Luzon

<table>
<thead>
<tr>
<th>Region</th>
<th>Location</th>
<th>Type of Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCR</td>
<td>NAIA Pasay City, Metro Manila</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>NCR</td>
<td>Port Area, Manila</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>NCR</td>
<td>Science Garden Quezon City, Metro Manila</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>NCR</td>
<td>National Agromet Research Station-Metro Manila</td>
<td>Agromet Station</td>
</tr>
<tr>
<td>4a</td>
<td>Alabat, Quezon</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>4a</td>
<td>Ambulong Tanauan, Batangas</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>4a</td>
<td>Infanta, Quezon</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>4a</td>
<td>Tayabas City, Quezon</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>4a</td>
<td>Tanay, Rizal</td>
<td>Synoptic/Agromet station</td>
</tr>
<tr>
<td>4b</td>
<td>Sangley Point, Cavite</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>4a</td>
<td>Cavite State University-Indang, Cavite</td>
<td>Agromet Station</td>
</tr>
<tr>
<td>4a</td>
<td>Tagaytay City, Cavite</td>
<td>Agromet Station</td>
</tr>
<tr>
<td>4a</td>
<td>Bureau of Soil-Cuyambay Tanay, Rizal</td>
<td>Agromet Station</td>
</tr>
<tr>
<td>4a</td>
<td>Rizal Agricultural Station-Cuyambay Tanay, Rizal</td>
<td>Agromet Station</td>
</tr>
<tr>
<td>4a</td>
<td>UPLB NAS-Los Baños, Laguna</td>
<td>Agromet Station</td>
</tr>
<tr>
<td>4b</td>
<td>Calapan, Oriental Mindoro</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>4b</td>
<td>San Jose, Occidental Mindoro</td>
<td>Synoptic Station</td>
</tr>
<tr>
<td>4b</td>
<td>Coron, Palawan</td>
<td>Synoptic Station</td>
</tr>
</tbody>
</table>
3.2. Suitability criteria

3.2.1. Suitable slope
Suitable areas additional stations were within the 0 to 3 percent slope was considered generally flat areas (or leveled to nearly leveled areas). Analysis of the map shows that the flat areas of Southern Luzon were about 12654.25 square kilometers (4885.83 square miles), which represent 20.51 percent of the entire Southern Luzon area.

3.2.2. Agricultural production areas
There were 21 different classifications of land use and land cover for Southern Luzon. The removal of land cover, water bodies and swamps, cropland mixed with tall timber plantations, and other areas may interfere with the collection of weather data. Four classifications remained considered for the analysis. These were arable lands, cultivated areas, grassland, and other barren lands. Map analysis shows that agricultural production areas are equivalent to 44.23 percent of the total area of Southern Luzon. It constitutes 27282.36 square kilometers (10533.78 square miles).

3.2.3. Categorized climate type
According to Modified Corona Classification of Climate: Metro Manila, Laguna (except Eastern part), Batangas (except Eastern part), and Northwestern part of Palawan belongs to Type I climate while the Western part of Quezon Province and Bicol Region (except Western part) have Type II climate. Areas on Southern Luzon with Type III climate are eastern parts of Laguna and Batangas, Oriental Mindoro, Romblon, and Marinduque. The areas of Southern Luzon with Type IV climate are remaining areas of Quezon Province and the western part of Bicol Region (Bareja, 2011).

3.2.4. Water bodies and coastlines
The total area of water bodies found in Southern Luzon includes rivers, lakes, floodways, reservoirs, and wetlands, is 1442.53 square kilometers (556.96 square miles).

3.3. Augmented Network of Station in Southern Luzon

Table 3 shows the area as affected by individual factors and the reduction of the affected area by combination factors. Results show that only 8.57 percent (5288.90 square kilometers) of the total area of Southern Luzon remained considering the slope, agricultural production areas, water bodies and coastlines (outside 100 m buffer), and road network (inside 500 m buffer). The results show that 34 possible additional weather stations be installed based on the consideration of the remaining factors such as climate type, the minimum area of weather station, and availability of collaborating institutions.

Table 4 shows the list of the proposed additional weather stations in the area include: the collaborating institution, station type, and justification for the proposed supplemental stations. Results show that 79.41% (27 sites) of the proposed additional stations to be erected because their locations were outside the existing weather station radius of influence. The remaining stations are inside the actual weather station radius of influence but with different climate types. Hence, a need for a separate weather station due to climate variability. Some of the proposed stations have multiple possible locations due to the presence of numerous collaborating institutions. To avoid overlapping of the radius of influence, these were counted as one additional proposed station only due to their proximity with each other. For versatility purposes, the Agromet station is preferred over synoptic when the collaborating institutions were SUCs. Hence, all additional weather stations are classified as Agromet stations. The map of augmented agrometeorological station networks in Southern Luzon is shown in Figure 2.
Table 3. Area as affected by individual factor and reduction of area as affected by combination of factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Area, sq.m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Luzon boundary</td>
<td>61687.98</td>
</tr>
<tr>
<td>Slope</td>
<td>12654.25</td>
</tr>
<tr>
<td>Agricultural production areas</td>
<td>27282.36</td>
</tr>
<tr>
<td>Slope, Agricultural production areas</td>
<td>5794.2</td>
</tr>
<tr>
<td>Slope, Agricultural production areas, water bodies</td>
<td>5709.48</td>
</tr>
<tr>
<td>Slope, Agricultural production areas, water bodies and coastlines</td>
<td>5647.95</td>
</tr>
<tr>
<td>(outside 100 m buffer), road buffer (500m)</td>
<td>5288.9</td>
</tr>
</tbody>
</table>
### Table 4. Proposed additional weather station in Southern Luzon

<table>
<thead>
<tr>
<th>Station no.</th>
<th>Region</th>
<th>Location</th>
<th>Collaborating institution</th>
<th>Justification</th>
<th>Station type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1*</td>
<td>IV-A</td>
<td>Balayan, Batangas</td>
<td>Batangas State University-Balayan Campus</td>
<td>Outside existing weather station radius of influence</td>
<td>Synoptic station</td>
</tr>
<tr>
<td>1</td>
<td>IV-A</td>
<td>San Juan, Batangas</td>
<td>Batangas State University-San Juan Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>IV-A</td>
<td>Nasugbu, Batangas</td>
<td>Batangas State University-Nasugbu Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>IV-A</td>
<td>Tagkawayan, Quezon</td>
<td>Southern Luzon State University-Tagkawayan Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>IV-A</td>
<td>Lucban, Quezon</td>
<td>Southern Luzon State University-Main Campus</td>
<td>Inside existing weather station radius of influence but with different climate type</td>
<td>Synoptic station</td>
</tr>
<tr>
<td>5</td>
<td>IV-A</td>
<td>Mulanay, Quezon</td>
<td>Polytechnic University of the Philippine-Mulanay Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>6*</td>
<td>IV-B</td>
<td>Boac, Marinduque</td>
<td>Marinduque State College-Main Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>IV-B</td>
<td>Gasan, Marinduque</td>
<td>Marinduque State College-Gasan Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>8*</td>
<td>IV-B</td>
<td>Mamburao, Occidental Mindoro</td>
<td>Occidental Mindoro State College-Mamburao Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>IV-B</td>
<td>Cajidiocan, Romblon</td>
<td>Romblon State University-Cajidiocan Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>IV-B</td>
<td>San Jose, Romblon</td>
<td>Romblon State University-San Jose Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>IV-B</td>
<td>Sta. Fe, Romblon</td>
<td>Romblon State University-Sta Fe Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>12*</td>
<td>IV-B</td>
<td>San Agustin, Romblon</td>
<td>Romblon State University-San Agustin Campus</td>
<td>Synoptic station</td>
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</tr>
<tr>
<td>13</td>
<td>IV-B</td>
<td>San Andres, Romblon</td>
<td>Romblon State University-San Andres Campus</td>
<td>Synoptic station</td>
<td></td>
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<tr>
<td>14*</td>
<td>IV-B</td>
<td>Calatrave, Romblon</td>
<td>Romblon State University-Calatrave Campus</td>
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<tr>
<td>14*</td>
<td>IV-B</td>
<td>Sta. Maria, Romblon</td>
<td>Romblon State University-Sta Maria Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>14*</td>
<td>IV-B</td>
<td>Odiongan, Romblon</td>
<td>Romblon State University-Main Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>IV-B</td>
<td>Taytay, Palawan</td>
<td>Palawan State University-Taytay Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>IV-B</td>
<td>Rio Tuba, Bataraza, Palawan</td>
<td>Western Philippines University-Rio Tuba Campus</td>
<td>Synoptic station</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Region</td>
<td>Location</td>
<td>Institution</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>-----</td>
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<td></td>
</tr>
<tr>
<td>15*</td>
<td>IV-B</td>
<td>Quezon, Palawan</td>
<td>Western Philippines University-Quezon Campus</td>
<td>Outside existing weather station radius of influence</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>IV-B</td>
<td>Busuanga, Palawan</td>
<td>Western Philippines University-Busuanga Campus</td>
<td>Outside existing weather station radius of influence</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>IV-B</td>
<td>Dumaran, Palawan</td>
<td>Palawan State University-Dumaran Campus</td>
<td>Outside existing weather station radius of influence</td>
<td></td>
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<td>18</td>
<td>IV-B</td>
<td>Sablayan, Occidental Mindoro</td>
<td>Occidental Mindoro State College-Sablayan Campus</td>
<td>Outside existing weather station radius of influence</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>IV-B</td>
<td>Sofronio Española, Palawan</td>
<td>Palawan State University-Sofronio Española Campus</td>
<td>Outside existing weather station radius of influence</td>
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</tr>
<tr>
<td>20</td>
<td>IV-B</td>
<td>Rizal, Palawan</td>
<td>Palawan State University-Rizal Campus</td>
<td>Outside existing weather station radius of influence</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>IV-B</td>
<td>Roxas, Palawan</td>
<td>Palawan State University-Roxas Campus</td>
<td>Outside existing weather station radius of influence</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>IV-B</td>
<td>El Nido, Palawan</td>
<td>Palawan State University-El Nido Campus</td>
<td>Outside existing weather station radius of influence</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>IV-B</td>
<td>Puerto Princesa, Palawan</td>
<td>Palawan State University-Main Campus</td>
<td>Outside existing weather station radius of influence</td>
<td></td>
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<tr>
<td>24</td>
<td>IV-B</td>
<td>Culion, Palawan</td>
<td>Western Philippines University-Culion Campus</td>
<td>Outside existing weather station radius of influence</td>
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<tr>
<td>25</td>
<td>V</td>
<td>Jose Panganiban, Camarines Norte</td>
<td>Camarines Norte State College-Panganiban Campus</td>
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<tr>
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<td>V</td>
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<tr>
<td>27</td>
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<tr>
<td>28</td>
<td>V</td>
<td>Pacasao, Camarines Sur</td>
<td>Central Bicol State University of Agriculture Pacasao Campus</td>
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<tr>
<td>29*</td>
<td>V</td>
<td>Sagñay, Camarines Sur</td>
<td>Partido State University-Sagñay Campus</td>
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<td>30*</td>
<td>V</td>
<td>Calabanga, Camarines Sur</td>
<td>Central Bicol State University of Agriculture Calabanga Campus</td>
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<td>Inside existing weather station radius of influence but with different climate type</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>V</td>
<td>Location</td>
<td>Campus Name/Type</td>
<td>Notes</td>
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<tr>
<td>31</td>
<td>V</td>
<td>Magallanes, Sorsogon</td>
<td>Sorsogon State College-Magallanes Campus</td>
<td>Inside existing weather station radius of influence but with different climate type</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>V</td>
<td>Bulan, Sorsogon</td>
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<td>Inside existing weather station radius of influence but with different climate type</td>
<td></td>
</tr>
<tr>
<td>32*</td>
<td>V</td>
<td>Sorsogon City, Sorsogon</td>
<td>Sorsogon State College-Main Campus</td>
<td>Inside existing weather station radius of influence but with different climate type</td>
<td></td>
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<tr>
<td>33</td>
<td>V</td>
<td>Castilla, Sorsogon</td>
<td>Sorsogon State College-Castilla Campus</td>
<td>Inside existing weather station radius of influence but with different climate type</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>V</td>
<td>Panganiban, Catanduanes</td>
<td>Catanduanes State University-Panganiban Campus</td>
<td>Outside existing weather station radius of influence</td>
<td></td>
</tr>
</tbody>
</table>

*additional stations with multiple available locations due to presence of numerous collaborating stations*
AUGMENTED AGROMETEOROLOGICAL STATION NETWORK IN SOUTHERN LUZON, PHILIPPINES

Figure 2. Augmented agrometeorological station network in Southern Luzon

4. CONCLUSION

Weather stations are vital to performing network stations in providing data analyzing, relevant weather information, and forecasting. The Philippines has numerous weather station types such as Doppler radar, synoptic, and agrometeorological stations. However, the number of functional weather stations may not be enough to provide accurate weather data due to the climate and geographical variability of a specific region. To aid in better forecasting of climatic and weather conditions that affect agriculture in the country, locations of augmented agrometeorological stations in the Southern Luzon identified based on WMO guidelines. Only weather stations managed by PAGASA are involved in the analysis. AWS and project-based weather stations within the area are excluded because of the difficulties to access functionality and data availability. The primary considerations for selecting the locations were the admissible distance from existing weather stations, agricultural areas, climate type, slope, distance from water bodies, coastlines and roads, and possible collaborating institutions. The use of GIS map analysis conforming with all of the designed criteria gave 34 additional weather stations needed in the study area for augmented station networks. Therefore, with these stations added in the study area to the existing meteorological station, the weather information could be forecasted more accurately and more effectively.

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AN HISTORICAL AND TRADITIONAL STUDY ABOUT AGRICULTURAL AND INDUSTRY LABOURS' PROBLEMS

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India

ABSTRACT
In these day's agricultural and industrial labours area unit thought of as a pitiable category in India as well as Karnataka. They are extremely reckoning on landholders to fulfill their fundamental requirements; they are not free from the contract and in addition excluded by the mainstream of the public. Their present socio economic situation as well as level of earnings and customary of living are terribly near to the ground due to the unorganized environment of the system and insignificant gratitude. Considering this background, the present paper tries to look at agricultural labour situation in Karnataka and furthermore analyzes the tribulations of agricultural and industrial labour in Karnataka. Building and Construction industry is renowned for unorganized region with huge labour strength and financial doings subsequent to agriculture in India. Agriculture leads to heavy demand for the workers who are proficient and also for non proficient workers. Labours essentially meet intrinsic threat to body component because of work-related hazards. Nevertheless, these workers effort is impermanent and informal natured with be short of essential facilities and insufficient wellbeing conveniences. By means of an intention of providing sufficient working circumstances and wellbeing facilities, India, Government presented the legislation specifically, building, industrial and agricultural workers (Regulation of employment and conditions of services) Act, 1996.
KEYWORDS: Agriculture labour, Industrial labour Scenario, Problems, Programs, Socio Economic problems

INTRODUCTION
Farming plays a essential position in the Indian economy, the fact that its commitment to gross domestic product (GDP) is at this moment around one sixth, it gives employment to 56 percent of the Indian labor force. Likewise, the onward and to the rear connection possessions of agriculture growth enhance the earnings in the non-farming area. The augmentation of some profitable crops has major prospective for advancing exports of farming or agro-based enterprises. Therefore agriculture not just adds to generally development of the economy yet additionally decreases destitution by providing job and provisions safety measures to the mainstream of the population in the country and therefore it is the most comprehensive development areas of the Indian economy. It is one among the main things of the Five Year Plan to make sure expanded options for job and enhanced source of revenue to all the areas of the countryside group of people. The most important aspect to be consider from economy point of view is, agricultural workers are increasing from year to year and crop production is decreasing due to various factors.

PROBLEM STATEMENT
The study is intended to determine the problems of agricultural and industrial workers from mediaeval of Karnataka. The major issues those are faced by particular workers after unified middle Karnataka is noticed. Reasons, problems, disapproval from labours is recognized and consequences are scheduled here. Recognize the issues and confronts those are expressed by women labours, child workers. Realize the affiliation among labours and landlords. Behavioral
examine regarding the interaction among labours and landlords. Labour improvement steps taken by means of government to exterminate the issues is momentarily premeditated here. All these problems addresses in this paper.

OBJECTIVES
To understand the problems of agricultural labours and industrial labours during the period of after unified medieval Karnataka.
- To understand the challenges faced by the agricultural labours and industrial labours.
- To understand the relationship between the agricultural labours and landlords.
- To understand the relationship between the industrial labours and their owners.
- To know the situation and scenarios of labours and their protest against landlords and owners.

MEANING AND DEFINITIONS OF AGRICULTURAL LABOURS
Labour is individual generally significant aspect of manufacture in a few upward economy. Labour is the most significant aspect from social and political aspect. It is not so straightforward to identify the perception of agricultural labour. Assorted endeavor have been made to define Agricultural labour by dissimilar professional committees selected through the government from moment in time. Agricultural labour is a person who works on a different people ground for their livelihood and fulfills their basic needs
- An Agricultural Labour Family was defined as a family which derived the bulk of its income from agricultural wages.
- Generally, agricultural labours are those who are busy in raising crops on imbursement of earnings.

Classification of Agricultural Labours
It is possible to classify agricultural laborers into four groups -
1. Landless staff, attached to the lords of the land;
2. Landless employees, who are autonomous individually, but who work exclusively for others;
3. Petty farmers with tiny bits of land who work for others and spend much of their time
4. Farmers with financial holdings, but with one or more of their sons and dependents working for additional abounding farmers.

PROBLEMS OF AGRICULTURAL LABOURS IN KARNATAKA
The problems of agricultural labour in Karnataka are increasing from year to year. In India and Karnataka, Agricultural labours are largest unorganized, poorest, resource less workers of socially and economically weaker section of the society. Agricultural labours are not free from the slavery or bondage even in Karnataka. “They are highly indebted, once they fall in debt; It is very difficult to come out of the contract or bondage. Amount of time which needs to be spend on agriculture land depends majorly on natural factors; most of the time working situation primarily depends on nature. The hours of working and problems of agricultural labours varies from region to region, season to season and from crop to crop depending on such factors on pressure of population, availability of land for cultivators, wage and fertility of land etc. Their standard of living, consumption level, and income level is very low in the absence of alternative sources of employment. In addition to the above said problems there are various problems faced by agricultural labours in Karnataka. They are:
1. Unorganized: agricultural labours in Karnataka are totally unorganized as they are illiterate and economically backward section of the society. They have no capacity to bargain for wage and hours of working.
2. Bad socio economic condition: agricultural labours are highly depending on landholders for fulfilling their basic needs. Almost they have been neglected and resource less class in rural areas.
3. Seasonal employment: agriculture workers job is seasonal. Labours are engaged in agriculture for five to six months in a year. Remaining days they are almost free from the agriculture work, it’s creates unemployment situation in our state.
4. Indebtedness: agricultural labours are basically come from depressed classes and economically weaker section in rural areas. They are highly depending on landholders for basic amenities of life.
5. Natural factors: agriculture persist on the way a venture resting on the monsoon in India as well as Karnataka. Agriculture depends on sun and rain. If nature is good, work increases otherwise agricultural labours are unemployed.

GOVERNMENT MEASURES TO IMPROVE THE CONDITIONS OF AGRICULTURAL LABOURS
Central and state governments have taken some policy measures to improve the socio economic condition of agricultural labours since independence. Fixing of minimum wages for agricultural labours, abolition of bonded labour, removal of disabilities the
ceiling on land holdings and redistribution of surplus land among the land less labours etc. To encourage the formation of labour co-operatives the government has introduced various employment guarantee schemes from 1977 to create employment opportunities to agricultural labours. Government has introduced the Twenty Point synopsis to develop the agricultural labours financial circumstances in the market. In addition, government launched last requests programme in the fifth five year plan to look up the utilization altitude, Condition of wellbeing amenities, consumption water, schooling electrification and accommodation conveniences to landless workers. Rural Review Committee (1969) suggested the concern of Small Farmers Development Agency (SFDA) and Marginal Farmers and Agriculture Labour Development Agency (MFALDA) to amplify the workers earnings, enhanced contribution and perform will generate job prospect. Government have established the particular plans for giving job prospects like,

- Integrated Rural Development Programme (IRDP)
- Food for Work Programme (FWP)
- Drought-Prone Areas Programme (DPAP)
- Desert Development Programme (DDP)
- National Rural Employment Programme (NREP)
- Rural Landless Employment Guarantee Programme (RLEGP)

MEANING AND DEFINITIONS OF INDUSTRIAL LABOURS

Construction workers, manufacture workers, production workers are individuals who occupied primarily on construction sites, manufacturing industries and be naturally busy in the customary features of the business apart from design and investing. They are encompassed in cooperation of local and immigrant work force. On a daily basis pay workers of professional deal such as electricians, carpenters and plumbers are together integrated below the sector as labours.

PROBLEMS OF INDUSTRIAL LABOURS IN KARNATAKA

As of the scrutinize on industrial labours Welfare Schemes/Amenities in Karnataka the subsequent are the most important concerns identifies:

- **Be deficient of career safety:** The job is of informal kind and extremely tiny subsist bonding with the service provider/job seekers. The service providers have the coercive authority to appoint & fire labours from the job and in addition the job seekers relinquish the work at one’s desire and will.

- **Work related hazard ensuring in provisional or eternal disability:** The labours be showing to threat of receiving wounded at the building or at the industry work location site and extremely fewer labours be endow with security components and equipments. The investigation disclose the **exposure of 77%** of entire labours to industrial grievance and vulnerability.

- **Short earning rates:** 24% of work forces surrounded by the section representative looking for a extremely short earnings, i.e., less than the lowest amount pay predetermined.

- **Utilization at the industry:** The 10% of labours is aged fewer than 18 years of age and be child workers. The labours be prepared toward job for everyone unconditionally, depending in the lead of the significance of the scheme. 35% of labours work for **extra 8 hours** at the job location site. The labours be prepared towards consume the nearby accessible basis of food, accommodations, travel amenities and supplementary resources of household convention. They are privileged of requirements of the industry Workers Act, 1996.

- **Un-organized industry work force:** The labours do their job in dissimilar areas specifically agriculture, industry, construction works, and day by day labour works. They do their job in the particular area for extremely less moment and bound to subsequently available prospect. They are below unremitting migrant since one job to another.

- **Constant joblessness due to accessibility of migrant labours:** Due to the presence of more migrant workers available at industry location leads to less chance and opportunities for local workers.

**Industry Labours Welfare Scheme**

Under the Act, the Karnataka Building and Other Construction/industry Workers Welfare Board has drawn up Welfare plans[2] that include;

- Accidental assistance benefits including disability benefits and ex-gratia for death.
- Medical benefits for major ailments and diseases.
- Marriage assistance benefits.
- Educational assistance for children.
- Loan facility for housing and purchase of equipments.

**CONCLUSION**

This paper have prepared an effort to revise the situation of agricultural and industry labours in Karnataka. Study consequences demonstrate that the proportion of populace have amplified, at the same time proportion of agricultural workers is continuously decreasing. Agricultural workers stimulated far away as of agriculture to non-agriculture area, Because of
frequent breakdown of yield, short daily earning rate, rising charge of manufacture, influence of globalization and slighter or no smallest amount of hold up cost to agricultural labours. Agricultural workers are confronting a variety of issues similar to, near to the ground socio-economic circumstances, be short of training, unorganized, recurring job, terrible functional situation, prolonged operational hours, incredibly a small amount of each day wages, revenue and normal of livelihood is extremely squat in Karnataka. Regarding industry labours in Karnataka, recognize that, Industry and Other Construction Workers in Karnataka, are susceptible to the lord ship of supervisors. They are prone to relentless utilization below several situations and surroundings, with be short of fundamental facilities, profit and collective safety. The hard work of the suitable Governments in the direction of organize these labours appear further than the necessary fraction. Government must obtain appropriate strategy procedures to get better the finance circumstances of agricultural and industry labours in Karnataka.

REFERENCES

A STUDY ON AWARENESS ON AB-PMJAY FOR TREATMENT OF DISEASES WITH SPECIAL REFERENCE TO CANCER CARE IN THANJAVUR DISTRICT OF TAMIL NADU

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ABSTRACT

BACKGROUND
Ayushman Bharat or Modicare, the Central Government aims to provide a health insurance cover of Rs 5 lakh to 500 million Indians free of cost. This includes families from lower income groups that fall under the socio-economic caste census (SECC) data of 2011. PMJAY envisions to help mitigate catastrophic expenditure on medical treatment which pushes nearly 6 crore Indians into poverty each year. In Tamil Nadu a scheme called ‘Chief Minister Kalaignar’s Insurance Scheme for Life Saving Treatments’ (KHIS) was launched in the year 2009 to ensure that poor and low income groups who cannot afford costly treatment, are able to get free treatment in Government as well as private hospitals for serious ailments. Later this scheme was modified with extended coverage in the year 2011 and re-launched in the name of ‘Chief Minister’s Comprehensive Health Insurance Scheme (CMCHIS)’. Under this scheme, the sum assured for each is revised as Rs.1 lakh every year for a total period of four years and for a total value of Rs. 4 lakh. Now, a value addition is made to the existing CMCHIS, after the launch of PMJAY, providing an insurance cover up to Rs 5 lakh per family, per year for secondary and tertiary hospitalization.

OBJECTIVES
The objective of this study is to assess the awareness about and attitude towards the AB-PMJAY for treatment of diseases especially cancer care. And it also aims to document the efforts taken by the Government of India to spread the awareness to achieve universal health coverage through AB-PMJAY and to the population.

NEED FOR THE STUDY
Due to large quantum of people being covered under PMJAY, there is a strong need to spread awareness with the right message, through the right media and within the right timeframe. The level of awareness about PMJAY scheme and access towards treatment especially cancer care were studied under this research.

METHODOLOGY OF THE STUDY
The Thanjavur District, one of the 32 Districts in the State of Tamil Nadu, mainly dominated by rural place depending on Agriculture, is taken as the area for the present study. It lies on the east coast of Tamil Nadu, India. The study uses both types of data i.e., primary data and secondary data. The primary data in the form of opinions were collected using structured questionnaire containing various knowledge aspects about AB-PMJAY to assess the awareness from the selected 200 sample beneficiaries following purposive random sampling method and the secondary data were collected from various sources such as books, reports of Government, Ministry of Health, Health Insurance companies, journals, network hospitals and websites. Data collection was done during the month of August 2020.

LIMITATIONS
This study is related to a particular geographic area namely Thanjavur district. So, few of the findings may not be generalized to the metro cities, wherein the awareness may be comparatively higher.

CONCLUSION
Low level of awareness regarding the AB-PMJAY scheme indicates a vital need for formal educational programs to sensitize public regarding the importance of accessing AB-PMJAY for treatment.

KEYWORDS: Health insurance, AB-PMJAY, Cancer care, Cancer Screening;
JEL Classification: I 13, I 18.
A Study on Awareness on AB-PMJAY for treatment of diseases with special reference to cancer care in Thanjavur District of Tamil Nadu

The Ayushman Bharat scheme is Prime Minister Narendra Modi’s ambitious initiative to evaluate the cost of health services. The Centrally-sponsored scheme will provide a free annual cover of up to ₹ 5 lakh a family, of which the State government will bear 40% of the premium. Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, which provides health insurance cover of Rs. 5,00,000 to more than 500 million poor and vulnerable persons, was launched on 23rd September 2018.

Ayushman Bharat is an attempt to move from sectoral and segmented approach of health service delivery to a comprehensive need-based health care service. Ayushman Bharat adopts a continuum of care approach, comprising of two inter-related components, which are:

1. Health and Wellness Centres (HWCs)
2. Pradhan Mantri Jan Arogya Yojana (PM-JAY)

1. Health and Wellness Centers (HWCs)

In February 2018, the Government of India announced the creation of 1,50,000 Health and Wellness Centres (HWCs) by transforming the existing Sub Centres and Primary Health Centres. These centres are to deliver Comprehensive Primary Health Care (CPHC) bringing healthcare closer to the homes of people. They cover both, maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services.

2. Pradhan Mantri Jan Arogya Yojana (PM-JAY)

The second component under Ayushman Bharat is the Pradhan Mantri Jan Arogya Yojana or PM-JAY as it is popularly known. Ayushman Bharat PM-JAY is the largest health assurance scheme in the world which aims at providing a health cover of Rs. 5 lakhs per family per year for secondary and tertiary care hospitalization to over 10.74 crores poor and vulnerable families which was approximately 50 crore beneficiaries that form the bottom 40% of the Indian population.

The households included are based on the deprivation and occupational criteria of Socio-Economic Caste Census 2011 (SECC 2011) for rural and urban areas respectively. PM-JAY was earlier known as the National Health Protection Scheme (NHP) before being rechristened. It subsumed the then existing Rashtriya Swasthya Bima Yojana (RSBY) which had been launched in 2008. The coverage mentioned under PM-JAY, therefore, also includes families that were covered in RSBY but are not present in the SECC 2011 database. PM-JAY is fully funded by the Government and cost of implementation is shared between the Central and State Governments.

States can implement PMJAY either through the insurance route or the trust route or both. The states implementing the scheme through the insurance mode select the insurance companies through an open tender process. The states implementing the scheme through the trust mode may engage Third-Party Administrators (TPAs) and Implement Support Agencies (ISAs) through an open tender process for implementing the scheme. The cover under the scheme includes all expenses incurred on the following components of the treatment.

- Medical examination, treatment and consultation, Pre-hospitalization, Medicine and medical consumables, Non-intensive and intensive care services, Diagnostic and laboratory investigations, Medical implantation services, Accommodation benefits, Food services, Complications arising during treatment, Post-hospitalization follow-up care up to 15 days

Tamil Nadu has topped the list in the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) in beneficiary enrolment. As of July 2019, the state enrolled 15.7 million families. This was followed by Madhya Pradesh that enrolled 12.8 million families. The scheme, which was launched in September 2018, already reached its target of reaching 500 million in India just within 10 months. According to Union Health Minister Harsh Vardhan As on July 2019, the scheme enrolled 16,039 hospitals, including 8,059 private hospitals and 7,980 public hospitals.

Need for Awareness about AB-PMJAY

Since PM-JAY is an entitlement-based scheme where there is no advance enrolment process, making beneficiaries aware of the scheme is the most critical aspect. Information, Education and Communication activities were carried out to educate beneficiaries about the scheme. Various modes of communication such as leaflets, booklets, hoardings, TV, radio spots etc are important elements for creating a comprehensive communication strategy for disseminating the desired messages across the target audience.

Steps taken for spreading the Awareness about the Ayushman Bharat scheme

A detailed communication strategy has been developed by National Health Authority (NHA) which was implemented at both national and State levels. NHA is also working on the overall cooperation & capacity-building with the States for implementation and development of communication strategy required for increasing awareness at the State level. IEC activities were initiated immediately after the Cabinet approval to the scheme on March, 2019.
The first major initiative taken was the **Additional Data Collection Drive (ADCD)** drive was undertaken by participating in “Gram Swaraj Abhiyaan” of Ministry of Rural Development on 30th April, 2018 named as “Ayushman Bharat Diwas” with an objective to make people aware about the upcoming scheme benefits and entitlement check by involving ASHA & ANMs and Gram Sevak covering around 3 lakh villages across the country. Various posters, banners etc. were designed and deployed in Hindi and regional languages across all camps and village meetings for spreading the awareness.

The next initiative taken was **Eligible letter was sent to all beneficiary families** from Hon’ble Prime Minister, to make them aware about their entitlements under the scheme and also provided them a family card with unique family ID. The letter issued by the Centre to beneficiaries across the State has helped to create awareness, has succeeded in getting people to take note of a scheme.

Standardised design materials was prepared by NHA that are being used by States for making beneficiaries aware about the scheme. Various communication channels like print media, television, radio, social media etc. are being used to reach beneficiaries and other stakeholders.

A communication strategy and IEC guidebook has also been developed for this purpose. A dedicated web portal for the scheme [www.pmjay.gov.in](http://www.pmjay.gov.in) has been also created to provide all the details about the scheme to various stakeholders. All relevant information and links, e list of empanelled hospitals, Am I eligible portal, grievance redressal portal, gallery, operational guidelines are placed

### Table No.1 Table showing the Assessment of the Awareness about AB-PMJAY

<table>
<thead>
<tr>
<th>No</th>
<th>Particulars</th>
<th>Aware %</th>
<th>Unaware %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Awareness regarding Coverage: Do you know that the State's CMCHIS health scheme has been integrated with the Centre's Ayushman Bharat (Pradhan Mantri Jan Arogya Yojana – PMJAY), and offers a cover of up to ₹ 5 lakh instead of earlier amount of ₹1-2 lakh</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>1b</td>
<td>Do you know that Benefits of the scheme are <strong>portable</strong> across the country i.e. a beneficiary can visit any empanelled public or private hospital in India to avail cashless treatment.</td>
<td>23%</td>
<td>77%</td>
</tr>
<tr>
<td>2a</td>
<td>Awareness regarding Authorisation Card: Do you know for emergency cases, there is a provision for hospitals to proceed with pre-authorisation without the card, which, when issued, can be subsequently submitted</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>2b</td>
<td>Are you aware that in Tamil Nadu, the card is issued only at the District Collector's office</td>
<td>38%</td>
<td>62%</td>
</tr>
<tr>
<td>2c</td>
<td>Are you aware about a beneficiary can produce the CMCHIS card to claim benefits under Ayushman</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>2d</td>
<td>Do you know if card is not available, on the CMCHIS website under the beneficiary/member ID tab, a person can check eligibility using either the URN number mentioned on the CMCHIS card or ration card number</td>
<td>26%</td>
<td>74%</td>
</tr>
<tr>
<td>2e</td>
<td>Do you know with income certificate and ration card one can apply and collect new e - health insurance card from District Collector's office immediately.</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>3a</td>
<td>Awareness regarding PMAM: Do you know that each empanelled hospital appoint a dedicated staff who are called Pradhan Mantri Arogya Mitras (PMAMS) and their role is to facilitate treatment of beneficiaries at the hospitals.</td>
<td>21%</td>
<td>79%</td>
</tr>
<tr>
<td>3b</td>
<td>Are you aware that AB PM-JAY beneficaries will be able to avail services in ESIC empanelled hospitals</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>4</td>
<td>Do you know that AB-PMJAY scheme covers up to 3 days of pre-hospitalization and 15 days post-hospitalization expenses</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>5</td>
<td>Awareness regarding NAFU: Are you aware of the fact that preventing, detecting and deterrence of fraud and abuse under PM-JAY was the primary responsibility of National Anti Fraud Unit (NAFU)</td>
<td>12%</td>
<td>88%</td>
</tr>
<tr>
<td>6</td>
<td>Awareness regarding Grievance redressal; Do you know that using AB PMJAY Call center/ helpline,sending letter, making telephone calls sending e-mail, and fax to the official addresses of the NHA can redress the grievances.</td>
<td>15%</td>
<td>85%</td>
</tr>
</tbody>
</table>
From the above table it is clear that level of awareness about Monitoring the execution of the scheme is very low and which was followed by functioning of Grievance redressal system whereas comparatively higher level of awareness was documented for coverage amount of the scheme and issuance of benefit card. To summarise, though efforts were taken by both the Governments for this scheme, still it finds very low especially Thanjavur like rural based areas need more effort. Because the success of the scheme itself depends on the awareness about various components of the scheme by the beneficiaries.

**AB-PMJAY in Treatment of Diseases**

Treatment under AB-PMJAY include Services of approximately 1,393 procedures which cover all the costs related to treatment, including but not limited to drugs, supplies, diagnostic services, physician's fees, room charges, surgeon charges, OT and ICU charges etc. Public hospitals are reimbursed for the healthcare services at par with the private hospitals.

According to Dr Indu Bhushan, CEO of National Health Authority, a large number of cancer cases go untreated every year, especially among the poor and a clear strategy for early detection and provision of affordable and quality cancer care is needed. One major challenge is to increase the availability of quality cancer care facilities across the country, especially in the northern states. The Government was tried to crack down on fraudulent activities and also imposed penalties on hospitals or insurers in indulging in malpractices.

### Cancer care treatment by Health and Wellness centre (HWC) in AB-PMJAY

According to Union Health Ministry every year there are 11.57 lakh new cancer patients in India and 7.84 lakh cancer deaths. At any given point, there are 22.5 lakh Indians living with cancer. India has large unmet cancer treatment facilities is fairly well known and with many reaching hospitals at an advanced stage, which makes treatment unaffordable, only adds to the cancer mortality figures.

Health and wellness centres (HWC), was started for screening of three types of cancer such as oral, cervical and breast for the purpose of identifying and starting the treatment of cancer at earlier stages.

<table>
<thead>
<tr>
<th>Types of Cancer</th>
<th>Number of Cancer Screening tests</th>
<th>Number of patients Treated for Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral cavity cancer Screening</td>
<td>76,00,000</td>
<td>10,218</td>
</tr>
<tr>
<td>Breast cancer Screening (W)</td>
<td>53,00,000</td>
<td>9,700</td>
</tr>
<tr>
<td>Cervical cancer Screening(W)</td>
<td>37,00,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Source: Secondary data from Ministry of Health Publications

As HWCs become operational, a significantly large number of cancer cases detected. In addition, with PMJAY getting mainstreamed, demand for treatment including cancer expanded and in the number of cancer treatments especially among the poor increased hugely. Tamil Nadu tops the list in AB-PMJAY cancer care beneficiaries. More than 1,000 hospitals are empanelled with the NHA for cancer care. Radiation oncology packages were the third-most claimed under tertiary care packages and medical oncology is the sixth-most claimed. The other top tertiary care packages are for cardiovascular diseases, orthopaedics and urology.

**AB-PMJAY in cancer care treatment of Tamil Nadu**

Union Health Ministry also documented that, in its first year, the Pradhan Mantri Jan Arogya Yojana (PMJAY), the tertiary care arm of Ayushman Bharat, has funded the treatment of 90,000 cancer patients through 1.8 lakh hospital admissions.

Tamil Nadu where the most cancer patients availed treatment under PMJAY, with 40,056 cancer cases, tops the list, followed by 22,000 cases in Kerala, 19,455 cases in Madhya Pradesh, followed by 15,997 cases in Chattisgarh and Gujarat with 14,380 cases. Officials say the figures reflect not just cancer incidence in these states but also the availability of treatment facilities and performance of PMJAY in these states. The cancer care claims under PMJAY show a steep rise over the past year. At the launching period that is during September 2018 there were 906 hospitalisation claims across the country for cancer. But during the next year September 2019, the figure was 87,382.

The NHA is responsible for the implementation of PMJAY under which 10.74 crore families will be entitled to an annual health cover of Rs 5 lakh per family. Until now, of the intended 50 crore beneficiaries, over 10 crore e-cards have been issued.

The National Health Authority (NHA) has so far sanctioned Rs 321 crore for cancer care. Of the total cancer packages claimed, 30,376 are for cancer.
of the reproductive system such as the cervix, ovary, testes etc. 28,506 breast cancer packages have been claimed while PMJAY has funded treatment of 21,379 GI cancer cases and 14,639 of blood and blood vessels and these figures are in line with cancer incidence in the country.

CONCLUSION

From the above discussions it is very imperative that creating awareness about the various components of AB-PMJAY is very much needed. The duty of the Government does not end by just by implementing health insurance schemes. The health system should be regulated and higher amount of transparency and standardization needs to be ensured. Because in the words of Elizabeth Edwards “Successful health reform must not just make health insurance affordable, affordable health insurance has to make health care affordable”. The outcome of the present study may help the policy makers to review the existing system constructively, ensuring more transparency and effectiveness and to attain the dream of providing UHC through Ayushman Bharat without any compromises.

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PSYCHOSOCIAL COPING DURING LOCKDOWN IN COVID-19 PANDEMICS

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ABSTRACT

INTRODUCTION: In the history of pandemics, enough attention has been given to medical practitioners for providing medical precautions and treatment of patients. However there has been no attention given to behavioral scientists. The present paper emphasized the need and importance of mental health professionals in coping mechanisms during pandemics.

OBJECTIVES: The primary objective of the study was to describe the relevance and the dire need of mental health professionals in crisis intervention specially in pandemics.

METHODS: This was a review-based paper. The primary focus was to understand the the treatment plans suggested by medical professionals and match it with the need of the society during the pandemics.

RESULTS: The paper has attempted to explore the role of mental health professionals by the review of literature available in dealing with coping strategies in pandemic which will be useful in coping mechanisms for anxiety, depression, suicidal thoughts etc during pandemic. The paper highlighted dire need to shift attention towards mental health professionals, its roles and challenges during pandemics.

CONCLUSION: Common treatment strategies were noted in this study. The requirement of mental health professionals was emphasized along with some treatment plans and coping mechanisms by mental health professionals which was missing in review of literature.

KEYWORDS: Psychological, Social, Coping, Pandemics, Covid 19

INTRODUCTION

There are evidences of several forms of pandemics witnessed in human history be it Plague in (430 B.C.), Spanish Flu Pandemic (1918-1920), HIV Pandemic (Early 1980’s), Smallpox Outbreak in Former Yugoslavia (1972), Severe Acute Respiratory Syndrome (SARS), Swine Flu or H1N1/09 (2009), Ebola Outbreak (2014-2016), Zika (2015-2016) and Covid-19 (2019). History has proved work of several scientists and medical professionals to fight with the pandemics and they have come with medication to fight with it. Most of the medical practitioners are providing medical precautions for the treatment of patients. However there has been no attention given to behavioral scientists. Hardly any attention has been given to psychological upliftment of the masses during quarantine and lockdown. This lack of attention is alarming for the societies because of the nature of pandemics. In the realm of history, Pandemics outburst has been seriously damaging the society, wiping out the entire population, bring down the economy of the country. While dealing with pandemics, modern scientists have given little attention on behavioral measures which are crucial at the time of pandemics. Mental health however is the officially accepted public health issues still somehow remain untouched while dealing with any physical ailment which is deadly disease. According to WHO data, in these fast times there is approximately 1/4th of the people who meets the criteria of developing any psychiatric/psychological ailments. The outbreak of pandemic and even a thought of its consequences does bring massive stress, depression, anxiety & other psychological distress among general population (Dong & Bouey, 2020).
Over the past few months there is a significant increase in mortality and morbidity owing to this pandemic. Till 20th June, 2020 it was reported more than 85 lacs total cases with 4.5 lacs deaths, more than 15 lacs recovered in more than 200 countries across the globe. USA is having 1st rank in terms of infected persons. India is 4th in rank. Total no. of cases in India (20th June, 2020) was about 4 lacs, with death of 13000 and recovery rate of 48%. Maharashtra is heading in terms of number of cases. The total number of cases in India rose to 85,91,730 in the month of November, 2020. As the disease is spreading furiously, majority of victim countries are unable to meet the demands of Personal Protective Equipment (PPE) and required medical infrastructure (WHO, 2020).

Evidences and literature suggest in every pandemic outbreak, techniques such as quarantine, social distancing or lockdown have been used and proved successful in controlling the death rates. Though quarantine has been found to be useful and the only technique in controlling the pandemics but it also brings list of its aftereffects. A major effect of outbreak of Covid-19 has brought some seriously concerning issues across the globe. It has not only affected the diagnosed patients and their family members but it has also affected psychologically, socially and economically to the uninfected sections of the populations. The recently conducted surveys suggests that people in general are not comfortable in dealing with the social –isolation and it has its direct link with mental wellbeing of people, increased anxiety, depression, stress, PTSD, anticipated anxiety about job loss and financial downfall. Recent surveys have also suggested that people are more concerned about their social and psychological wellbeing more than have concerns of physically getting infected with Covid-19. The reasons could be in developing countries/underdeveloped nations the major issue is to earn bread and butter for the family and this itself is huge source of anxiety and stress during this pandemic.

Across the globe Covid-19 has damaged the societies in terms of unbearable death rates, turning down of economies of the country, In order to be able to respond to such a global challenge WHO, APA and other psychological associations has been enormously doing its efforts to make the world understand the importance of mental health during such pandemics. The pandemic situations is so dangerous with the only solution is social distancing or lockdown which is not only challenging to the general population as people would have to change their life styles, sudden change in job demands, social cut-offs, employment crisis etc but it also brings number of challenges for mental health professionals to provide therapeutic treatment/counseling while maintaining social distancing i.e. through online methods such as webinars, zoom meetings, skype calls or telephonically. Despite of the utmost attention on the need to handle the mental health of people of all sections of the society, approaches to mental health care is still in infancy. This is high time for us to understand mental and physical health goes hand in hand and are not separate from each other.

The only treatment which has been successful during pandemics is social-isolation or lockdown. Being in social isolation/lockdown can be pleasant for some but can be extremely unbearable to others. For many, all these changes further lead to disruptions in work, gross distortion in daily routine, change of lifestyles which further may lead to variety of mental health problems such as stress, depression, death anxiety, mood variations, boredom, frustrations, job insecurities etc. It has been observed that during lockdown people mainly try to cope with the social isolation by looking to TV channels, movies and media news. Repeated hearing of the negative news would further create panic and anxiety among the people. Such depiction of negative news mainly about increase in cases, death rates and watching of other psychosocial negative events 24 x 7 would lead to the behavioral contagion effect. Managing and controlling behavioral contagion on individual and community as well as global level is the primary concern of mental health workers (Huremovic, 2019).

Researches have shown that specific population such as people already diagnosed with mental health issues have to face more challenges and gets affected more to cope up during pandemic Chatterjee (2020)

To deal with behavioral contagion effect of stress and death anxiety, researchers have used Psychological First Aid which is one of the methods in order to help people to come out of distress. It helps as a coping mechanism and provides the feeling of security, safety and optimism. The role of the mental health workers here is crucial to train people how to handle the social isolation gracefully. Some of the points to be dealing with this pandemic is to handle social isolation. The psychologists are conducting training and webinars during this time for the general masses to provide them tips to handle the situation with ease. The following are the ways to for self help during lockdown to deal with stress:

1. Stay Informed but not overloaded – Excessive negative news regarding increasing covid-19 cases and increasing death rates would create panic, state of apprehension.
2. Avoid discussions of Covid-19 and discuss other interesting topic to divert your attention.
3. Put your energy in taking care of your physical and mental health by practicing
4. Maintain social distancing but be connected with your family and loved ones through various social medias and telephones
5. Make a plan of the time if any close one in your family get infected with Covid-19. Plan your steps and strategies in advance to fight with the corona virus to lessen your stress and anxiety.
6. Mutual harmony has to be maintained within the family. Making action plan including all the family members from grandparents, parents and kids in the family.
7. Pay extra attention to older persons in the family. Pay special attention to their daily routine needs and medicines etc.
8. Kids are to be engaged in some physical and mental activities in order to save them feeling boredom, fatigue and anxiety.
9. Listen to music of your choice. Music has been a relaxation technique for many.
10. Develop hobbies or revive old hobbies which you could not afford earlier due to hectic lifestyle.

Consult Psychologist/Mental Health Workers

If an individual despite of all his efforts to stay relaxed, calm and anxiety free. Still unable to get rid over of negative thoughts should talk with friends and trust worthy people. The person should never hesitate to discuss these issues with mental health professional in order to cope with the situation. Check your govt. website to find the professionals/ counselors /psychologists/ who are dealing with this pandemic outbreak.

Reach to Mental Health Problems in Your Neighborhood/ Online Webinars & Workshops

Stay vigilant of your near and dear ones. Do notice changes in mental health of your family members as well as of your neighbors. Notice marked variations in sleep cycle, Unable to focus attention on any work, Increase use of alcohol, tobacco or drugs, Mood variations, feelings of depression. If the problem persists consult mental health professionals.

Vulnerable Persons: (Children, Elderly and People already suffering with Psychological problems)

Persons who are already diagnosed with mental illness may face newer challenges during lockdown. Extra care and attention needs to be given to those who are already dealing with mental health issues such as depression, OCD, Mood disorders, Irritable behaviour etc. Their condition may worsen and they are on higher risk of relapse (Yao et al., 2020a). Family members should seek help from mental health expert to provide them online counseling and consultation from psychiatrist or psychologist for continuation or change in their medicines.

Elderly people also needs some extra care and attention by family members as change in their daily routine may make them irritable, frustrated and may worsen their physical and mental health. It’s the role of the young family members to make them at ease and take care of their medicines if they require. At times online counseling or telephonic counseling can also be provided to them to make them positive. Positive mental state at the time of crisis does play a role to cope with the crisis.

Therapeutic Interventions and Coping Mechanism of Covid -19

There has been enough evidence of importance of mental health professionals in the literature from Western Countries. However still there is dearth of literature about the relevance of mental health workers and mental health needs of an individual in Asian countries. Psychologists and other mental health professionals have to achieve targets to convince the importance and need to care for mental health in their respective societies. There is emergent need for a mental health professional to (i) educate the public about the importance of psychological problems during the pandemic and otherwise too. (ii) Conducting online webinars / discussions to motivate public about how to deal with psychological issues during the crisis (iii) Educating public about problem solving strategies to cope with pandemic (iv) Rendering their services to the society with available health care. (v) Empowering patients suffering with corona virus and their caregivers. (vi) Provision of mental health care to health workers (Banerjee, 2020).

The challenge which has to be addressed by mental health professionals globally is to develop team of professionals to address psychological impact during pandemic and how to deal with the emotional distress of the public (Duon &Zhu, 2020), the development and collection of mental health surveys to get the real condition of the infected patients, the caregivers of infected patients and people in general (Liuet. Al, 2020b); the training of community health workers (Duon & Zhu,2020); Provision of online/ telephonic counseling as well as self help practices (Liu et.2020b); the development of telemedicine services for diagnostic purposes (Zhou et.al, 2020); and very importantly to cover the entire section of people for online counseling including lower socio-economic class (Yao-et.al, 2020b). Such online strategies if practiced by mental health professionals would be of great help in any pandemic outbreaks. Thus it is highly important for the Govt. to provide proper training and basic availability.
of technology to doctors and health professionals who further would help the society in accessibility of online counseling and services. More and more researches have to be done by health professionals to know its limitations and shortcomings so that it can be addressed appropriately.

CONCLUSION

With the increase in number of cases of Covid-19, there is a boom in the awareness of the psychologists and other mental health professionals in India. On one hand for the wellbeing of the society, Psychologists and mental health professionals are facing huge responsibilities and challenges to find out the measures which can reach to all sections of people in society including children, women & men, working or non-working, young and old, rich as well as poor and on the other hand, it has also come up as an opportunity in country like India where mental health is still not an emerged branch and considered secondary to medical professionals, to work towards planning, making and incorporating strategies for uplifting mental health needs of general as well as diagnosed population by providing online consultation/counseling/webinars during lockdown. Further, there is a dire need that Psychologists & other mental health professionals with the help of the Govt. aims to develop mental health policies to be implemented in general routines as well as which can be implemented during any crisis situations like pandemics. Once developed, such interventions should be tested in the form of pilot studies so that limitations if any can be ruled out in final development of mental health policies.

Conflict of Interest: No Conflict of Interest

Acknowledgements: I express thanks to all the researchers who have worked in the area of pandemics and its effect on mental health.

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ANALYSIS OF THE PROBLEMS OF EFFECTIVE USE OF LOCAL BUDGET FUNDS AND THEIR CAUSES (in the case of Fergana region)

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Uzbekistan

Article DOI: https://doi.org/10.36713/epra0327

ABSTRACT
The article analyzes the problems of effective use of local budget funds and their causes on the example of the Ferghana region.
KEYWORDS: local budget, revenues and expenditures, financing, deficit, appropriations, illegal expenditures.

INTRODUCTION
Every year, a huge amount of money is spent from the state budget of our country in order to ensure its development and increase the welfare of the population. And the main part of them is carried out through local budgets. In turn, a large part of the funds that are being spent through local budgets has a social orientation. Its level, in some years, reaches 95.0-97.0% on the local budgets taken separately. In the conditions of a market economy, any funds are subject to its effective spending. This also applies to any expenses incurred from the budget, including the account of local budgets. However, as practice shows, it is still problematic to ensure effective spending of funds, especially within the local budgets. No matter how much effort is being made, managers of local budget funds during their activities allow the illegal use of resources.

LITERATURE REVIEW
Some aspects of ensuring effective use of state or local budgets funds have been investigated to some extent in the economic (financial) literature. In this direction, scientific work and research carried out by Uzbekistan's economists-scientists and practicing specialists T.S.Malikov, O.A.Olimjanov, A.K.Iminov, J.A.Kuchkorov, N.H.Haydarov, D.H.Polotov, D.A.Rahmonov, Z.H.Srojiddinova, O.G'.Gaybullaev, U.Orokov, G. Kosimova and others. In particular, the issues of using separately received state budget expenditures as social networks (expenditures for supporting the education system, health care, and social security of the population) were studied by B. I. Nurmukhamedova, and N. Yuldasheva at the level of local budgets, from the point of medium-term budget planning view were learned by Sh. Fayzullayeva and I. A. Azizova.

RESEARCH METHODOLOGY
During the study, statistical and economic analysis methods such as analysis and synthesis, induction and deduction, abstract-logical analysis and comparison, correlation and regression were used.

ANALYSIS AND RESULTS
The results of the analysis carried out will allow us to identify the problems and the reasons for their occurrence, including the effective use of local budget funds in Fergana region. Despite this, in our opinion, the approach here should initially be taken from the analysis of the data presented in Table 1.
As can be seen from Table 1, it shows the growth rates of revenues and expenditures of the budget of Fergana region for 2010-2019 years compared to the previous year. According to it, during these years the revenues of the budget of the Fergana region have the character of growing steadily and their growth rate from 5.89% (2016 year) to 286.7% (2019 year). In addition, the growth rate of the budget revenues of the Fergana region is characterized by the fluctuation as a whole. Of course, this thing generates certain difficulties or problems in the implementation (financing)of costs from the same budget. Also, such fluctuation does not remain without its negative impact on the efficiency of the costs incurred from the budget of the Fergana region. At the same time, the budget expenditures of Fergana region have also increased year-by-year during this period. These growth rates ranged from 4,05% (2017 year) to 49.48% (2019 year). For year-by-year costs growth rates are also typically fluctuated. It is clear that this also raises certain problems in ensuring their effective spending. One of the most important conclusions that can be drawn on the basis of Table 1 data, in our opinion, is that there is no correlation between the year-by-year growth rates of revenues and expenditures of the budget of the Fergana Region. In our opinion, in this matter, of course, there must be balance between them. This means that the expenditure of local budgets should also be increased in accordance with their income. However, Table 1 data shows that in the budget of the Fergana region, we can see that not all the time in the practical rule, which does not require proof of this, is also not adhered to. In practice, costs, especially at the level of local budgets, can go far beyond the limit of revenues within these budgets. There are various reasons for this, which are mainly due to the fact that the same district or region is subject to the level or pace of socio-economic development. In such cases, the excess of expenses can usually be covered from a higher budget (for example, from the budget of the Republic) on the account of the allocation of appropriate funds in different views. In our opinion, such a situation in Fergana Region for 2010-2019 may have occurred in 2012-2013, 2016 and 2018 and in this case it is possible to be financed from the account of high (Republican) budget funds, including the High (Republican) budget expenditures at a higher rate than the revenues of the regional budget. While analyzing the data of Table 1, it is worth paying attention to one more case. In this place, the analysis of the growth rates of revenues of the Fergana region budget for 2010-2019 years, the growth rates of the same budget expenditures go on about 5 times high. The fact is that the above table data showed that such a situation occurred in 2014, 2015, 2017 and 2019. This, of course, can be caused by some kind of objects. But, in our opinion, at a time when the budget revenues increased by 40.2%, its expenditures increased by 22.78% (in 2011 year) or 18.58% of the budget revenues, despite the fact that during this period, its expenditures increased by 4.05% (in 2017 year) and finally, an increase of 286.7% of budget revenues to 49.48% of the costs associated with it during the same period needs an explanation, and all of the above indicates the presence of certain problems here. According to our reckoning, these problems can also be explained by the opportunities that have been dispensed with in the planning of the revenues and expenses of the budget of the Fergana region for these years. In the absence of such a situation, in our opinion, the transition from annual planning of local budgets to medium-term planning plays a special role. Now let's try to look at this problem even lower, that is, at the intersection of districts. As an example, we will use data from the Kushtepa District of Fergana region. Therefore, the

<table>
<thead>
<tr>
<th>#</th>
<th>years</th>
<th>Changes in income and expenses compared to the previous year</th>
<th>Cost changes in relation to revenue (+,*,-)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Incomes in %</td>
<td>Expenses in %</td>
</tr>
<tr>
<td>1.</td>
<td>2010</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>2011</td>
<td>+40.20</td>
<td>+22.78</td>
</tr>
<tr>
<td>3.</td>
<td>2012</td>
<td>+16.27</td>
<td>+29.49</td>
</tr>
<tr>
<td>4.</td>
<td>2013</td>
<td>+16.42</td>
<td>+23.15</td>
</tr>
<tr>
<td>5.</td>
<td>2014</td>
<td>+15.03</td>
<td>+14.03</td>
</tr>
<tr>
<td>6.</td>
<td>2015</td>
<td>+11.59</td>
<td>+11.26</td>
</tr>
<tr>
<td>7.</td>
<td>2016</td>
<td>+5.89</td>
<td>+7.31</td>
</tr>
<tr>
<td>8.</td>
<td>2017</td>
<td>+18.58</td>
<td>+4.05</td>
</tr>
<tr>
<td>9.</td>
<td>2018</td>
<td>+12.00</td>
<td>+46.42</td>
</tr>
<tr>
<td>10.</td>
<td>2019</td>
<td>+286.7</td>
<td>+49.48</td>
</tr>
</tbody>
</table>

Source: It was compiled by the author on the basis of data from the financial Department of Fergana Region.
following table 2 presents the dynamics of changes in revenues and expenditures of the budget of the Kushtepa District of Fergana region of the Republic of Uzbekistan and the differences between them.

### Table 2
The dynamics of changes in income and expenses of the budget of the Kushtepa District of Fergana region, Uzbekistan compared to the previous year and differences between them, in %

<table>
<thead>
<tr>
<th>#</th>
<th>Years</th>
<th>Revenue changes</th>
<th>Expenses changes</th>
<th>Difference of changes in income and expenses (+, -)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2010</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>2011</td>
<td>26.72</td>
<td>22.91</td>
<td>-3.81</td>
</tr>
<tr>
<td>3.</td>
<td>2012</td>
<td>26.22</td>
<td>25.80</td>
<td>-0.42</td>
</tr>
<tr>
<td>4.</td>
<td>2013</td>
<td>13.75</td>
<td>12.94</td>
<td>-0.81</td>
</tr>
<tr>
<td>5.</td>
<td>2014</td>
<td>43.41</td>
<td>39.89</td>
<td>-3.52</td>
</tr>
<tr>
<td>6.</td>
<td>2015</td>
<td>23.29</td>
<td>9.59</td>
<td>-13.70</td>
</tr>
<tr>
<td>7.</td>
<td>2016</td>
<td>8.37</td>
<td>7.92</td>
<td>-0.45</td>
</tr>
<tr>
<td>9.</td>
<td>2018</td>
<td>56.57</td>
<td>37.02</td>
<td>-19.55</td>
</tr>
<tr>
<td>10.</td>
<td>2019</td>
<td>970.02</td>
<td>160.32</td>
<td>-809.70</td>
</tr>
</tbody>
</table>

Source: It was compiled by the author on the basis of data from the financial body of Kushtepa district.

This means that the data presented in Table 2 shows that the problem with the change in revenue and expenditure of local budgets from year to year and the dynamics of the differences between them has taken more acute tone at the district level than at the regional level.

So, if 5 of the previous table 1 data has a sign (-) (the growth rate of budget expenditures is lower than that of revenues) and 4 (+) has a sign (on the contrary, the growth rate of budget expenditures is higher than that of its earnings), then, as can be seen from the table 2 data, all of them have a sign (-), that is, in all the years under analysis, the growth rate of costs was at a level lower than its earnings. This, on the one hand, can be positively assessed, that is, the expenditure of the Kushtepa district budget was carried out within the framework of its income, there were no excessive expenditures, etc. However, this can be assessed, on the second hand, negatively, that is, in the Kushtepa district, even within the framework of the existing income, costs have not been realized. Because at a time when social problems that need to be solved at the crossroads of districts are becoming increasingly acute, it is much more difficult to explain this, that is, extreme austerity in some years (for example, in 2018 and 2019 years). Speaking about the problems of effective use of local budget funds and the reasons for their occurrence, it is worthwhile to touch on another problem that has long been included in the practice not only in the Fergana region, but also in the whole Republic and is still coming without a solution and the reason for its origin. The question is about the deficit, appropriation and illegal expenditure, which is firmly deep-rooted in the practice of our country and consists not only in relation to the local budget costs, but also in relation to the state budget costs in general. This is exactly the case with the budget of the Fergana region, the results of our research carried out on the example above once again confirmed. Therefore, it is of key importance to recognize this as one of the most fundamental problems that hinders the effective expenditure of the budget, including local budgets, and to identify the reasons for its occurrence. Indeed, as the results of our analysis carried out above show, the deficit, which is a component of the budget expenditure, the appropriation and illegal expenditure, in our practice, occurs steadily every year and is repeated from year to year. Although their scale in each region is equal to several tens of billion soms, on the country's scale, this amount reaches several hundreds of billion soms. Despite the fact that a certain part of them is being restored to the budget as a result of the implementation of various activities, it is not possible to restore another part at all. For example, according to the data of Table 1, It was impossible to restore funds to the budget in Fergana region in 2010-8.0%, in 2014 – 21.3%, in 2015 – 12.1%, in 2016 – 8.5%, in 2017 – 22.3%, in 2018 – 20.4% and in 2019 – 9.9%. So, as can be seen from this, in 3 of the 7 cases, the deficit committed from the account of budgetary funds, from every 5 sums of appropriation and illegal expenses, 1 sum was not returned to the budget (not restored). There are at least a few reasons why both of the above situations (on the one hand, the deficit, the appropriation and the fact that illegal expenditures are committed repeatedly every year, and on the other hand, they are not completely re-established in the budget) occur continuously from year to year. Firstly, the sense and responsibility of ensuring that
these funds are effectively spent in budgetary allocators has not been fully formed. They have an indifferent (unfamiliar) mood about the fact that these funds are their own funds. They do not fully feel responsibility and obligation in this direction. Secondly, in practice, even in users of budgetary funds, the same mood was formed as above. In our opinion, the solution to the problem of ensuring the effective use of budget (including local budget) funds, will remain complicated, if the situation is not changed, first of all, even in the case of both of the above. World practice shows that this problem is impossible without a sharp increase in the responsibility and obligation of both sides in this direction.

**SUMMARY AND SUGGESTIONS**

Taking into account the above, in our opinion, it is worth paying attention to the following:

1. To achieve a 100.0% recovery in a relatively short period of the above funds from the accounts of all the perpetrators who have committed a deficit in relation to budgetary funds, including local budgetary funds, assimilating them and preventing the occurrence of illegal expenditures. Also, it is important not to take into account any object or sub-causes and to take them into account at the time of making the appropriate decision;

2. Refusal to apply the concept or indicator of “funds that have not been restored to the budget” in practice. Instead, if it is not possible for the deficit, appropriation and illegal expenditure to be returned to the budget during the relevant period, it is necessary to formalize them as a “loan”, which should be collected in relation to the relevant subjects, and also provide for the additional payment of the corresponding interest in this. In our opinion, there is nothing surprising or unusual in this. Because the budget, including the funds that have not been recovered within the time limit set for the disposal of the local budgets, nevertheless, means the use of funds that do not belong to them at the disposal of someone or by someone. It does not differ from the loan given in its economic essence. Therefore, it must be returned all the same and also pay the fee for its use. On top of this, the introduction of the above order into practice also does not contradict the market mechanism;

3. It is difficult to believe that the deficit, appropriation and illegal expenditure of a part of the budget and local budget expenditures, including those, occurs without the participation of “budget allocators” in our opinion. On the contrary, if this process is in the constant focus of the same “budget allocators”, monitoring is carried out by them on the continuous use of these funds, in our opinion, there is no possibility of reducing the deficit, appropriation and illegal expenditure to a minimum and equating it to zero. Therefore, it is worthwhile to reconsider, in our view, the issues related to both responsibility and obligation of such subjects, taking into account their contribution in the occurrence of deficit, appropriation and illegal expenditure in relation to budgetary expenditures. For example, “allocators of budgetary funds” should be additionally encouraged if they did not allow for the occurrence of a deficit, appropriation and illegal expenditure on budgetary expenditures during their annual activities, and, conversely, should be punished from a material (financial) point of view. The introduction of such a procedure, in our opinion, would be in line with the nowadays spirit and the state policy currently being implemented in Uzbekistan.

We believe that it is also necessary to dwell on the problems of the effective use of local budget funds and the reasons for their occurrence at the local level when an opinion is being made about the extent to which budgetary expenditures are planned at the local level. Based on the results of the analysis carried out, it can be said that, including the actual circumstances that exist when the expenditure of local budgets is planned, are not taken into account in sufficient quantity. For example, we are witnessing that even the level of revenues and their growth rates from year to year have remained, to a certain extent, inattentive, when the overall plan of expenditure is being drawn up in local budgets (see Table 1 and 2 figures). In practice, there are also cases when this is the opposite, that is, within the local budget, expenses are planned in such a way that they exceed its income (see Table 1).

In this regard, we should emphasize that the level of year-round growth rates of revenues and expenditures in the budgets of Fergana region and one of its districts during the 2010-2019 years being analyzed, especially in the Kushtepa district, is also one of the problems that is not sufficiently justified by the plans drawn up in this direction. As can be seen from the above-mentioned tables, if the growth rate of revenues in a year amounted to 40,2% (compared to 2010 in 2011) compared to the previous year, the rate of this indicator in the next year was 16.27% (compared to 2011 in 2012). The same opinion can be expressed about costs. For example, if the expenditure of the budget of Fergana region in 2017 year increased by 4,05% compared to 2016 year, the rate of this indicator for 2018 year was 46,42% compared to 2017 year, that is, the growth rate was 10,0 times higher than in the previous year, etc. The same can be said about the fact that the case is included in practice in the section of the Kushtepa District of the Fergana Region.

All of the above is evident in the issue of revenue and expenditure planning within the framework of local budgets, in many cases, since there is a non-violent approach, they, in the end, will not have its negative impact on the issue of
ensuring effective spending of local budgets funds.
As one of the reasons for this, in our opinion, we can show that the relevant experts are preventing some kind of neglect in the budgetary process.

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DAS BILD EINES KLEINEN MANNES IN DEN WERKEN DES DEUTSCHEN SCHREIBERS G. FALLODAT

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ANMERKUNG
Der Artikel diskutiert die Beziehung zwischen Mensch und Geschichte in der Form, in der sie in diesem Meisterwerk der deutschen Literatur des 20. Jahrhunderts beschrieben werden.
Schlüsselwörter: künstlerisches Bewusstsein, Tragödie in der Literatur, Bild, Figur, Klassiker.

ОБРАЗ МАЛЕНЬКОГО ЧЕЛОВЕКА В ТВОРЧЕСТВЕ НЕМЕЦКОГО ПИСАТЕЛЯ Г. ФАЛЛАДЫ

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Назарова Шахноза Исмат кизи,
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Аннотация
В статье обсуждаются отношения между человеком и историей в том виде, в каком они описаны в этом шедевре немецкой литературы XX века.
Ключевые слова: художественное сознание, трагизм в литературе, образ, фигура, классика.


Die Tragödie der Situation des Helden von Fallas liegt auch in der Tatsache, dass dieser Held die Essenz dessen, was in seinem Land geschieht, nicht versteht. Die Weltanschauung des "kleinen Mannes" ist durch den Rahmen des Alltags begrenzt, er ist nach den Worten von S. Nosov „unter der Ebene der Geschichte“ [12]. Der "kleine Mann" registriert die Folgen der laufenden Prozesse, kann aber deren Ursachen nicht verstehen. Das zentrale Problem in Falladas Romanen war die Frage: Kann sich ein Mensch von den politischen und historischen Problemen seiner Zeit fernhalten und sein eigenes "privates" Glück leben?


Der Name des Helden - Pinneberg - leitet sich vom Namen der norddeutschen Provinzstadt Pinneberg bei Hamburg ab. T. Lemmer gibt in seiner Monographie eine interessante Interpretation des Namens Pinneberg: Das umgangssprachliche Verb "pinnen" wird aus dem Deutschen als "schreiben" übersetzt, der andere Teil des Namens ist "berg".


Pinneberg und Lemkhen, eine Fortsetzung des Romans schreiben wollte, aber diese Pläne waren nicht dazu bestimmt, wahr zu werden. Der Held ist gezwungen zu leben und wartet schmerzlich auf Veränderungen in seinem Schicksal, über die er, der „kleine Mann“, keine Kontrolle hat: „Das ist ja gerade das Schlimmste, daß er hier besteht und nichts hat, kann er erlebt. Er kann nur warten - warten? Auf war? Auf gar nichts! .. Warten ... sonst nichts“ (Was für Schwierigkeiten hat er zu überwinden? <...>) Das Schlimmste ist, dass er hier am Rande sitzt und nichts zu kämpfen hat. Alles was bleibt ist zu warten - was? Was? Nichts. Warten ... und nichts anderes) [13, p. 364]. Das einzige, was für Pinneberg übrig bleibt, ist der „Luxus“, ein anständiger Mensch zu bleiben. Trotz der Tatsache, dass die moralische Position des Helden - "Anständigkeit" -, die sich in seiner Einstellung zur Arbeit, zu seiner Familie, zu anderen manifestiert, den Helden nicht vor Erniedrigung rettet, bleibt er ihr treu.


Dies war die Position des Schriftstellers zu dieser Zeit. In einem Brief an den Leser, Herrn Benda, beantwortet Fallada die Frage im Titel des Romans folgendermaßen:.... Wenn der Titel meines Buches eine Frage ist, liegt es daran, dass der Autor die Antwort auf nicht kennt die Frage, die du ihm gestellt hast. Immerhin ist er genauso arm und glaubt außerdem, was die ganze Sache kompliziert, nicht an Parteientscheidungen, zum Beispiel an außerparlamentarische Resolutionen, an Programme politischer Parteien oder an die Ideen großer Wirtschaftsführer. "Kleiner Mann - was kommt als nächstes?" es ist eine Frage und es wird eine Frage bleiben. Aber wenn sein Buch dennoch auf so etwas wie eine Antwort hinweist, weiß ich sehr gut, dass diese Antwort eher unbedeutend ist. Es mag so klingen: Die Lösung, die Erlösung, kann nur im Bereich des Privatlebens liegen."


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ISLAMIC APPROACH TO POVERTY ALLEVIATION

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ABSTRACT

It is generally agreed that poverty is a major socioeconomic problem of emerging countries; however, Islam has presented effective instruments for poverty reduction. The aim of this research is to analyze the role of instruments in poverty reduction with particular reference to Pakistan. In the process of doing that both primary and secondary data are utilized, primary data is obtained from reports etc., while secondary data is found in the text books and other publications. The study found that these instruments play a vital role in reducing poverty in the society. In Pakistan, governments have been spending huge amounts of money in form of economic empowerment, medical assistance and so forth, for example Benazir Income Support, Ushar, Zakat, Ehsas Program etc. Millions of people have benefited from such assistances. Despite this, the performance of the governments has been below expectation, due to the fact that the total money of such assistances has been below the amount required to eradicate poverty in the state. Therefore, it is necessary to see towards Islamic teachings and test the tools of Islamic Economics for eradication of today’s great problem, ‘poverty’ which has unbalanced our society. It is needed to introduce sophisticated means of collection zakat, training of zakat personnel, mobilizing members of the public (rich) toward payment of zakat, sadaqat, charity and other ways of assisting the poor. This article explores the key features described in above lines. Overall strategy of the study is a qualitative research based on extensive documents.

KEY WORDS: Poverty, Eradication, Welfare State, Social problem

1. INTRODUCTION

The word poverty comes from the old (Norman) French word poverté (Modern French: pauvreté), from Latin pauperis from pauper (poor). Poverty is a state of an individual or a community in which he is deprived of even basic necessities of life. Encyclopaedia Britannica describes that poverty is a state to exist when people lack the means to satisfy their basic needs. Here needs, if narrowly defined as the needs those are necessary for the survival, or if broadly defined as the needs those are necessary for the prevailing standard of living in the community. The World Bank Organization describes poverty in this way:

“Poverty includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity. It also encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, and insufficient capacity and opportunity to better one’s life.”

According to United Nations Organization, fundamentally, poverty is the inability of having choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic


to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living in marginal or fragile environments, without access to clean water or sanitation

After understanding the poverty, we describe its states existing in Pakistan, we are talking about. Now we see that how Islam defines poverty. We discuss it under these two headings:

1. Qur'anic definition
   2. Hadithic Definition.

1.1. Qur'anic Definition: The Quran gives the objective definition. The verses denote four levels of poverty which virtually represent all such groups of individuals potentially present in any economy at any time, as is described in Al-Touba:
   (a) Al-Fuqara: The individuals who are living at or below the poverty level.
   (b) Al-Masakin: Those living very much below it.
   (c) Al-Ghari'im: Those who are overwhelmed by debts contracted in good faith and the individuals who face natural disaster like property caught fire, agricultural epidemic, earthquake etc.
   (d) Ibn al-Sabil: Those who are to live at distance from homes or who haven't enough means to meet their both hands while being on the journey and consequently face many difficulties.

1.2. The Hadithic Definition: Holy Prophet (peace and blessings of Allah be upon him) mentions that poverty or deprivation is a sort of danger and threat for both individuals and societies. It is an undesirable circumstance of which each Muslim ought to secure himself. Holy Prophet himself prayed to Allah:

   “O my Allah, I refuge to you from the evils of poverty”

   He advised his companions to pray the following oftenly:

   “Refuge to Allah from the evils of poverty, famine, degradation, oppressing and oppressed”

   Consequently demonstrated that Islam too grades destitution as a fiendish, a peril and a risk. The Prophet (peace and favors of Allah be upon him) instructed us to look for asylum from destitution. So it appears vital to set the target to urge rid of this fiendish and to create battle for it. Islam has, assist, given a few arrangements.

2. ISLAMIC STRATEGY FOR POVERTY ALLEVIATION

Islam is a universal religion. It presents everlasting solutions of all social problems. We can find clear guidelines from teachings of Islam to alleviate or reduce poverty. Here are some points little more important.

Each Muslim, anything his financial position is to work to fulfill his part in accomplishing feasible improvement agreeing to his intrinsic conceivable outcomes and his procured abilities.

Earning and obtaining properties is a fundamental job for each Muslim. Hence, earning to make assets and keep up great standard of life may be an important exertion and adore. Allah says in Holy Quran:

“Man can have nothing but what he strives for.”

The Prophet guarantees the significance and sacredness of working.

2.1. Zakat

A vital approach degree for destitution annihilation in Islam is Zakat. It may be a required obligation for the well off individuals to pay Zakat. It is a very important source for destitution easing on the off chance that work isn't accessible or its return isn't adequate to fulfill the necessities of life. Each and every affluent Muslim should perform Zakat to total his adore to Allah.

Every person who has 52.5 tolas of silver or 7.5 tolas of gold or its value in addition to essentials, houses and riding, etc., should spend 2.5% of his annual income in the way of Allah. That is, if a person has one lakh rupees, he should spend two and a half thousand rupees in the way of Allah and spend it on the poor and needy. Details of who can be given the amount of Zakat and who are entitled to it are available in the books of jurisprudence. There are two main benefits to the Zakat system.

1. Commodity is in circulation. In other words, if a person has a crore, he is obliged to pay Zakat of two and a half lakh rupees. Similarly, as the value increases, the proportion of the amount of Zakat will also increase. Stays in circulation

2. It helps other poor and needy people. By helping them financially, they are prevented from reaching out to anyone.

2.2 Ushr

It is calculated as five percent of agricultural production of the land depending on manual irrigation and ten percent of agricultural production of the land depending on natural irrigation.

4. Al-Touba:60
5. Ibn Hanbal, Al-Musnad, 1953
6. Ibn Hanbal, Al-Musnad, 1953
7. Fatir:39
8. Bukhari, Al-Jame Al-Sahih, 1976
9. Al-Ma’un:1-7
And for the cattle not being used for farming or the activities like that. Ushr is necessary to be paid, mostly in-kind, while harvesting time.10

2.3 Sadaqat

This term is utilized within the Qur’an to indicate all social consumption or investing counting the obligatory one, Zakat. Its base is “sadaqa” which suggests speaking the truth and being true. Sadaqah is a free-will offering given for the sake of Allah by a Muslim out of worship, sensitivity and sympathy for others, also what he is morally or legally obliged to give without foreseeing any common return. Sadaqah is, consequently, social and charitable blessings or favors.11

Sadaqat play a basic part within the Muslim community. Indeed where may have been fulfilled and destitution expelled, they give ceaseless private assets for assembly individual and open needs, and advancing social improvement.

2.4 Auqaf

Giving away a kind of social benefit to service to a Muslim, not having resources or riches for the purpose of Allah, in favor of a category of individuals until the end of time. Auqaf, as a rule, give merchandise and administrations that offer assistance profoundly in destitution easing and social improvement through assembly instructive, social, social, wellbeing, foundation and common betterment reasons. These are used for covering social necessities (merchandise and administrations), giving an affluent, exceedingly created community, all through a long period welfare of an Islamic society. Holy Aпostle (peace and blessings of Allah be upon him) energized this type of riches commitment back social improvement. It is one of the deeds of a Muslim that continues to gather rewards even after his death. Sadaqat can play a critical part by giving essential stores to Auqaf, charitable trusts and establishments.

2.5. Tauzif

Another discretionary obligation, in Islam, for poverty alleviation, is Tauzif. It is a discontinuous commitment as compared to Sadaqat and Auqaf. It is associated because it were in certain occasions. It is comparative to common charges, but to be collected because it were from the wealthiest inside the society to come over unprecedented budgetary, social or/and political issues and for an obliged period of time. It is the obligation of the government to choose the clear causes to accumulate them, the level of wealth that must take portion in these installments, the time required to overcome issues they are suggested to comprehend.

So too, when a require of work openings wins, Islam slants for course of ‘action of capital through grants and propels to enable the unemployed/underemployed to conclusion up palatable income-earning people of the society. Meanwhile, Islam fights for an ampleness wage-structure and equalization of work and educator openings course of action that lead to extended compensation potential and openings.12 These Islamic apparatuses focusing on destitution easing have profound positive impacts on social elevating. Satisfying the obligatory and discretionary obligations (Zakah, Sadaqat and Auqaf) as a commitment to the Muslim give a copious sum of return collected annually. The multiplier impact of these assets will be through their effect on expanding utilization, yield, business and pay within the society.

2.6 Charity

In addition to making Zakat obligatory, Islam emphasizes that every Muslim should give some of his income to the poor and needy, meet their needs, help them in need, and give clothes to those who do not have clothes. If they do not have food, the best way to feed them and help them is to get them on their feet or to teach them in a short period of time so that they can be employed or at least not given enough money to run their business on a small scale.

The work of making the poor out of the country or giving them money for employment can also be done through Zakat but only the deserving ones have to be included in it. While through charity everyone can be helped in general regardless of their status. The biggest way is that people who are unemployed but educated and have the passion to do something, so people who have the capital but don't have the time or experience to do business, by making these educated unemployed people share in the profits and can solve a big problem of the society.

In Islam, this is known as mazaarbat, meaning hard work on one side and capital on the other. If done with honesty and integrity, it is not far off that it will not only solve the problem of poverty but also Muslims will raise the banner of their success in the field of trade. The condition is that both parties should be honest and not think of exploiting their partner's capital or hard work.

2.7. Some Other Important Measures

Firstly, it is well known that poverty leads to crimes and corruption. Many nations suffer from it and are looking for solutions to this problem and

10 Al Qaradawi, 1981
11. Al-Baqarah:263-4, 271, 276

there is no solution except in Islam, which brought rulings for all people until the Day of Judgment.

Secondly, the means that have been prescribed by Islam to solve the problem of poverty and combat it are as follows:

(a) Teaching Patience
By teaching people to believe truly that provision comes from Allah and that He is the Provider (al-Razzaaq), and every calamity that Allah decrees is for a reason, and that the poor Muslim should be patient in bearing his calamity and strive to relieve himself and his family of poverty is very key. Allah says:

“Verily, Allah is the All-Provider, Owner of Power, the Most Strong.”  

(b) Encouragement to Help the Needy and Support the Weak
Nou'man ibn Basheer said that Prophet (SAW) said:

“The likeness of the believers in their mutual love, mercy and compassion is that of the body; when one part of it is in pain, the rest of the body joins it in restlessness and fever.”  

(c) Helping each other
Economy is related to every aspect of human life, individual and collective, and since the congregation is the body and the individual is a part of that body. Therefore, there is an inseparable relationship between the collective and individual spheres of life and it is inevitable that one will affect the other.

(d) Incentives for the earning in the welfare state
The first destination in economics is the destination of "economy" and "provision of sustenance". The Holy Qur'an says that every human being must strive for the economy to the best of his ability. The world is a field of action. Stagnation here is tantamount to death. In this workshop, God Almighty has amassed a wealth of sustenance, but it is a condition to seek sustenance. It is instructed in the Holy Qur'an:

“And how many other people are wandering in the land, seeking the bounty of Allah Almighty.”

Hazrat Umar Farooq (may Allah be pleased with him) said:

“None of you should sit down in the struggle for sustenance.”

Moreover man is encouraged to struggle and move for earning a living and it is said that man should earn his own living with his own hands.

(e) Teachings of Holy Prophet:
Human history bears witness to the fact that economic and social justice and stability in human society is not possible without the holistic and all-encompassing implementation of the religion (system of life) of God's choice, which He has chosen. Through the Holy Prophets (peace and blessings of Allah be upon him), the holy people have bestowed blessings on humanity for the worldly and otherworldly welfare, and the fulfilment of which was accomplished through its last Prophet, Hazrat Muhammad (peace and blessings of Allah be upon him). We firmly believe that man will continue to suffer in the world as long as he does not bow down to the teachings of Prophet Muhammad. He will never be able to achieve peace and harmony, economic prosperity and social justice in life.

Sirah-e-Taiba for the eradication of basic and vile human evils in the world such as oppression and injustice, hunger, poverty and misery, self-imposed exploitation and unjust law, unnatural economic and social inequality and imbalance and attainment of worldly and otherworldly happiness. It is necessary to follow the teachings and instructions of the Prophet (peace and blessings of Allah be upon him).

(f) Encouragement for working hard
We are well aware that one of the most important primary and key means of generating wealth is the personal labour of human beings, without which many divine treasures cannot be profitable in the raw state. One of the reasons for poverty, misery and decline in income and productivity in our society is to live off this source of wealth (labour). Allah says:

“He it is Who made the earth subservient to you, so follow in its footsteps, and eat of what is given to it, and to Him is the resurrection.”

When we study the biography of the Prophet (peace and blessings of Allah be upon him) in terms of hard work, we see that the honour and dignity which he gave to hard work and labour to an encouraging and enviable extent. Existence did not exist on earth before the advent of the Prophet (peace and blessings of Allah be upon him) nor is it found in today's civilized and well-meaning human rights world. The Prophet (peace and blessings of Allah be upon him) encouraged people to eat by hand. He said:

"There is no better food than eating by hand and (that is why) the Prophet of God, David (peace be upon him) used to eat by hand (despite being a king)."

On another occasion, he said:

"It is better for one of you to carry a bundle of wood on his back, that is, to

13. Al-Dhaariyat 51:58. See also, Q11v6, Q67v21, Q17v70.
14. Bukhari, Al-Jame Al-Sahih, Hadith: 5665
15. Al muzammil: 20
17. Ahmad bin Hanbal, Al-Musnad, 502/28
18. Al-Mulk: 15
earn money by selling wood, than to raise hand in front of people and then give it to someone or not.”

What could be more encouraging and respectful than the fact that the Prophet (peace and blessings of Allah be upon him) kissed the hands of a labourer Companion with his blessed lips and said:

“These are the palms that Allah loves.”

It is narrated that the Prophet (peace be upon him) said about a labourer hand:

“This is the hand that will not be touched by fire.”

The book revealed to the Holy Prophet (peace and blessings of Allah be upon him) also encourages us to migrate to another place in the vast land of Allah if there are no suitable and reasonable opportunities for employment in spite of hard work. We will give prosperity and breadth. He said:

“And whoever leaves his home in the way of Allah, he will find in the earth many places (for emigration) and prosperity.”

(g) Indoctrination of Self-Sacrifice and Spending

In any welfare state, it is natural for people to find economic disparities, that is, for some to be rich and wealthy, for some to be in need, and for some to be poor and needy. Man is obliged to follow the system of creation given by the last Prophet (peace and blessings of Allah be upon him) instead of the system of creation. Thus, Muhammadan Shari’ah does not believe in unnatural equality in the degrees of economy like socialism, but it has equated all human beings without any distinction in the "right to economy". To this end, he has used the teachings of benevolent, voluntary and fraternal compassion, i.e. mutual sympathy and compassion.

Therefore, the problem of poverty is mostly solved by these unique and effective teachings of Muhammadan Shari’ah. The rest of the deficit is removed with the help of law. When some people of the tribe of ‘Madhar’ came to the service of the Prophet (peace and blessings of Allah be upon him) barefoot and dressed in torn old clothes, seeing their dilapidated condition, the face of the Prophet (peace and blessings of Allah be upon him) changed. The Prophet (peace and blessings of Allah be upon him) did not feel at ease until the signs of happiness appeared on his face until he had the necessary equipment for their distress.

These were the beautiful teachings of the Holy Prophet (peace and blessings of Allah be upon him)

which on the one hand created in the hearts of the nobles and the rich the feelings of love for the poor, compassion, benevolence, sorrow, self-sacrifice and brotherhood.

(h) Promoting Simplicity instead of Luxury

One of the major causes of poverty in a welfare state is the indulgence of its rulers, especially those in power, in extravagant extravagances. As per Islamic point of view, no man, not even the head of state, can discriminate against the common man in terms of living, eating and other human rights. The division between VIP and non-VIP is un-Islamic. Who could be a VIP in the world more than the Prophet (peace and blessings of Allah be upon him)? In spite of this, often meal was not prepared for the days, even no pair of clothes had ever been folded for him.

The room of no spouse of Prophet of Allah, was made of any kind of marble, teak wood or “imported” materials. The details can still be found today. The Prophet (peace and blessings of Allah be upon him) said:

“Avoid luxuries because the servants of God do not indulge in luxuries.”

In times of general poverty, the Prophet (peace and blessings of Allah be upon him) did not like to enter the room of no spouse of Prophet of Allah, to eat and drink, and instead, he used to eat and drink in the room of the Prophet’s house. He did not like to accept the meals prepared for him.

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(f) Eradication of Bribery and Corruption

Bribery after usury is rampant in our society which has engulfed the whole society. Bribery is what it is; right should be given to falsehood and falsehood to right. Ibn ‘Abidin says:

“The bribes are something that a person gives to a ruler or a non-ruler for the purpose that the decision is in his favour or he is promoted to the position of his choice.”

The Prophet (peace and blessings of Allah be upon him) has made very painful warnings against bribery and those who take and give it. Abdullah ibn Umar (may Allah be pleased with them) narrates:

20. Bukhari, Al-Jame Al-Sahih, Hadith:1042
21. Tibrani, Suleman bin Ahmad, Al-Moujam Al-Qusut, Hadith:8934
22. Ibn-e-Aseer, Usdal Ghaba:4202
23. Al-Nisa:100
24. Muslim, Al-Jame Al-Sahih, Hadith:3271

25. Tabrezii, Muhammad bin Abdullah, Mishkat Al-Masabih,449/3
27. do, Hadith:572
28. Ibn Abidin, Radd-ul-Muhtara Ala Al-Durr Al-Mukhtar, 453/1
“The Prophet (peace and blessings of Allah be upon him) cursed the bribe-taker and the bribe-giver.”

Man's nature has been created in such a way that he is obsessed with materialism, the desire to achieve the maximum of it in the world, always exists in his heart. This human weakness is mentioned in many places in the Qur'an. Allah says:

“He is deeply in love with wealth.”

On another place, Allah says:

“And you consume all the wealth of the inheritance and eat it, and cherish the wealth with all your heart.”

That is why man does not have patience in what he gets in a lawful way, but adopts every unlawful way to gain more, even though if he thinks about it, Allah has made it very clear that the more wealth a person acquires from lawful sources, the better for him if he is patient with it.

(j) Discouraging Usury

The literal meaning of usury is to be more, to grow, and to go higher. This word appears in the Holy Qur'an in several verses. Imam Ragheb (may Allah have mercy on him) writes:

“The excess of capital is usury. But in the Shariah, it is specific to an excess that is in one particular way and not in another.”

Abu Hayyan Gharunafi defines ‘usury’ as:

The practice of taking interest on a loan by lending it to someone and increasing the interest on it for as long as the loan lasts is called usury. The Prophet (peace and blessings of Allah be upon him) defines usury as:

“The loan that makes a profit is usury.”

However, the Prophet (peace and blessings of Allah be upon him) also included some forms of sale and purchase in the concept of usury, which the Arabs did not consider usury. For example, in the sale and purchase of six things, it was ordered that if they are exchanged, they should be equal and the cash should be in hand. Barley, dates and grapes.

Following the same principle, the Prophet (peace and blessings of Allah be upon him) forbade some of the forms of affairs in Arabia which were common in the name of m azabna and mahaqila.

There are so many teachings of Shariah condemning usury. Islam has encouraged business instead of usury. The reason behind it is that it is so obvious that real profit lies in business. So if usury system is eliminated from a society, positive results may be got in form of alleviation or lessening of poverty.

3. POVERTY ALLEVIATION MODEL

In the time of Umar bin Abdul Aziz, people were given so much stipend that by doing business they would join the ranks of Zakat payers the following year. Within a year, the people became so prosperous that there was no one to receive charity. For this, besides taking the above discussed measures, he additionally took the following steps.

3.1. Reduction in Expenses

He substantially reduced the expenses of the Caliphate and all its adjoining offices. He issued orders to the princes and rulers of all the states to adopt simplicity and austerity. Abu Bakr ibn Hazm, the governor of Medina, asked for an increase in the cost of pen and ink, and he wrote back:

"Sharpen the pen, write the lines closer together. Use frugality in other needs. You will not get a single dirham from the treasury of the Muslims in this regard.”

Sayyidina Umar's son says:

"When the father became caliph, the annual income was forty thousand dinars, but when he died, the annual income was less than four hundred dinars.”

3.2. Return of Property to the Real Owners

Two-thirds of the wealth of the Muslim Ummah held by the Umayyads was returned to the treasury. All confiscated property and estates were returned to their original owners. It is narrated on the authority of Salman ibn Musa:

"I saw that Umar bin Abdul Aziz, from the day he was made the caliph until his death, continued to restore the rights of the people.”

3.3. The Right of the Poor to the Treasury

35. Hakim Neshapuri, Muhammad bin Abdullah, Al-Mustadrak Ala Sahihain, 327/1
37. Ibn Kathir, Ismail bin Umar, Al-Bidayah wa Al-Nihayah, Karachi: Nafees Academy, p.188
He got prepared lists of orphans, widows, the poor, the disabled, the unemployed and infants, and fixed their stipends from the state treasury. The doors of the treasury were opened for the needy.

3.4. Multiple Increase in the Treasury Income

By waiving of the jizya of new Muslims and issuing benefits, the income of the treasury decreased. He made the strictest arrangements for the protection and supervision of the treasury. He made the collection and distribution system transparent. In this regard, such the strictest laws were enacted that after the equitable distribution of wealth and the elimination of illicit income, the revenue of the treasury multiplied in a single year.

**CONCLUSION**

After having somewhat a brief discussion, we consequently reach to conclude that Islam is the only religion who presents several solution to a single social problem, as we discussed here in this article. So, the requirement is that these guidelines should be followed by the individuals of a Muslim state. As others have took guidance to establish their economics, Muslims should also align their economy in the sparkling light of everlasting Islamic system of economics. It is the only way to alleviate or, at least decrease the poverty. So, we recommend here for the states that legislation should be conducted in light Islamic economic system, if laws already exist, so theses should be enforced. Besides this, individuals should also follow the points given here, to balance their economic position.

THE REPRESENTATIVE ISSUES IN FAMILY AND LEGAL RELATIONS UNDER THE LEGISLATION OF THE REPUBLIC OF UZBEKISTAN

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ABSTRACT
The article analyzes the issues of representation in family law relations under the legislation of the Republic of Uzbekistan with the help of scientific literature and normative legal acts. The study also highlights the implementation of a number of social, economic and legal reforms in Uzbekistan aimed at further strengthening the family and creating a system of consistent legal regulation of family relations.

KEY WORDS: Republic of Uzbekistan, legislation, legal reform, family law, representation, law, family law.

INTRODUCTION
In the following years, the attention and importance to the family increased, and the family began to be seen as the backbone of society and the state. Uzbekistan has implemented a number of social, economic and legal reforms aimed at further strengthening the family and creating a system of consistent legal regulation of family relations. It should be noted that the institution of representation has a special place in family and legal relations. The institute is currently interrelated with civil-law and civil-procedural-legal representation, and in many places, representation in the above two areas is given less attention due to special attention. However, family and legal representation in relation to minors and incapacitated children are legal representatives: parents, guardians and trustees, the adoptive parent and the elderly or incapacitated or incapacitated parent, their children in relation to the adoptive parent, the adoptive parents and differs from civil-law and civil-procedural-legal representation in terms of family-legal and kinship relationship of the representative and the person under representation. This, in turn, requires a separate study of the existing representation in the field of family law and the study of the regulation of the relationship between the representative and the person represented in terms of family law methods.

METHODS
At the same time, there are problems with the practical application of representation in family law relations, including a clearer definition of the rights and obligations of representatives, the establishment of basic criteria governing the relationship between the representative and the person represented, improvement of existing legislation, solving existing problems in law enforcement is relevant. Analysis of the representation of a parent, guardian and trustee, adoptive parent as a type of representation in family-legal relations, the application of contractual representation in family-legal relations (for example, representation of a child on behalf of his parents by power of attorney) important from the point of view.

RESULTS AND DISCUSSIONS
Article 43 of the Constitution of the Republic of Uzbekistan states that the rights and freedoms of individuals are guaranteed by the state, that is, one of the main tasks of our legislation is to protect the rights and freedoms of individuals, to ensure their inviolability. Civil law also recognizes the protection of the subjective rights and interests of individuals, their equality in civil law relations and their free movement without hindrance in the exercise of their rights, as well as the legal capacity of all persons...
regardless of their status. and if they are unable to exercise their rights on their own for objective reasons, they may exercise those rights through other persons, that is, through their own representatives. Indeed, the role and importance of civil law, especially the institution of representation in it, is great today in the protection of the rights and freedoms of individuals in our society and their unimpeded implementation. Because the institute of representation performs the following important functions:

- Ensures the timely implementation of the rights and obligations of the subjects;
- Assists individuals in exercising their rights and obligations;
- Prevents violations of legal rights and freedoms of individuals;
- Important for the development of society by ensuring the stability of legal relations between the subjects and the performance of other tasks.

Representation has developed in a certain way throughout all periods of human development, especially in ancient Egypt, China, Greece and Rome, where it was widely used in trade and handicrafts. In ancient Rome, a contract of assignment consisted of one party (mandating) giving an assignment and the other party assigning the assignment. Both legal actions and factual services are recognized as the subject of the assignment [1, p.245]. Representation was later considerably improved by the eighteenth and nineteenth centuries, and in the meantime, with some changes from the past, was legally brought to its present form. The word “representation” is a relationship in which one person acts on behalf of another person on the basis of the existing power, by directly creating (changing, terminating) rights for him [2, p.784]. Legal encyclopedias define representation as follows: representation is the performance of an agreement and other legal actions by one person - the representative by another person - on behalf of the principal and in his interests, within its competence [3].

Thus, in accordance with Article 129 of the Civil Code of the Republic of Uzbekistan, an agreement concluded by one person (representative) on behalf of another person (representative) with a power of attorney based on a power of attorney, law, court decision or document of the authorized state body directly affects the civil rights and obligations. create, modify and cancel. If we analyze the views of scientists on the concept of representation, we can see that they are in almost the same position. For example, IB Zakirov states that representation is the performance of legal actions by one person on behalf of another person [4, p.173]. Some legal literature, on the other hand, states that representation is a legal relationship that binds a representative to an authorized person [5, p.345]. Some scholars have argued in their works that representation is a form of realization of civil legal relations [6, p.61]. In turn, a number of Russian scholars have commented on the concept of representation, including, according to A.P. Sergeeva and Yu.K. Tolstoy, that representation is the authority of a person, ie a transaction and other legal actions within the powers granted to him by the representative. is understood to be done on behalf of the employer and in its interests [7, pp.322-323]. L.Yu. Grudtsyna and A.A. Spectors, on the other hand, say that “representation is a legal relationship in which one person performs legal acts on behalf of another, that is, concludes transactions on behalf of the principal on the basis of a power of attorney, law or documents of a state body or local self-government; creation, modification and termination of obligations”[8, p.222].

Another Russian civil scientist, According to M.F. Lukyanenko, representation is different from a relationship in which one person replaces another or pursues his or her own interests. Execution of legal actions is an independent will, which represents legal actions that do not repeat the will of the principal [9, p.182]. Some scholars, on the other hand, focus on the essence of representation in their works, noting that it manifests itself in the imposition of obligations on the representative to perform legal actions and conclude one or more agreements in favor of the principal [10, p.203]. Thus, representation is an action of a representative on a legal basis in the interests of the principal, aimed at the direct creation, modification and termination of civil rights and obligations in relation to him.

It is known that legal representation in family law is a type of representation in which the relationship with representation occurs in cases specified in the law on direct grounds. One of the main differences of legal representation from other types of representation is that the will of the principal is not required for its occurrence. Because he is considered incompetent. Legal representatives therefore have the right to represent the interests of the persons they represent in all relations with third parties, including in court, without a power of attorney.

- Legal representation occurs on the following grounds;
  - Based on the fact of parenthood;
  - In accordance with the decision of the court to determine the adoption.
  - Guardianship and trusteeship based on the decision of the appointing governor.

Parents are the legal representatives of their children and protect their rights and interests in any relationship with any natural or legal person, including without special authority in court. It is enough to show the child's birth certificate or passport, as it is clear that the child is the real father or mother. According to Otahojaev, the state does not
interfere in the process of giving parents broad rights over their children, as a general rule. However, the state sets its own conditions. The main focus is that parental rights cannot be exercised in a manner contrary to the best interests of the children [11]. Of course, parental rights are one of the highest and most inviolable rights of citizens, and deprivation of this right is the last resort. This measure applies only to those who grossly violate parental rights and responsibilities. This is a very serious loss for parents.

The current law stipulates that in the exercise of parental rights, parents must not harm the physical and mental health and moral development of children, and must refrain from disregarding the methods of raising children, cruelty, rudeness, degrading treatment, insulting or harassing children. If parents exercise their parental rights against the rights and interests of children, they can be held civilly, criminally and administratively liable. According to Yuldasheva, parental responsibility can also arise on the basis of the norms of family law, that is, the existence of certain conditions can be a basis for deprivation of parental rights [13]. Of course, as a result of various objective and subjective factors that occur in life, not all parents may always be able to exercise parental rights over their children. That is, if a parent dies, is deprived of parental rights, their parental rights are restricted, they are found incompetent, ill, for a long time, the parent refuses to raise children or protect their rights and interests Guardianship and trusteeship authorities are responsible for the protection of the rights and interests of children, including when a parent refuses to take a child in educational, medical, social protection and other similar institutions, as well as in other cases deprived of parental care. This is because one of the most important tasks of guardianship and trusteeship bodies is to identify and protect the rights of children left without parental care.

According to Article 151 of the Family Code of the Republic of Uzbekistan, adoption is allowed only in respect of minors and in their interests.

Adoption is carried out on the basis of the application of the persons wishing to adopt the child and on the recommendation of the guardianship and trusteeship authority by a court decision.

Adult male or female citizens may be adoptive parents, except for the following persons:
- deprived of parental rights or have limited parental rights;
- declared incapable or with limited legal capacity in the manner prescribed by law;
- Registered in neurological or narcological institutions;
- former adoptive parents whose adoption has been annulled on the grounds specified in the first part of Article 169 of this Code;
- previously convicted for intentional crimes.

The age difference between the adopter and the adoptive parents must not be less than fifteen years, except in cases of adoption by the stepfather and stepmother.

The date of adoption is the date on which the necessary changes are made to the birth register of the adopted child. From that moment on, the adoptee, as the legal representative of the adopted child, may take various legal actions in his interests. Of course, the existence of such norms in the legislation emphasizes the importance of educating the younger generation in our country, ensuring that children are brought up in a healthy family and become full-fledged people as worthy owners of tomorrow.

Another form of legal representation currently in practice is representation appointed by a court to permanently manage the property of a citizen who has been declared missing. Of course, today, as a result of the development of entrepreneurship and a broad focus on private property, citizens are the owners of large enterprises and factories, a variety of securities. In this case, if a citizen is found to be missing, the management of his property can not be carried out through the usual institution of guardianship, in which case the court finds the citizen missing and appoints a trustee for his property [14, pp.102-103]. However, a court-appointed representative to manage the property of the missing person and to take legal action against him shall fully comply with the instructions given by the court, even if he is acting on the basis of free expression of his will.

Hence, the legislation appoints a representative to manage the property of the missing person in order to protect his property rights. But another important condition is left out of the law, i.e. the person falls into a state of coma or lethargic sleep (lying unconscious for a long time). The current legislation does not develop a mechanism to protect the rights and interests of such persons, to ensure the fulfillment of their obligations, to protect their personal non-property and property rights. However, we do not consider the condition of adults who are in a coma or lethargic sleep (prolonged unconsciousness) due to mental illness or inability to exercise their rights and obligations independently due to ill health. cannot be compared with, because if a person who is found to be incapacitated is psychologically ill, a person who is incapacitated as a sponsor because of his ill health understands everything in his place of consciousness and consciousness. According to Matkurbanov, there are a number of uncertainties in the practice of regulating the rights and interests of persons in a state of coma or lethargic sleep (prolonged unconsciousness), as well as the protection of their subjective rights. It is not possible to apply the institution of finding a citizen incompetent in this situation. Because in this case it is not a mental disorder, but a state of
anesthesia that persists for a long time. In addition, the consequences of a state of mental disorder can lead to the recovery of the person and the lifting of the “restriction” on him.

However, the state of anesthesia can be transient because it is associated with a physical condition rather than a mental disorder. In this case, in order to protect the subjective rights and interests of citizens in a coma or lethargic sleep, it is expedient to introduce the concept of “cessation of the ability of a citizen to act” [15, p.13]. In our opinion, it would be more correct to say “suspension of the citizen’s capacity” than “suspension of the citizen’s capacity”, because the word “suspension” is closer to the meaning of “suspension” than “temporary”, because the capacity of citizens in a coma or lethargic sleep is completely without suspension should be suspended only temporarily, until the person regains consciousness. However, medicine cannot yet say when a person in such a situation will regain consciousness, so it would be appropriate for the court to appoint a temporary representative to protect the rights of such persons.

CONCLUSION

The following conclusions can be drawn on the basis of the study of issues related to the nature, application and problems of representation in family law in the legislation of the Republic of Uzbekistan:

1. To study the concept of representation in family law relations as a separate institution of family law of the Republic of Uzbekistan and to develop a scientific definition of it. It should be noted that today in national civilization and family law there is no definition of the concept of family-legal representation. However, as a legal category, the term needs a separate scientific definition. This situation, first of all, allows to improve the mechanisms of understanding and application of family law representation as an independent branch of law separately from civil law representation.

2. Types of representation on the basis of which exist in the doctrine today: the features of the expression of legal and contractual representation in family law are revealed. In this case, the legal representation is inextricably linked with the family-legal relationship, arises in close kinship or operates with the appropriate decision of the state body, and, conversely, the prospects of the application of contractual representation in family law, which is widely used in civil law. The legal regulation of the implementation of the contractual procedure is disclosed.

3. Scientific-theoretical analysis of the relationship between representation in family law relations and representation in civil law relations and coverage of their similarities and differences. In this case, first of all, it is necessary to consider representation in family law relations as an institution of family law and to determine the limits of application of family and civil law in its application. Such differences include the fact that representation in family law is based on kinship, first of all, the right of a parent to be a representative of his child, the choice of a representative, in contrast to civil law, is based not only on the will of the principal, but also on state bodies (guardianship and trusteeship, with the participation of juvenile commissions under district authorities).

4. The fact that the current family legislation does not regulate the representation in family-legal relations on a single system and does not have rules that are common to the types of representation, their interpretation and application give rise to different approaches. Representation in family-legal relations means not only the realization of the rights and interests of minors, but also the representation of spouses in relation to each other, the application of contractual representation in family matters, and the introduction of such provisions in the Family Code.

5. The naming of 2021 in Uzbekistan as the “Year of Youth Support and Health Promotion” and the improvement of family legislation as a priority in this regard, in turn, requires the improvement of norms governing the relationship of representation in family law. In this regard, it is necessary to improve the legislation on guardianship and trusteeship, which are special types of representation in family law relations, the rules of adoption and placement of children in family upbringing, as well as the rules of contractual representation in family law.

6. In law enforcement practice, there is no separate document of a general recommendatory nature on the application of norms and rules related to representation in family law relations. Therefore, it is necessary to adopt the Decision of the Plenum of the Supreme Court of the Republic of Uzbekistan on the application of norms related to family and legal representation and to develop rules of a recommendatory nature. For this purpose, the research provides for the preparation of a draft resolution of the Plenum.

REFERENCES


A COMPARATIVE STUDY OF CONSUMPTION OF ELECTRICITY USING STATISTICAL MEASURES

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ABSTRACT
Electricity is an important promoter of socioeconomic development. It is a vital source of energy in daily life, especially for household appliances, and hence, energy use efficiency can be achieved by applying demand side strategies to these devices. This can be beneficial to consumers in terms of reduction in energy costs, and to the electricity grid in terms of an optimal and efficient allocation of resources. The worldwide consumption of energy has become a crucial problem. The population is rising which leads to an increase in the energy demand and energy consumption. This study aimed to analyze the characteristic of the households affecting energy consumption of household electricity in Kolhapur District. The survey was conducted for collect primary data through questionnaires contains several attributes and collected information are analyzed using various statistical measures.

KEY WORDS: Graphical Representation, Parametric Test, Non parametric Test, Level of Significance,

INTRODUCTION
Today, electricity has become critical to human life. It is a vital source of energy in daily life. Also is an important promoter of socioeconomic development. It has allowed us to achieve way more than what nature and evolution had restricted us to. But in our world that is constantly in metamorphosis and exponential growth, then finally, electricity is not as equitably distributed to all as it should be. One of the reasons for this could be socio economic geographic conditions added to consumer behaviour towards electricity. From 1973 to 1982 a number of general trends that characterized electricity use between 1960 to 1972 showed distinct changes. The annual percentage change in electricity price, adjusted for inflation reversed direction, from a decrease of 3.8% per year to an increase of 4% per year. Electricity is a type of energy fueled by transfer of electrons from positive and negative points within a conductor. Firstly to generate electricity, we require a fuel source. Such as coal, gas, hydropower or wind regardless of the chosen fuel, most generators operate on the proven principle turn turbine so that it spin magnet surrounded by copper wire, to get the flow of electrons across atoms which in turn generates electricity. Electricity is widely used for providing power to building electric device and even some automobiles. A number of individuals are responsible for development of electricity but the most notable one is Benjamin Franklin and his flying
kite experiment. Electricity has several contradictory meanings. There exists an extensive literature on electricity demand projection, and different approaches are found. This section provides a brief review of those that have focused on India’s electricity demand. One approach makes use of aggregate macro data at the country or sub-national/state level (for example, Bose and Shukla 1999, CEA 2007a). Essentially, this approach aims to estimate the income elasticity of electricity consumption by econometric analysis of the relationship between electricity consumption and its key determinants, such as gross domestic product (GDP) per capita and electricity prices, over a relatively long period of time. Another approach uses micro-level data that reflects individual and household behaviour; this may be referred to as a microeconomic approach. This approach enables analysis across different heterogeneous household sub-groups and takes into account a number of household characteristics. Examples include Pachauri (2004), Filippini and Pachauri (2004), and Tiwari (2000). These authors estimate price and income elasticities of electricity demand in the residential sector using household survey data. Filippini and Pachauri (2004) regressed household electricity consumption on household expenditure (as a proxy for income), the average prices of electricity and other fuels, and a set of other geographic (regional dummies) and socio-economic (such as household size and the age of the household head) variables. An analysis of the development of simulation models for electric appliances use, with respect to their ability to shift their energy demand, was discussed by Stadler et al. (2009). Results from this study indicate that household devices such as electric boilers, off-peak storage heaters, or freezers, are more suited to load balancing than a refrigerator. Moreau (2011) presented a control strategy for water heaters that minimized the consumption demand when the heating elements are reactivated at the end of a load shifting period initiated by utilities shifting hot water demand from peak hours to off-peak hours. The research indicated that the consumption demand of water heaters after such universal load shifting periods can be detrimental to the efficiency of the measure if not adequately controlled. Shu Fan et.al.(2011), Ijbahal, A.M et.al.(2011), WANG Qi et.al(2010) carried out frequently to study either consumption or demand but not consumer behaviour. Domestic energy consumption is the total amount of energy used in a house for household work. The amount of energy used per household varies widely depending on the standard of living of the country, the climate, and the age and type of the residence. It is part of our interest to study factors affecting on it. So, we have tried to collect the data related to the consumption of electricity in Rural and Urban area in Kolhapur District. In our study we had taken a sample of 200 houses using electricity for various purposes such as light , computer, T.V., fan, refrigerator, etc. Our main focus was comparative study of consumption of electricity in Urban and Rural area.

OBJECTIVES

➢ To study domestic consumption of electricity in rural and urban area through statistical Study.
➢ To study the comparative effect of number of rooms, equipments and family members on electricity.
➢ To study financial background of members.
➢ To study literacy/ awareness towards saving of non renewable energy.
➢ To Comparison of Urban and Rural area.
➢ To study the how much time use of electronic appliances.

METHODOLOGY

The subject of our project is “Domestic consumption of electricity in urban and rural area”. For collection of primary data, we use questionnaire and the questionnaire includes the information about the area, no. of family members, no. of appliances and its company, no. of rooms in house, family income, no. of units used per month, etc. We collect information of 100 houses from each Urban and Rural area respectively. The questionnaire is attached on last page of project.

Method of data collection

For the project work, we have collected primary data from Vicharemhal, Jadhavwadi and Kadamwadi as urban points and Mugali, kamalehatti and Bachani as Rural point for data collection. The convenience sampling method is used for collecting data from the following areas by using questionnaires method.

1. Urban area
2. Rural area

Statistical tools used: Graphical representation, Testing of hypothesis and theory of Attributes.

Software used: MS – Excel and MS - Word
Graphical Representation

A) Consumption of electricity of months in urban and rural areas

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>65</td>
<td>69</td>
<td>76</td>
<td>88</td>
<td>103</td>
<td>94</td>
<td>73</td>
<td>70</td>
<td>70</td>
<td>80</td>
<td>79</td>
<td>72</td>
</tr>
<tr>
<td>Rural</td>
<td>40</td>
<td>41</td>
<td>42</td>
<td>47</td>
<td>61</td>
<td>50</td>
<td>42</td>
<td>48</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>39</td>
</tr>
</tbody>
</table>

Average Units of Electricity used in Rural and Urban area

<table>
<thead>
<tr>
<th>Area</th>
<th>Average Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>45.33</td>
</tr>
<tr>
<td>Urban</td>
<td>78.32</td>
</tr>
</tbody>
</table>

Electricity Bill Paid Per Month

<table>
<thead>
<tr>
<th>Bill Amount</th>
<th>Less than Rs. 500</th>
<th>Rs. 500 to Rs. 1000</th>
<th>More than Rs. 1000</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>119</td>
<td>70</td>
<td>11</td>
<td>200</td>
</tr>
</tbody>
</table>

No of Appliances used in Rural and Urban Area

<table>
<thead>
<tr>
<th>Appliances</th>
<th>TV</th>
<th>Mixer</th>
<th>Iron</th>
<th>Heater</th>
<th>Fan</th>
<th>Fridge</th>
<th>Mobile</th>
<th>Washing Machine</th>
<th>Computer</th>
<th>Oven</th>
<th>Electric motor</th>
<th>Flour mill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>98</td>
<td>98</td>
<td>87</td>
<td>8</td>
<td>184</td>
<td>59</td>
<td>229</td>
<td>6</td>
<td>18</td>
<td>2</td>
<td>47</td>
<td>4</td>
</tr>
<tr>
<td>Urban</td>
<td>102</td>
<td>96</td>
<td>90</td>
<td>10</td>
<td>190</td>
<td>84</td>
<td>266</td>
<td>21</td>
<td>15</td>
<td>3</td>
<td>33</td>
<td>10</td>
</tr>
</tbody>
</table>
### Families having equal number of males and females:

<table>
<thead>
<tr>
<th>No. of house</th>
<th>M</th>
<th>F</th>
<th>Average Unit</th>
<th>Per Head Unit</th>
<th>No. Of Rooms</th>
<th>Average Per room</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>1</td>
<td>1</td>
<td>59.16</td>
<td>29.58</td>
<td>3.24</td>
<td>19.33</td>
</tr>
<tr>
<td>49</td>
<td>2</td>
<td>2</td>
<td>60.28</td>
<td>15.07</td>
<td>4.29</td>
<td>16.65</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>3</td>
<td>76.43</td>
<td>12.74</td>
<td>3.55</td>
<td>24.59</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>5</td>
<td>62.58</td>
<td>6.26</td>
<td>9</td>
<td>6.95</td>
</tr>
</tbody>
</table>

### Families having number of males is greater than females:

<table>
<thead>
<tr>
<th>No. of house</th>
<th>M</th>
<th>F</th>
<th>Average Unit</th>
<th>Per Head Unit</th>
<th>No. Of Rooms</th>
<th>Average Per room</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>5</td>
<td>247.25</td>
<td>22.48</td>
<td>6</td>
<td>41.21</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>4</td>
<td>159.34</td>
<td>15.94</td>
<td>4</td>
<td>39.84</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>1</td>
<td>30.39</td>
<td>5.07</td>
<td>1</td>
<td>23.23</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>3</td>
<td>102.53</td>
<td>14.65</td>
<td>4</td>
<td>24.96</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>2</td>
<td>36.58</td>
<td>6.10</td>
<td>4</td>
<td>9.15</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>1</td>
<td>36.34</td>
<td>7.27</td>
<td>1</td>
<td>36.34</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>2</td>
<td>62.71</td>
<td>12.54</td>
<td>4</td>
<td>17.76</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>1</td>
<td>61.72</td>
<td>17.51</td>
<td>3</td>
<td>20.15</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>1</td>
<td>66.59</td>
<td>22.20</td>
<td>3</td>
<td>22.23</td>
</tr>
</tbody>
</table>

---

**Number of appliances**

- TV: 98, 102, 81, 90, 87, 90
- Mixer: 98, 96
- Iron: 8
- Heater: 10
- Fan: 18, 40, 90
- Fridge: 5, 9
- Mobile: 26, 66, 22
- Washing Machine: 21
- Computer: 18, 15
- Oven: 2, 3
- Electric motor: 47, 33
- Floor mill: 4, 10

**Number of appliances (Rural)**

- TV: 98, 102, 81, 90, 87, 90
- Mixer: 98, 96
- Iron: 8
- Heater: 10
- Fan: 18, 40, 90
- Fridge: 5, 9
- Mobile: 26, 66, 22
- Washing Machine: 21
- Computer: 18, 15
- Oven: 2, 3
- Electric motor: 47, 33
- Floor mill: 4, 10

---

**Number of appliances**

- TV: 98, 102, 81, 90, 87, 90
- Mixer: 98, 96
- Iron: 8
- Heater: 10
- Fan: 18, 40, 90
- Fridge: 5, 9
- Mobile: 26, 66, 22
- Washing Machine: 21
- Computer: 18, 15
- Oven: 2, 3
- Electric motor: 47, 33
- Floor mill: 4, 10
Families having number of males is less than females:

<table>
<thead>
<tr>
<th>No. of house</th>
<th>M</th>
<th>F</th>
<th>Average Unit</th>
<th>Per Head Unit</th>
<th>No. Of Rooms</th>
<th>Average Per room</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
<td>55.29167</td>
<td>13.8229</td>
<td>2.75</td>
<td>25.925</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>2</td>
<td>69.70588</td>
<td>23.2353</td>
<td>2.764706</td>
<td>26.81903595</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4</td>
<td>39.08333</td>
<td>6.51389</td>
<td>4.25</td>
<td>9.147916667</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>3</td>
<td>51.8287</td>
<td>10.3657</td>
<td>4.388889</td>
<td>14.61743827</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4</td>
<td>63.30556</td>
<td>9.04365</td>
<td>4.666667</td>
<td>13.06111111</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>M&lt;F</th>
<th>M=F</th>
<th>M&gt;F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Average number of room</td>
<td>21(16.2769)</td>
<td>44(33.2615)</td>
<td>4(19.4615)</td>
<td>69</td>
</tr>
<tr>
<td>Below Average number of room</td>
<td>25(29.7230)</td>
<td>50(48.6871)</td>
<td>51(35.5384)</td>
<td>126</td>
</tr>
</tbody>
</table>

\[ \chi^2_{\text{cal}} = 36.6852 \]
\[ \chi^2_{\text{tab}} = \chi^2_{2, 5\%} = 5.991 \]
\[ \chi^2_{\text{cal}} > \chi^2_{\text{tab}} \]

b) Association between families & bill payment type urban & rural

Here we use the notations as A be number of families in Rural area and B be the number of families paying offline bill and \( \alpha \) be number of families in Urban area \( \beta \) be the number of families paying online bill the observed frequencies are \((AB) = 84, (A\beta) = 16, (\alpha B) = 85, (\alpha\beta) = 15\)

Yule's coefficient of association
\[ Q = \frac{(AB)(\alpha\beta)-(A\beta)(\alpha B)}{(AB)(\alpha B)+(A\beta)(\alpha B)} = -0.03817 \]

Coefficient of colligation
\[ Y = \frac{\sqrt{(AB)(\alpha\beta)}-\sqrt{(AB)(A\beta)}}{\sqrt{(AB)(\alpha B)}+\sqrt{(AB)(\alpha B)}} = -0.01909 \]

c) Paired t – test

Ho: There is no significant difference between unit consumption of urban & rural area.
H1: There is significant difference between unit consumption of urban & rural area.
Observation Table

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban (Xᵢ)</td>
<td>65.11</td>
<td>68.56</td>
<td>75.7</td>
<td>87.62</td>
<td>103.3</td>
<td>93.88</td>
<td>72.78</td>
<td>70.46</td>
<td>80.16</td>
<td>79.08</td>
<td>72.38</td>
<td>939.25</td>
<td></td>
</tr>
<tr>
<td>Rural (Yᵢ)</td>
<td>39.65</td>
<td>41.45</td>
<td>41.91</td>
<td>46.95</td>
<td>60.96</td>
<td>49.86</td>
<td>42.47</td>
<td>48.49</td>
<td>44.45</td>
<td>44.28</td>
<td>44.34</td>
<td>39.1</td>
<td>543.91</td>
</tr>
<tr>
<td>ð=Xi-Yi</td>
<td>25.46</td>
<td>27.11</td>
<td>33.79</td>
<td>40.67</td>
<td>42.36</td>
<td>44.02</td>
<td>30.31</td>
<td>21.97</td>
<td>25.75</td>
<td>35.88</td>
<td>34.74</td>
<td>33.28</td>
<td>395.34</td>
</tr>
</tbody>
</table>

Here the pair of observations are \( n₁ = 12 \), \( n₂ = 12 \).
Average unit consumption are \( \bar{X} = 78.271 \), \( \bar{Y} = 45.6 \) and \( \bar{d} = 32.95 \)

The Variance \( \frac{\bar{d}}{\sqrt{\frac{\bar{d}^2}{n}}} = 16.1 \); \( t_{\text{calc}} = \frac{t}{\sqrt{\frac{\bar{d}^2}{n}}} = 1.796 \) and \( t_{\text{calc}} > t_{\text{tab}} \)

**d) F-test for variances in rural and urban area**

\( H₀ : \) There is no significant difference between variances of unit consumption between Urban and Rural areas. \( v/s \) \( H₁ : \) There is significant difference between variances of unit consumption between Urban and Rural areas.

Test statistics \( F = \frac{S_u^2}{S_r^2} \)

Where, \( S_u^2 = \text{Sample mean square of urban area.} \)
\( S_r^2 = \text{Sample mean square of rural area.} \)

\[ S_u^2 = \frac{1}{n₁-1} \sum (Xᵢ - \bar{X})^2 = 129.804 \]
\[ S_r^2 = \frac{1}{n₂-1} \sum (Yᵢ - \bar{Y})^2 = 35.1173 \]

\[ F_{\text{calc}} = 3.696321 \] and \( F_{\text{tab}} = F(n₁-1, n₂-1) = F(11,11) = 2.818 \) at 5% level of significance

**e) Run test**

1) **Rural area**: \( H₀ : \) Sample is random. \( v/s \) \( H₁ : \) Sample is not random.

Observation table

<table>
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<tr>
<th>64.7</th>
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</table>

Here, \( X_m = \text{Sample Median} = 38.70 \) (Denote ‘A’ if \( X_i ≥ X_m \) and denote ‘B’ if \( X_i < X_m \))
\[ r = \text{Number of runs} = 49, \ n_1 = \text{Number of A's} = 51, \ n_2 = \text{Number of B's} = 49. \]

The test statistic is,

\[ Z_0 = \frac{r - E(r)}{\sqrt{\text{Var}(r)}} \sim N(0,1) \]

If \(|Z_0| \geq Z_{\alpha/2}\) then, we reject \(H_0\).

**Calculation part**

\[ E(r) = \frac{(n_1 + n_2)}{2} = 51, \quad \text{var} (r) = \frac{n(n-2)}{4(n-1)} = 24.7474 \]

\[ |Z_0| = \frac{49 - 51}{\sqrt{24.7474}} = 0.4020 \quad \text{and} \quad Z_{\text{tab}} = Z_{\alpha/2} = 1.96 \]

2) **Urban area**

\(H_0\): Sample is random \(v/s\) \(H_1\): Sample is not random.

**Observation Table**

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</table>

Here, \(X_m = \text{Sample Median} = 70.08\). (Denote ‘A’ if \(X_i \geq X_m\) and denote ‘B’ if \(X_i < X_m\))

\(r = \text{Number of runs} = 52\), \(n_1 = \text{Number of A's} = 51\), \(n_2 = \text{Number of B's} = 49\).

The test statistic is,

\[ Z_0 = \frac{r - E(r)}{\sqrt{\text{Var}(r)}} \sim N(0,1) \quad \text{and} \quad |Z_0| \geq Z_{\alpha/2} \quad \text{then, we reject} \ H_0. \]

**Calculation part**

\[ E(r) = \frac{(n_1 + n_2)}{2} = 51, \quad \text{var} (r) = \frac{n(n-2)}{4(n-1)} = 24.7474 \]

\[ |Z_0| = \frac{52 - 51}{\sqrt{24.7474}} = 0.2010 \quad \text{and} \quad Z_{\text{tab}} = Z_{\alpha/2} = 1.96. \]

f) **Mann whitney U test**

\(H_0\): The two samples comes from same population \(v/s\) \(H_1\): The two samples comes from different population.

Level of significance \(\alpha \%) = 5\%\)

The test statistic,

\[ Z_0 = \frac{U - E(U)}{\sqrt{\text{Var}(U)}} \sim N(0,1) \]

Where, \(U = \min (U_1, U_2)\) and \(U_1 = n_1.n_2 + \frac{n_1(n_1+1)}{2} - R_1\) and \(U_2 = n_1.n_2 + \frac{n_2(n_2+1)}{2} - R_2\)
E (U) = \frac{n_1 \cdot n_2}{2} \quad \text{and} \quad \text{Var (U)} = \frac{n_1 n_2 (n_1 + n_2 + 1)}{12} \quad \text{If} \quad |Z_0| \geq Z_{\alpha/2} \quad \text{then we reject } H_0 \text{ at } \alpha \% \text{ level of significance.}

The observed values are \( n_1 = 100, \) \( n_2 = 100, \) \( R_1 = 12655, \) \( R_2 = 7445, \) \( U_1 = 2395, \) \( U_2 = 7605, \)
\( E (U) = 5000, \) \( \text{Var(U)} = 167500 \) \( \therefore \) \( U = \min (U_1, U_2) = 2395, \)
\( Z_0 = \frac{U-E(U)}{\sqrt{\text{Var(U)}}} = -6.3650 \) \( \text{Then} \quad |Z_0| = 6.3650 \quad \text{and} \quad Z_{\alpha/2} = 1.96 \)

**Overall Conclusion**

- Consumption of electricity in house used within one year is maximum in urban area as compared to rural area.
- The average electricity unit of used and family size are dependent.
- The average electricity unit of used and number of rooms are dependent.
- The attributes of families & bill payment type are negatively associated to each other.
- There is significant difference in average units between Urban & Rural area.
- There is significant difference in variance of unit consumption of electricity in Urban and Rural areas.
- The Rural and Urban area samples are randomly taken.
- The two samples (i.e average unit of rural & urban area,) comes from different population.

**BIBLIOGRAPHY**

7. Shu Fan; Yuan-Kang Wu; Wei-jen Lee; Ching-Yin Lee, "Comparative study on load forecasting technologies for different geographical distributed loads," Power and Energy Society General Meeting, 2011 IEEE , vol., no., pp.1,8, 24-29 July 2011
THE BEAUTY OF A GENERALIZED SUMMATION FORMULA

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PDM University,
Bahadurgarh 124507,
Haryana, India

ABSTRACT
In this paper, we have developed the generalized expression of

\[ _2F_1 \left[ \begin{array}{l} \alpha, \beta - \alpha \cr \frac{1}{2} \end{array} ; 1 \right] \]

and it’s corresponding integral form and some amazing results from the Generalized formula.

KEY WORDS: Appell’s Hypergeometric Function, Pochhammer symbol, Jacobi polynomials, Gauss hypergeometric function, Regular solution.

2020 MSC NO: 33C05, 33C20, 33C60
1. Introduction

Appell’s Hypergeometric Function $F_1(x, y)$, $F_2(x, y)$, $F_3(x, y)$, $F_4(x, y)$ are defined as (see [7]):

\[
F_1[a; b; c; d; x, y] = \sum_{m=0}^{\infty} \sum_{n=0}^{\infty} \frac{(a)_{m+n} (b)_m (c)_n x^m y^n}{(d)_{m+n} m! n!}, \quad \max(|x|, |y|) < 1 \tag{1.1}
\]

\[
F_2[a; b; c; d; e; x, y] = \sum_{m=0}^{\infty} \sum_{n=0}^{\infty} \frac{(a)_{m+n} (b)_m (c)_n x^m y^n}{(d)_{m+n} m! n!}, \quad |x| + |y| < 1 \tag{1.2}
\]

\[
F_3[a, b; c; d; e; x, y] = \sum_{m=0}^{\infty} \sum_{n=0}^{\infty} \frac{(a)_{m+n} (b)_m (c)_n (d)_m x^m y^n}{(e)_{m+n} m! n!}, \quad \max(|x|, |y|) < 1 \tag{1.3}
\]

\[
F_4[a, b; c; d; x, y] = \sum_{m=0}^{\infty} \sum_{n=0}^{\infty} \frac{(a)_{m+n} (b)_m (c)_n (d)_{m+n} x^m y^n}{(e)_{m+n} m! n!}, \quad \sqrt{|x|} + \sqrt{|y|} < 1 \tag{1.4}
\]

A generalized hypergeometric function $F_b(a_1, \ldots, a_p; b_1, \ldots, b_q; z)$ is a function which can be defined in the form of a hypergeometric series, i.e., a series for which the ratio of successive terms can be written

\[
\frac{c_{k+1}}{c_k} = \frac{P(k)}{Q(k)} = \frac{(k+a_1)(k+a_2)\ldots(k+a_p)}{(k+b_1)(k+b_2)\ldots(k+b_q)(k+1)} z \tag{1.5}
\]

Where $b + 1$ in the denominator is present for historical reasons of notation [Koepf p.12(2.9)], and the resulting generalized hypergeometric function is written

\[
\sum_{k=0}^{\infty} \frac{(a_1)_{k}(a_2)_{k}\ldots(a_p)_{k}z^k}{(b_1)_{k}(b_2)_{k}\ldots(b_q)_{k}k!} \tag{1.6}
\]

where the parameters $b_1, b_2, \ldots, b_q$ are positive integers.

The $F_b$ series converges for all finite $z$ if $p \leq q$, converges for $|z| < 1$ if $p = q + 1$, diverges for all $z$, $z \neq 0$ if $p > q + 1$ [Luke p.156(3)].
The function \( _2F_1(a, b; c; z) \) corresponding to \( p = 2, q = 1 \), is the first hypergeometric function to be studied (and, in general, arises the most frequently in physical problems), and so is frequently known as the "hypergeometric equation or, more explicitly, Gauss's hypergeometric function [Gauss p.123-162]. To confuse matters even more, the term "hypergeometric function" is less commonly used to mean closed form, and "hypergeometric series" is sometimes used to mean hypergeometric function.

The hypergeometric functions are solutions of Gaussian hypergeometric linear differential equation of second order

\[
z(1-z)y'' + [c - (a + b + 1)z]y' - aby = 0
\]  

(1.7)

The solution of this equation is

\[
y = A_0 \left[ 1 + \frac{ab}{1!e} z + \frac{a(a+1)b(b+1)}{2!c(c+1)} z^2 + \ldots \ldots \right]
\]

(1.8)

This is the so-called regular solution, denoted

\[
_2F_1(a, b; c; z) = \left[ 1 + \frac{ab}{1!e} z + \frac{a(a+1)b(b+1)}{2!c(c+1)} z^2 + \ldots \ldots \right] = \sum_{k=0}^{\infty} \frac{(a)_k(b)_k}{(c)_kk!} z^k
\]

(1.9)

which converges if \( c \) is not a negative integer for all \( |z| < 1 \) and on the unit circle \( |z| = 1 \) if \( R(e-a-b) > 0 \).

It is known as Gauss hypergeometric function in terms of Pochhammer symbol \((a)_k\) or generalized factorial function.

The Jacobi polynomials are defined as follows:

\[
P_n^{(a,b)}(z) = \frac{(\alpha+1)_n}{n!} _2F_1\left( -n, 1+\alpha+b+n; \alpha+1; \frac{1}{2}(1-z) \right)
\]

Pochhammer symbol:

In mathematics, the falling factorial or Pochhammer symbol (sometimes called the descending factorial, falling sequential product, or lower factorial) is defined as the polynomial [Steffenson p.5]

\[
(x)_n = x(x-1)(x-2)\ldots\ldots(x-n+1) = \prod_{k=1}^{n}(x-k+1) = \prod_{k=0}^{n-1}(x-k)
\]

(1.11)

2. Main Generalized Formula

\[
_2F_1\left[ \begin{array}{c} \alpha_n-a \\ c \end{array} ; \frac{1}{2} \right] = \sum_{k=0}^{\infty} \frac{(a-c+k)n}{k!} \Gamma(c) \Gamma(-c+n)\Gamma(a+c-n)k! \left( \frac{2^{-\alpha} \Gamma(c) \Gamma(c-n)\Gamma(a) \Gamma(-a+n)}{\Gamma(-a+c) \Gamma(c+a-n)(1+c-n)k!} \right)
\]

(2.1)

for \( c-n \notin z \)

3. Integral Representation of Main Generalized Formula

\[
_2F_1\left[ \begin{array}{c} \alpha_n-a \\ c \end{array} ; \frac{1}{2} \right] = \frac{1}{\Gamma(-a+n)} \int_{0}^{\infty} e^{-t} t^{1-a+n} \_1F_1\left[ \frac{1}{2}; \alpha; \frac{t}{2} \right] dt \text{ for } Re(-a+n) > 0.
\]

(3.1)
3. Integral Representation of Main Generalized Formula

\[ \text{3. Integral Representation of Main Generalized Formula} \]

\[ \text{3. Integral Representation of Main Generalized Formula} \]

\[ _2F_1 \left[ \begin{array}{c} a, \quad -n-a; \\ c, \quad 0 \end{array} \right] = \frac{1}{\Gamma(-n)} \int_0^\infty e^{-t} t^{1-a-n} \Gamma(a-n) \, dt \quad \text{for Re}(a-n) < 0. \quad (3.1) \]

\[ = \frac{\Gamma(c)}{\Gamma(a+c+n)(-n)} \int_0^1 (1-t)^{-1+\gamma+n} \left( 1 - t^\frac{1}{2} \right)^{-\gamma} t^{1-a-n} \, dt \quad \text{for Re}(c) > -\text{Re}(a+n) > 0. \quad (3.2) \]

\[ = \frac{\Gamma(c)}{\Gamma(a+c+n)(-n)} \int_0^1 \left( 1 + t \right)^{-\gamma} \left( 1 + t^\frac{1}{2} \right)^{-\gamma} \left( 1 - t \right)^{-1+\gamma+n} \, dt \quad \text{for Re}(c) > -\text{Re}(a+n) > 0. \quad (3.3) \]

\[ = \frac{\Gamma(c)}{\Gamma(a+c+n)(-n)} \int_{-\infty}^{\infty} 2\pi \Gamma(a) \Gamma(-a-n) \Gamma(a+c+n) \Gamma(-a-n-s) \Gamma(s) \Gamma(c+n+s) \Gamma(s) \, ds \quad (3.4) \]

For \( \max(-\text{Re}(c+n)) < \gamma < \min(\text{Re}(a), -\text{Re}(a+n)) \)

4. Special cases of the formula

If \( a = c = 0 \), then

\[ _2F_1 \left[ \begin{array}{c} 0, \quad -n; \\ 0, \quad 0 \end{array} \right] = \frac{\Gamma(0) \Gamma(1) P_0^{-1-n}(0)}{\Gamma(0)} = \Gamma(1) P_0^{-1-n}(0). \quad (4.1) \]

\[ = \frac{1}{\Gamma(-n)} \int_0^\infty e^{-t} t^{1-n} \, dt \quad \text{for Re}(a) < 0. \quad (4.2) \]

If \( a = c = 1 \), then

\[ _2F_1 \left[ \begin{array}{c} 1, \quad -n-1; \\ 1, \quad 0 \end{array} \right] = \Gamma(1) P_1^{-1-n}(0) \quad (4.4) \]

\[ = \sum_{k=0}^\infty R_{\text{Res}} \left[ \left( \frac{1}{2} \right)^{-s} \Gamma(1) \Gamma(-1-n-s) \Gamma(s) \right] \quad (4.6) \]

\[ = \frac{2}{\Gamma(2+n) \Gamma(-1-n)} \int_0^1 (1-t)^{1+n} t^{-2-n} \, dt \quad \text{for } -2 < \text{Re}(n) < -1 \quad (4.7) \]

\[ = \frac{1}{\Gamma(2+n) \Gamma(-1-n)} \int_0^\infty \frac{t^{1+n}}{t+2} \, dt \quad \text{for } -2 < \text{Re}(n) < -1 \quad (4.8) \]

\[ = \frac{1}{\Gamma(1-n)} \int_0^\infty e^{-t} t^{2-n} \, dt \quad \text{for } I + \text{Re}(n) < 0 \quad (4.9) \]

If \( a = c = 2 \), then

\[ _2F_1 \left[ \begin{array}{c} 2, \quad -n-2; \\ 2, \quad 0 \end{array} \right] = \frac{\Gamma(2) \Gamma(1) P_2^{-1-n}(0)}{\Gamma(0)} \quad (4.10) \]

\[ = \sum_{k=0}^\infty R_{\text{Res}} \left[ \left( \frac{1}{2} \right)^{-s} \Gamma(2) \Gamma(-1-n-s) \Gamma(s) \right] \quad (4.11) \]

For \( \max(-\text{Re}(c+n)) < \gamma < \min(\text{Re}(a), -\text{Re}(a+n)) \)
\[ \frac{\Gamma(c)}{\Gamma(a+c-n)\Gamma(-a+n)} \int_0^1 (1-t)^{-1+a+c-n} \left(1 - \frac{t}{2}\right)^{-\frac{n}{2}} t^{-1-a+n} \, dt \quad \text{for } \text{Re}(c) > \text{Re}(-a+n) > 0. \]  
\[ \frac{\Gamma(c)}{\Gamma(a+c-n)\Gamma(-a+n)} \int_0^\infty (1+t)^{-1+a+c-n} \left(1 + \frac{t}{2}\right)^{-\frac{n}{2}} t^{-1-a+n} \, dt \quad \text{for } \text{Re}(c) > \text{Re}(-a+n) > 0. \]  
\[ = \frac{\gamma \Gamma(c)}{2\pi \Gamma(a) \Gamma(-a+c) \Gamma(a+c-n) \Gamma(-a+n)} \int_{-i\infty+\gamma}^{i\infty+\gamma} 2^s \Gamma(a-s) \Gamma(-a+n-s) \Gamma(s) \Gamma(c-n+s) \, ds \]  
\[ \text{for } \max(0, \text{Re}(-c+n)) < \gamma < \min(\text{Re}(a), \text{Re}(-a+n)) \]  

4. Special cases of the formula  
If \( a = c = 0 \), then  
\[ _2F_1 \left[ 0, n; \frac{1}{2} \right] = \frac{\Gamma(0) \Gamma(1) P_{c}^{(0,-1)n}(0)}{\Gamma(0)} = \Gamma(1) P_{c}^{(0,-1)n}(0) \]  
\[ = \sum_{k=0}^{\infty} \frac{\Gamma(k+n; n, z)(n)!}{k!} \left(1 - z_0\right)^k \quad \text{for } \text{not}(z_0 \in \mathbb{R} \text{ and } 1 \leq z_0 \leq \infty) \]  
\[ = \frac{1}{\Gamma(n)} \int_0^\infty e^{-t} t^{-1+n} F_1 \left(0; 0; \frac{1}{2}\right) \, dt \quad \text{for } \text{Re}(n) > 0 \]  

If \( a = c = 1 \), then  
\[ _2F_1 \left[ 1, n-1; \frac{1}{2} \right] = \frac{\Gamma(1) P_{c}^{(0,-1)n}(0)}{\Gamma(0)} \]  
\[ = \sum_{k=0}^{\infty} \frac{\text{Res}_{x=-1} \left(-\frac{1}{2}\right)^x \Gamma(-1+n-s) \Gamma(s)}{\Gamma(-1+n)} \]  
\[ = \frac{2}{\Gamma(2-n) \Gamma(-1+n)} \int_0^1 (1-t)^{-1-n} t^{-2+n} \, dt \quad \text{for } 1 < \text{Re}(n) < 2 \]  
\[ = \frac{1}{\Gamma(2-n) \Gamma(-1+n)} \int_0^\infty \frac{t^{1-n}}{t+1} \, dt \quad \text{for } 1 < \text{Re}(n) < 2 \]  
\[ = \frac{1}{\Gamma(-1+n)} \int_0^\infty e^{-t} t^{-2+n} F_1 \left(1; 1; \frac{1}{2}\right) \, dt \quad \text{for } \text{Re}(n) > 1 \]  

If \( a = c = 2 \), then  
\[ _2F_1 \left[ 2, n-2; \frac{1}{2} \right] = \frac{\Gamma(-1) \Gamma(2) P_{c}^{(1,-2+n)}(0)}{\Gamma(0)} \]  
\[ = \sum_{k=0}^{\infty} \frac{\text{Res}_{x=-1} \left(-\frac{1}{2}\right)^x \Gamma(-2+n-s) \Gamma(s)}{\Gamma(-2+n)} \]  
\[ = \frac{4}{\Gamma(4-n) \Gamma(-2+n)} \int_0^1 (1-t)^{-1-n} t^{-3+n} \, dt \quad \text{for } 2 < \text{Re}(n) < 4 \]
\[
\frac{1}{\Gamma(4-n) \Gamma(-2+n)} \int_0^\infty \frac{t^{3-n}}{(1+t)^2} dt \quad \text{for} \quad 2 < \Re(n) < 4
\]
\[
= \frac{1}{\Gamma(-2+n)} \int_0^\infty e^{-t} t^{3-2n} F_1\left(\frac{2, 2, \frac{t}{2}}{n}\right) dt \quad \text{for} \quad \Re(n) > 2
\]

If \( a = c = n \), then
\[
\sum_{k=0}^\infty \frac{2F_1\left(k, 2n, 0, 0; \frac{1}{2}\right)}{k!} = \frac{\Gamma(1-n) \Gamma(n) P_{-1+n}^{1+n}(0)}{\Gamma(0)}
\]

for \( \text{not} \ z_0 \in R \text{ and } 1 \leq z_0 \leq \infty \).

5. Derivation of the formulae

\[
2F_1\left[ a, n-a; \frac{1}{2}\right] = \sum_{k=0}^\infty 2^{-k} \binom{a+k}{k} \frac{(-a+n)k}{k!} = \sum_{k=0}^\infty 2^{-k} \frac{\Gamma(a+k) \Gamma(-a+n+k)}{\Gamma(a) \Gamma(-n+k) \Gamma(1+n-k)}
\]

\[
= \sum_{k=0}^\infty \frac{2^{-k} \Gamma(a+k) \Gamma(-a+n+k)}{k! \Gamma(a) \Gamma(-a+n) \Gamma(1+c-k)}
\]

REFERENCES
IMPACT OF SELFIE ON PSYCHOSOCIAL WELLBEING AMONG COLLEGE STUDENTS AT SELECTED COLLEGE IN REDDIYARPALAYAM, PUDUCHERRY

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ABSTRACT

INTRODUCTION
A selfie is defined as "a photograph that one has taken of oneself, typically one taken with Smartphone (or) webcam and shared via social media".

Since 2012 the rate of usage of selfie reportedly increased by 17000%. The phenomenon of selfie is now so wide spread that Oxford Dictionaries selected the term as the “word of 2013”. The trend of taking selfie almost became a daily habit for many people all around the world, and the social media websites became the main place to post their selfies.

Burris & Carlson in 2009 defined Psychological Well-being as the simple notion of a person's welfare, happiness, advantages, interests, utility, and quality of life. Campbell (2014) reported that trying to take a selfie as many times as needed to get the face to look as perfect as possible could lead to serious mental health problems.

STATEMENT OF THE PROBLEM
A study to assess the level of impact of Selfie on psychosocial wellbeing among college students in selected college, Puducherry.

OBJECTIVES
1. To assess the level of impact of selfie on psychosocial wellbeing among selected college students
2. To correlate the level of impact of selfie and psychosocial wellbeing among selected college students.
3. To associate the level of impact of selfie and psychosocial well-being with the demographic variables of college students.

HYPOTHESES
H1 – There is a significant correlation with the level of impact of Selfie and Psychosocial wellbeing among college students with the selected demographic variables of college students.

H2 – There is a significant association with the level of impact of Selfie and Psychosocial wellbeing among college students with the selected demographic variables of college students.

METHODS
The research approach adopted for this study is quantitative approach. The research design adopted for this study was descriptive design. Convenient sampling technique was chosen to select 70 students at selected college, Puducherry. Informed consent obtained from the participants before collecting data. The data was collected using 5 point Rating Scale to assess the level of impact of Selfie & Ryff’s psychological wellbeing scale to assess the psychosocial wellbeing. The data was analyzed using descriptive statistics like mean, standard deviation and inferential statistics like correlation and coefficient and chi-square on the basis of objectives and hypothesis of the study.

RESULTS
Among 70 college students, 85.7% had mild and 14.30% had moderate level of impact of selfie. Most of them 95.7% had good psychosocial wellbeing and very few of them 4.3% had poor psychosocial wellbeing. Mean 122.71 and standard deviation was 14.752 for the impact of selfie and mean 169.36 and standard deviation was 18.235 for psychosocial wellbeing and the r value was 0.376 at P>0.01. There is a significant correlation between level of impact of selfie and psychosocial wellbeing. There was no significant association between the level of impact of selfie and psychosocial wellbeing with socio-demographic variables.

CONCLUSION
The study concluded that the selfie has a significant impact on psychosocial well-being among college students. They had mild and moderate level of impact of selfie and most of them had good psychosocial well being and few of them have poor psychosocial well being.

KEY WORDS: Selfie & Psychosocial Wellbeing

INTRODUCTION
BACKGROUND OF THE STUDY
A selfie is defined as "a photograph that one has taken of oneself, typically one taken with Smartphone (or) webcam and shared via social media". (1)

The term ‘selfie’ was coined by Steven Wrighter in September 2002. The usage of the hashtag "#selfie" first appeared on flicker in 2004. It took almost a decade to gain public interest and attention. A Google trend study indicated that the selfie culture gained popularity in 2012. Since 2012 the rate of usage of selfie reportedly increased by 17000%. The phenomenon of selfie is now so wide spread that Oxford Dictionaries selected the term as the “word of 2013”. Moreau in 2014 stated that the trend of taking selfie almost became a daily habit for many people all around the world and the social media websites became the main place to post their selfies. (2)

The term psychosocial underscores the close connection between psychological aspects of our experience (e.g., our thoughts, emotions, and behavior) and our wider social experience (e.g., our relationships,
traditions and culture). Well-being is a condition of holistic health in all its dimensions: physical, cognitive, emotional, social, physical, and spiritual. The process of well-being consists of the full range of what is good for a person: participating in a meaningful social role, feeling happy and hopeful, living according to good values, as locally defined; having positive social relations and a supportive environment, coping with challenges through the use of appropriate life skills and having security, protection, and access to quality services. Burris & Carlson defined Psychological Well-being is the simple notion of a person's welfare, happiness, advantages, interests, utility, and quality of life. (3)

Psychosocial well-being is closely related to safety, health, illness, absenteeism and workplace circumstances and conditions. The important psychosocial areas are inappropriate behavior, post-traumatic stress, alcohol & drugs, stress and smoking. Most often the individual decisions are always work within this spacious framework. (4)

Researchers at Nottingham Trent University and the Thiagarajar School of Management in India began investigating the phenomenon after a hoax story appeared in the media in 2014 claiming 'selfitis' has been classed as a genuine mental disorder by the American Psychiatric Association. (5)

Selfitis is a new epidemic prevailing in our country since 2015. Selfitis is followed with Self presentation, Narcissism, Psychological satisfaction and Selfie fever. To know about the existence of selfies, in last few years, capturing selfies has become global phenomenon. Bruno & others in 2014 stated individual from dissimilar socio-economic, sexual category, race, and age group take selfies in different occasions and concludes that, it is entertaining and attracts the young mind. This enormous amount of self portrait images captured and pooled on social media is modernizing the way individual introduce themselves and the surrounded of their friends to the globe. Capturing photo of oneself can be seen basically a documentary of personal memories. (6)

Selfies have the capacity to boost the self-confidence of a person. New researches have also suggested that clicking and posting selfies could be an empowering activity and also helps young people to develop their identity and mainly boost their confidence and self-esteem. Many psychologists in 2013 have also ascertained the fact that, when selfies are used in moderation is healthy and it boost one’s self-confidence and their self-esteem. (2)

This rapid growth of Social Networking Sites (SNS’s) as well as smart phone has resulted in a new addiction (i.e) 'SELFIE FEVER'. Selfie fever made people to portray them and use them as an object for likes and comments only. It is also a true fact that some of the person considers selfie as a token of memorable moments. The entry of selfie to new generation’s world has replaced a major portion of traditional photography. (7)

The act of taking selfies and overall usage of various social media platform are an integral part of life for the youths. It changed the ‘We-We generation’ into ‘Me-Me generation’ can be clearly rectified from Social Networking Sites such as Facebook, whatsapp, hike, twitter etc. Social media are the true selfie promoters, they do promotion of the selfie for their own benefit. The self-portrayed photos exhibit some of the behavioral characteristics. Nowadays selfie posting behavior is seen without any genetic difference. Increase in the level of selfie addiction results in a mental disorder termed as 'SELFITIS'. It is the obsessive taking of selfies on mobile phones- appears to be a real condition according to a new study. (8)

This research study seeks to analyze why individual upload images to different social media platform and how it affects individual themselves and the level of impact among college students.

NEED FOR THE STUDY

The need for this study is to know the impact of selfie usage among college students. This descriptive study will benefit the Society &people media especially selfie usage among college students.

Makati city, known as the financial center of Philippines, can now boast another distinction: it is the selfie capital of the world. (7) Indians are risking life andlip to capture perfect selfie. According to a research by Precong at Delhi’s Indraprastha Institute of Medical Technology in 2014-15, it was reported that 127 deaths were due to reckless behavior while clicking selfies and among these 76 occurred in India. The team working on the study examined more than 62,000 selfies posted globally on Twitter, and went through the most common reason of deaths caused by selfies. (9)

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>NUMBER OF CASUALTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>76</td>
</tr>
<tr>
<td>Pakistan</td>
<td>9</td>
</tr>
<tr>
<td>USA</td>
<td>8</td>
</tr>
<tr>
<td>Russia</td>
<td>6</td>
</tr>
<tr>
<td>Philippines, China</td>
<td>4</td>
</tr>
<tr>
<td>Spain</td>
<td>3</td>
</tr>
<tr>
<td>Indonesia, Portugal, Peru, Turkey</td>
<td>2</td>
</tr>
</tbody>
</table>

Country-wise number of selfie casualties (9)
Three-quarters of young people aged between 18 & 24 admit taking selfie, the study by mobile phone company HTC found. According to the PEW research centre, teenagers in America are sharing more information than ever about themselves on social media. Of those studied, 91% post photos of themselves online - up from 79% in 2006. According to Samsung’s data selfie accounts for 1/3rd of all photos being taken daily by people aged between 18-24 years.\(^{(10)}\)

According to the experts this latest selfie craze could also be fuelling & increase in eating disorders such as anorexia. Another research which was published in the Journal of Adolescent Health, suggests that teens are more likely to engage in risky activities like smoking and drinking if they see their friends doing it in photos.\(^{(11)}\)

Self-esteem refers to an overall positive or negative evaluation of the self. One way of fulfilling self-esteem needs is the use of social media to communicate interpersonally which might provide an opportunity for people with low self-esteem to engage in public behavior with reduced risk of humiliation and reduced social anxiety. Study of friend networking sites revealed that about 78 percent of respondents received predominantly positive feedback from others users of social networking sites, and that enhance their self-esteem significantly. In addition, it was reported that those with low self-esteem exhibited a strong affinity for online communication and selfie than did those with high self-esteem.\(^{(2)}\)

Some researchers linked the habit of taking a lot of selfies to narcissism, isolation and even suicide. A poll conducted by the American Academy of Facial Plastic and Reconstructive Surgery found that selfies became a reason for increasing number of plastic surgery in US. The poll conducted annually to analyze trends in facial plastic surgery exhibited an increase in requests for procedures due to patients being more self-aware of looks in social media.\(^{(2)}\)

Campbell reported that trying to take a selfie as many times as needed to get the face to look as perfect as possible could lead to serious mental health problems. He also reported that Thailand government psychiatrist Dr. Panpimol Wipulakorn had warned young Thais who post their selfies on social media but do not receive enough likes and positive feedback can have serious emotional problems. Beside selfies posing a possible threat to some societies, selfies have been the cause for suicide attempts and deaths. In Chicago, 20 out of 23 college students reported social media induced anxiety and stress. According to the students, the habit of scrolling down in their social media accounts had affected the time they allocated for their studies.\(^{(2)}\)

The selfie craze doesn’t seem to be dying anytime soon, but a lot of people are dying because of it. In fact, India leads the world in selfie – related deaths in 2015, according to Washington Post. Citing reports, the Washington Posts says that India accounted for about half of the selfie related deaths globally. A study found that between March 2014 and September 2016, 60% of all "selfie deaths", where a person dies while trying to take a picture of themselves, occurred in India. According to Me, Myself & My Killfie: characterizing and preventing selfie deaths, a collaborative study by researchers from Carnegie Mellon University and Indraprastha Institute of Information, Delhi the country was the backdrop to 76 of the 127 reported selfie deaths in 18 month period. It’s such a big issue, Mumbai police are even considering a proposal to designate 15 particularly dangerous sites in the city as "selfiefree points", reported The Times of India.\(^{(12,13)}\)

**Number of selfie related deaths in different years\(^{(12)}\)**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>DEATH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>15</td>
</tr>
<tr>
<td>2015</td>
<td>39</td>
</tr>
<tr>
<td>2016</td>
<td>73</td>
</tr>
</tbody>
</table>
Causes of selfie deaths (12)

A Japanese tourist in Agra died in September after he succumbed to head injuries from slipping on Taj Mahal’s stairs as he tried to take a selfie. An engineering student passed away when taking a selfie while standing on the rock cracked and plunged into a 60-foot ravine in Namakkal, Tamil Nadu. In Sundar Nagar near Rajkot, 2 more students passed away by drowning in the Narmada canal while trying to take a selfie. Selfie related deaths have continued in 2018 as well. (12) Hence the researcher is interested to conduct research study on impact on selfie usage among college students, Puducherry.

STATEMENT OF THE PROBLEM

A study to assess the level of impact of Selfie on psychosocial wellbeing among college students in selected college, Puducherry.

OBJECTIVES

1. To assess the level of impact of selfie on psychosocial wellbeing among selected college students.
2. To correlate the level of impact of selfie and psychosocial wellbeing among selected college students.
3. To associate the level of impact of selfie and psychosocial well-being with the demographic variables of selected college students.

OPERATIONAL DEFINITIONS

Assess
It is a process of identifying the level of impact of selfie on psychosocial wellbeing among College Students.

Impact
It refers to positive/negative influences on Psychosocial Well-being by selfie usage among college Students.

Selfie:
It refers to a photograph that one has taken of oneself, typically with a smartphone or webcam.

Psychosocial Well-being:
It refers to a dynamic concept that includes autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance.

ASSUMPTION

The selfie may have impact on psychosocial well-being among college students.

HYPOTHESIS

H₁ – There is a significant correlation with the level of impact of Selfie and Psychosocial wellbeing among college students with the selected demographic variables of college students.

H₂ – There is a significant association with the level of impact of Selfie and Psychosocial wellbeing among college students with the selected demographic variables of college students.
METHODOLOGY

RESEARCH APPROACH
Quantitative Research approach was chosen by the investigator to conduct this study.

RESEARCH DESIGN
The research design selected for the study is descriptive design.

VARIABLES
Variables are measurable characteristics of a concept and consist of a logical group of attributes (Talbot 1995).
The variable in this study are the level of impact of selfie on psychosocial wellbeing among selected college students.

SETTING OF THE STUDY
Setting is physical location and condition in which data collection take place in this study (POLIT and HUNGLER).
The study was conducted in Sri Krishna Institute of Life Sciences, Reddiarpalayam, Puducherry.

POPULATION
In this the population consisted of all college students in Puducherry.

SAMPLE
The sample of the study includes students studying in Sri Krishna Institute of Life sciences, Reddiarpalayam, Puducherry.

SAMPLE SIZE
The sample size comprised of 70 college students who fulfill the inclusion criteria.

SAMPLING TECHNIQUE
Sampling defines as the process of selecting a group of people or the elements with which the study to conduct.
In this study, the participants were selected by using convenience sampling technique.

SAMPLING CRITERIA
Inclusion criteria
- Students using front camera mobiles
Exclusion criteria
- Students who are not willing to participate in study.
- Students who are not available during study.

TOOL
The instruments selected in a research should be as far as possible vehicle that would be the best obtaining data for drawing conclusions, which are pertinent to the data.
The study was conducted by using Demographic variables, Rating Scale for Assessment of impact of Selfie and Ryff’s Psychological Well-being Scale.

DESCRIPTION OF THE TOOLS
The tool consists of three parts.
Part – 1: Consist of demographic data with the variables like age, gender, religion, type of family, year of course, domicile, and year of android mobile usage area.
Part – 2: The Rating Scale for Assessment of impact of Selfie to assess the impact of selfie among selected college students.
It is a 5 point scale comprises of 30 items representing the level of impact of selfie.
Scoring:
1 - Always
2 - Mostly
3 - Sometimes
4 - Rarely
5 - Never.
The score was graded as follows:
Mild impact of selfie – 71 to 100%
Moderate impact of selfie - 41 to 70%
Severe impact of selfie - 1 to 41%
Part – 3: The Ryff’s Psychological Well-being Scale (PWB) for Assessment of Psychosocial Well-being. It is a 6 point scale consists of 42 items.
Scoring:
1 = strongly disagree
the CoS yam, college, Puducherry. Collecting data. The data om Institute of Review Board & s criteria. Informed

CONTENT VALIDITY
Structured questionnaire was developed to assess the impact of selfie by the investigators and Ryff’s psychological wellbeing scale a standardized scale used to assess the psychological well-being. To evaluate the content validity, the tool was submitted to three Nursing experts and one Medical expert. The tool was validated regarding the adequacy of the content, sequence and framing of questions. Based on experts comment and suggestion the tool was finalized.

Ethical Consideration
1. The study proposal was approved by the Institutional Review Board, PIMS, Puducherry.
2. Prior permission was obtained from the Managing director of Sri Krishna Institute of Life sciences, Reddiyarpalayam, Puducherry.
3. Written consent was obtained from all the participants after giving a brief explanation about the purpose and process of the study.
4. Confidentiality was maintained throughout the study.

PILOT STUDY
The pilot study was conducted on 03.03.2018 in College of Nursing, PIMS to III Year B.Sc (Nursing) students. Prior to the study formal permission was obtained from the Dean, CON, PIMS.

The pilot study was conducted for 10 participants who satisfied the sample selection criteria to determine the feasibility and practicability for carrying out the main study and to refine the tool.

The investigator utilized convenient sampling technique to select the participants. Structured questionnaire to assess the impact of selfie and Ryff’s psychological wellbeing scale was assessed. The investigator did not find any difficulty during the pilot study. The study was found to be feasible and practical.

DATA COLLECTION PROCESS
The investigator obtained formal permission from Institute of Review Board & the Dean, College of Nursing, PIMS and the Managing director, Sri Krishna Institute of Life Sciences, Reddiyarpalayam, Puducherry. After obtaining formal permission, General survey was conducted to check the availability of the participant at selected college, Puducherry. Data collected over a period of 1 week on March 2018. Convenient sampling method adapted to select 70 participants based on the inclusion criteria. Informed consent obtained from the participants before collecting data. The data collected by distributing rating scale and Ryff’s psychological wellbeing scale to the students. The data was maintained confidential among the students.

DATA ANALYSIS PLAN
Descriptive statistics
Frequency distribution, Mean, standard deviation and mean percentage was used to analyze the demographic variables and the level of impact of selfie on psychosocial wellbeing among selected college students.

Inferential statistics
1. Correlation was done by using correlation and co efficient test to find out the ‘r’ value.
2. The association between the level of impact of selfie and psychosocial wellbeing among college students with selected demographic variables is done by using Chi-Square test.

DATA ANALYSIS AND INTERPRETATION
The data was collected from 70 participants who fulfilled and analyzed by using descriptive and inferential statistics which was necessary to assess the level of impact of selfie on psychosocial wellbeing among selected college students.

This chapter presents the details of data analyzed and their findings under the following sections.

SECTION I : Distribution of demographic variables of study subjects.
SECTION II : Level of impact of selfie and Psychosocial wellbeing among college Students.
SECTION III : Correlation between the level of impact of selfie and psychosocial wellbeing.
SECTION IV : Associate the level of impact of selfie and psychosocial well-being with the selected demographic variables.
SECTION I: DISTRIBUTION OF DEMOGRAPHIC VARIABLES OF STUDY SUBJECT

Table: 1 Frequency and Percentage distribution of demographic variables of participants  

<table>
<thead>
<tr>
<th>S. No</th>
<th>Demographic variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) 18-19 years</td>
<td>49</td>
<td>70.0</td>
</tr>
<tr>
<td></td>
<td>b) 20-22 years</td>
<td>16</td>
<td>22.9</td>
</tr>
<tr>
<td></td>
<td>c) Above 22 years</td>
<td>5</td>
<td>7.1</td>
</tr>
<tr>
<td>2.</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Male</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>b) Female</td>
<td>68</td>
<td>97.1</td>
</tr>
<tr>
<td>3.</td>
<td>Type of family</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Nuclear</td>
<td>22</td>
<td>31.4</td>
</tr>
<tr>
<td></td>
<td>b) Joint</td>
<td>48</td>
<td>68.6</td>
</tr>
<tr>
<td>4.</td>
<td>Year of course</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) 1st Year</td>
<td>33</td>
<td>47.1</td>
</tr>
<tr>
<td></td>
<td>b) 2nd Year</td>
<td>37</td>
<td>52.9</td>
</tr>
<tr>
<td>5.</td>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Hindu</td>
<td>67</td>
<td>95.7</td>
</tr>
<tr>
<td></td>
<td>b) Christian</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>c) Muslim</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>6.</td>
<td>Domicile</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Rural</td>
<td>48</td>
<td>68.6</td>
</tr>
<tr>
<td></td>
<td>b) Urban</td>
<td>17</td>
<td>24.3</td>
</tr>
<tr>
<td></td>
<td>c) Semi urban</td>
<td>5</td>
<td>7.1</td>
</tr>
<tr>
<td>7.</td>
<td>Years of android mobile usage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) 0- 1Year</td>
<td>27</td>
<td>38.6</td>
</tr>
<tr>
<td></td>
<td>b) 1- 2 Years</td>
<td>37</td>
<td>52.9</td>
</tr>
<tr>
<td></td>
<td>c) Above 2 Years</td>
<td>6</td>
<td>8.6</td>
</tr>
</tbody>
</table>

Table 1 shows the frequency & percentage distribution of demographic variables of college students. Most of them 49 (70%) comes under 18-19 years and 5 (7.1%) are above 22 years. Majority of them 68 (97.1%) were female and only Two (2.9%) were males. In type of family 48 (68.6%) belongs to joint family and 22 (31.4%) belongs to nuclear family. With regard to year of course of 37 (52.9%) are second years and 33 (47.1%) are first years. While considering the religion most of them 67 (95.7%) belongs to Hindu and only 1 (1.4%) belong to Muslim. With regard to domicile 48 (68.6%) are living in rural area and only 5 (7.1%) are living in semi-urban. Looking to the years of android mobile usage 37 (52.9%) have been using mobile for 2 years and only 6 (8.6%) were using above 2 years.
SECTION II: LEVEL OF IMPACT OF SELFIE AND PSYCHOSOCIAL WELLBEING AMONG COLLEGE STUDENTS

n=70

Figure 3 reveals the distribution of level of impact of selfie among selected college students, most of them 60 (85.7%) had mild and 10 (14.30%) had moderate level of impact.

Figure 4 - Percentage Distribution of Psychosocial wellbeing among college students
Figure 4 reveals the percentage distribution of psychosocial wellbeing among selected college students. Most of them 67 (95.7%) had good psychosocial wellbeing and very few of them 3 (4.3%) had poor psychosocial wellbeing.

**SECTION III : TO CORRELATE THE LEVEL OF IMPACT OF SELFIE AND PSYCHOSOCIAL WELLBEING AMONG COLLEGE STUDENTS**

Table: 2 Mean and Standard deviation of level of impact of selfie and psychosocial wellbeing among selected college students.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Descriptive Statistics</th>
<th>r value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Range</td>
</tr>
<tr>
<td>Impact Of Selfie</td>
<td>122.71</td>
<td>14.75</td>
<td>84-145</td>
</tr>
<tr>
<td>Psychosocial wellbeing</td>
<td>169.36</td>
<td>18.24</td>
<td>114-214</td>
</tr>
</tbody>
</table>

** Correlation is highly significant.

Table 4 indicates that the mean 122.7 and standard deviation was 14.7 for the impact of selfie and mean 169.4 and standard deviation was 18.3 for psychosocial wellbeing and the r value was 0.376.

There is significant correlation between the level of impact of selfie and psychosocial wellbeing among selected college students respectively.

**SECTION IV : ASSOCIATE THE IMPACT OF SELFIE AND PSYCHOSOCIAL WELLBEING WITH SELECTED DEMOGRAPHIC VARIABLES**

Table 3: Associate the level of impact of selfie among selected college students with selected demographic variables

<table>
<thead>
<tr>
<th>S. No</th>
<th>Demographic Variables</th>
<th>Level of Impact of Selfie</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Moderate (31-70%)</td>
<td>Mild (71-100%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>1.</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a)18-19 years</td>
<td>8</td>
<td>11.42</td>
</tr>
<tr>
<td></td>
<td>b)20-22 years</td>
<td>1</td>
<td>1.42</td>
</tr>
<tr>
<td></td>
<td>c)Above 22 years</td>
<td>1</td>
<td>1.42</td>
</tr>
<tr>
<td>2.</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a)Male</td>
<td>1</td>
<td>1.42</td>
</tr>
<tr>
<td></td>
<td>b)Female</td>
<td>9</td>
<td>12.85</td>
</tr>
<tr>
<td>3.</td>
<td>Type of family</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a)Nuclear</td>
<td>3</td>
<td>4.28</td>
</tr>
<tr>
<td></td>
<td>b)Joint</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>4.</td>
<td>Year of course</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a)1st Year</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>b)2nd Year</td>
<td>3</td>
<td>4.28</td>
</tr>
<tr>
<td>5.</td>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a)Hindu</td>
<td>10</td>
<td>14.28</td>
</tr>
<tr>
<td></td>
<td>b)Christian</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>c)Muslim</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>Domicile</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a)Rural</td>
<td>6</td>
<td>8.57</td>
</tr>
<tr>
<td></td>
<td>b)Urban</td>
<td>4</td>
<td>5.71</td>
</tr>
<tr>
<td></td>
<td>c)Semi urban</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>Years of android mobile usage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a)0-1 Year</td>
<td>2</td>
<td>2.85</td>
</tr>
<tr>
<td></td>
<td>b)1-2 Years</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>c)Above 2 Years</td>
<td>1</td>
<td>1.42</td>
</tr>
</tbody>
</table>

S: Significant &NS: not statistically significant
Table 3 describes the association between the level of impact of selfie with the selected demographic variables. It was found that there is no significant association between the level of impact of selfie with age, gender, type of family, religion, year of course, domicile and years of android usage as indicated by the p value at 0.05.

Table 4: Associate the psychosocial wellbeing among selected college students with selected demographic variables

<table>
<thead>
<tr>
<th>S.N o</th>
<th>Demographic Variables</th>
<th>Psychosocial Wellbeing</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Good (More than or equal to 126)</td>
<td>Poor (less than 126)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>1.</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)18-19 years</td>
<td>47</td>
<td>67.14</td>
<td>2</td>
</tr>
<tr>
<td>b)20-22 years</td>
<td>15</td>
<td>21.42</td>
<td>1</td>
</tr>
<tr>
<td>c)Above 22 years</td>
<td>5</td>
<td>7.14</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)Male</td>
<td>2</td>
<td>2.85</td>
<td>0</td>
</tr>
<tr>
<td>b)Female</td>
<td>65</td>
<td>92.85</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Type of family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)Nuclear</td>
<td>20</td>
<td>28.57</td>
<td>2</td>
</tr>
<tr>
<td>b)Joint</td>
<td>47</td>
<td>67.14</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Year of course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)1st Year</td>
<td>30</td>
<td>42.85</td>
<td>3</td>
</tr>
<tr>
<td>b)2nd Year</td>
<td>37</td>
<td>52.86</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)Hindu</td>
<td>64</td>
<td>91.42</td>
<td>3</td>
</tr>
<tr>
<td>b)Christian</td>
<td>2</td>
<td>2.85</td>
<td>0</td>
</tr>
<tr>
<td>c)Muslim</td>
<td>1</td>
<td>1.42</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>Domicile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)Rural</td>
<td>47</td>
<td>67.14</td>
<td>1</td>
</tr>
<tr>
<td>b)Urban</td>
<td>15</td>
<td>21.42</td>
<td>2</td>
</tr>
<tr>
<td>c)Semi urban</td>
<td>5</td>
<td>7.14</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>Years of android mobile usage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)0-1 Year</td>
<td>27</td>
<td>38.57</td>
<td>0</td>
</tr>
<tr>
<td>b)1-2 Years</td>
<td>34</td>
<td>48.57</td>
<td>3</td>
</tr>
<tr>
<td>c)Above 2 Years</td>
<td>6</td>
<td>8.57</td>
<td>0</td>
</tr>
</tbody>
</table>

S- Significant &NS- not statistically significant

Table 4 depicts the association between the psychosocial wellbeing with the selected demographic variables. It reveals that there was no statistically significant association between psychosocial wellbeing and with age, gender, type of family, religion, year of course, domiciles and years of android usage as indicated by the p value at 0.05.

DISCUSSION, SUMMARY, IMPLICATIONS, RECOMMENDATIONS AND CONCLUSION

This chapter deals with findings of the study derived from statistical analysis and pertinence to the study also related to literature of the study.

This study was conducted to assess the level of impact of selfie on psychosocial well-being among college students at selected college, Puducherry. Descriptive design was adopted. The nature and purpose of the study was explained to the study participants, 70 students were chosen by using convenient sampling method. Rating Scale for Assessment of impact of Selfie and Ryff’s Psychological Well-being Scale were used. The data analysis was done by using descriptive statistics (frequency distribution, mean, standard deviation) and inferential statistics correlation coefficient and fishers extract test.

MAJOR FINDINGS OF THE STUDY

- Based on the age 49 (70%) comes under 18-19 years, 16 (22.9%) under 20-22 years and 5 (7.1%) are above 22 years.
- Especially 68 (97.1%) were females and only Two (2.9%) were males.
- In type of family 48 (68.6%) belongs to joint family and 22 (31.4%) belongs to nuclear family.
A study carried out for university students to examine the relationship between levels of psychological well-being and smart phone addiction. The study group consisted of 408 students 303 female and 105 male. The second objective of the study is to correlate the level of impact of selfie and psychosocial well-being among college students. In this present study the mean 122.71 and standard deviation was 14.752 for the impact of selfie and mean 169.36 and standard deviation was 18.235 for psychosocial wellbeing and the r value was 0.376.

With regard to year of course of 37 (52.9%) are second years and 33 (47.1%) are first years.

While considering the religion most of them 67 (95.7%) belongs to Hindu, 2 (2.9%) belongs to Christian and only 1 (1.4%) belong to Muslim.

Besides domicile 48 (68.6%) are living in rural area, 17 (24.4%) and only 5 (7.1%) are living in semi-urban.

Looking to the years of android mobile usage 27 (38.6%) have been using for 1 year 37 (52.9%) have been using mobile for 2 years and only 6 (8.6%) were using above 2 years.

The First objective of the study is to assess the level of impact of selfie on psychosocial well-being among college students. The study finding reveals the distribution of level of impact of selfie among selected college students. Most of them 60 (85.7%) had mild and 10 (14.3%) had moderate level of impact of selfie. The percentage distribution of psychosocial wellbeing among selected college students, Most of them 67 (95.7%) had good psychosocial wellbeing and very few of them 3 (4.3%) had poor psychosocial wellbeing.

Similarly the study conducted at Mangalore University investigated the perception towards capturing selfies and its impact among students. The research employed survey method was conducted using structured questionnaire. 120 respondents were chosen through convenience sampling for their research. The findings of the study shows that majority 70.83% of respondents after taking selfie send via whatsapp, 71.66% of students states that taking a selfie can turn deadly issues, 51.66% of the student stated taking selfie is a waste of time.

The Second objective of the study is to correlate the level of impact of selfie and psychosocial well-being among college students. In present study it depicts the association between the level of impact of selfie with selected socio demographic variables. It was found that there is no significant association between the level of impact of selfie with age, gender, type of family, religion, year of course, domicile and years of android usage.

The Third objective of the study, associate the level of impact of selfie and psychosocial well-being with selected socio demographic variables

A study conducted in U.S for assessing psychological well-being of undergraduates. The Ryff scale of psychological well-being was used to measure multiple facets of psychological well-being. The results showed that of all 131 participants surveyed, 91 (69.5%) were female students and 40 (30.5%) were male students. Ages of the participants surveyed were mostly 21 years of age with 25 students (18.5%), followed by the age of 20 with 20 students (15.4%). The results also showed that 88 (67.7%) of the students that participated were Caucasian, followed by African Americans with 28 (21.5%). The class levels of the participants 41 juniors (31.3%), followed by 35 (26.7 %,) sophomores. Research also showed that 102 (77.9%) of students were single at the time of the survey, (19.1%) were married and 3 (2.3%) were divorced. One hundred four students did not have children (79.4%), while 27 (20.6%) did have children. For the gender variable, an ANOVA (Analysis of Variance) was conducted with the Ryff six subscale totals as the dependent variable and gender as the factor/dependent variable. ANOVA results indicated that the males and females means for psychological wellbeing as measured by the Ryff scale significantly differed for four of the subscales (personal growth, positive relations with others, purpose in life and self-acceptance) with females scoring higher than males in all the four subscales. ANOVA showed no statistical differences in autonomy and emotional mastery subscales.
ANOVA showed no significant differences between the class levels for all the six subscales of Psychological Well-Being. The participants were first divided into two groups by age 18-23 (traditional) and 24 and above (non-traditional). ANOVA results indicated significant differences in psychological well-being in two subscales (Personal growth and purpose in growth) between traditional and non-traditional students.\(^{(21)}\)

**SUMMARY**

The main aim of this study was to assess the level of impact of selfie on psychosocial well-being among college students at selected college, Puducherry. Descriptive design was adopted and 70 students was chosen using convenient sampling technique based on inclusion criteria. 5 point Rating Scale was used to assess the impact of selfie and Ryff’s psychological well-being scale was used assess to psychosocial well-being among college students.

The data was collected for the period of one week and was analyzed using the descriptive and inferential statistics.

**IMPLICATIONS OF THE STUDY**

The findings of the study had several implications for the field of Nursing practice, Nursing education, Nursing administration and Nursing research.

**Nursing Practice**

In Practice, the Community and Mental Health nurses play a vital role at college students. It is nurse’s responsibility to assure that the college students are more prone to be addicted with selfie and it alters the psychosocial wellbeing. Nurses should be knowledgeable enough to practice and to be trained in handling the students with impact of selfie, it enhances the skill of nurses in educating students, family and teachers regarding psychosocial wellbeing in colleges/university.

**Nursing Education**

Nursing education should emphasize to prepare prospective nurses to impart psychosocial wellbeing in the community. During early adult period they will undergo physical and psychological changes, in which the students will feel difficult to cope up with the changes. So by knowing their problems, nurses can give guidance and counseling to nursing students regarding selfie and its effects.

**Nursing administration**

Students during their early adult period experience lots of problems such as academic problems, psychosocial problems, peer group adaptation and addictions to mobile, whatsapp, facebook, selfie, substances etc. So it is important that the nurse administrator should take initiative to implement mental health program and community mental health program to the college students and motivate them to participate in such activities through Continuing Nursing Education & Journal Club Presentation.

**Nursing research**

There is very less research done to assess the impact of selfie on psychosocial wellbeing among college students. Many researchers can be done in the area of selfie usage and its health effects. The researchers can identify impact of selfie and risk factors on physical and mental health among college students.

**RECOMMENDATION**

- Similar study can be conducted for a larger group of sample and in different settings.
- Similar study can be conducted with nursing students.
- A comparative study can be conducted between boys and girls on impact of selfie among college students.
- A comparative study can be conducted between different professionals.

**CONCLUSION**

The findings revealed that the selfie has a significant impact on psychosocial well-being among college students. They had mild and moderate level of impact of selfie and most of them had good psychosocial well being.

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THE IMPORTANCE OF ETHICS IN PROVIDING THE HARMONY OF TRADITIONAL AND MODERN VALUES

Mukhamedzhanova Lalikhon Ashuralievna
Professor of the Department of Ethics and Aesthetics of the Faculty of Social Sciences of the National University of Uzbekistan named after Mirzo Ulugbek, Ph.D.

ANNOTATION
The article discusses the importance of morality in ensuring the harmony of traditional and modern values, national and Islamic values, the problem of human excellence, as well as the importance of ensuring the harmony of traditional and modern values.

KEYWORDS: Moral values, man and society, national values are good, personal values, freedom, equality, brotherhood.

ВАЖНОСТЬ ЭТИКИ В ОБЕСПЕЧЕНИИ ГАРМОНИИ ТРАДИЦИОННЫХ И СОВРЕМЕННЫХ ЦЕННОСТЕЙ

Мухамеджанова Лалихон Ашуралиевна
Профессор кафедры этики и эстетики факультета социальных наук Национального университета Узбекистана имени Мирзо Улугбека, к.ф.н

Аннотация
В статье обсуждается важность нравственности в обеспечении гармонии традиционных и современных ценностей, национальных и исламских ценностей, проблема человеческого совершенства, а также важность обеспечения гармонии традиционных и современных ценностей.

Ключевые слова
Моральные ценности, человек и общество, национальные ценности - это добро, личные ценности, свобода, равенство, братство.

У каждой нации и народа, больших и малых, есть своя национальная культура и духовность. Духовность, воплощающая в себе духовное богатство наций и народов, сформировавшееся на протяжении многих веков, его обычаи, традиции, нравственные нормы, также является неотъемлемой частью универсальной духовности, а значит, это духовное богатство всех народов мира.

Нравственность - это практическое проявление духовности. Наука, знания, мировоззрение, восприятие и вера уникальным образом отражаются в поведении человека. С другой стороны, человеческая духовность проявляется в нравственных качествах. Духовность - это внутренняя сила, которую можно почувствовать, понять, основанную на разуме, тогда как мораль напрямую относится к духовному отношению...
каждого человека к другим. Следовательно, этические концепции также признаются духовными концепциями. Действительно, мораль - это духовный феномен, который порождает такие духовные концепции, как честьность и справедливость, вера и честность, доброта и милосердие, щедрость и терпимость, сострадание и милосердие, доброта и забота в жизнедеятельности человека.

Действительно, «Нравственность - это проявление уровня духовной зрелости, присущей формам и нормам самоуправления, взаимодействия и взаимоотношений людей, которые существуют как личности в контексте общественных отношений» [1]

Во все периоды моральные отношения между человеком и обществом определялись политическими, правовыми и экономическими критериями. Тем более у народов Востока, в частности, в основе человеческих отношений нашего народа лежат мораль и этика: на основе политических, правовых, экономических отношений преобладают моральные критерии.

У человека образ мышления, способность мыслить сознательно не проявлялись сразу, а прошли несколько стадий. Мышление и мировоззрение - важные факторы, определяющие культурный процесс. Мифы определяют мировоззрение первобытного человека. Мифы, а религия - это первый уровень духовности человека. Первобытный человек освящает любое животное или птицу. Или он может прославить лидера общества, дух его предков, освятить дерево, растение, камень в природе.

Но это еще не религия, а культ поклонения. Когда возникает потребность в нравственной культуре, возникает религия. Даже самая примитивная религия не может быть аморальной. Когда появляется мораль? Важная часть духовности - моральная культура - возникает, когда человек осознает, что правильно и неправильно, хорошо и плохо, правильно и неправильно, и противоречия между этими понятиями.

Хадисы, которые являются вторым по значимости источником ислама и шариата после Корана, также содержат идеи большого духовного значения в вопросе взаимоотношений между человеком и обществом, которые призывают людей к доброте, состраданию, солидарности и дружба друг с другом.

Сборники хадисов, составленные Абу Иса ат-Тирмизи, содержат замечательные идеи, которые побуждают людей проявлять доброту в отношениях друг с другом, то есть поддерживать теплые, уважительные отношения между человеком и обществом: Аль-Адаб аль-муфрад имама Бухари («Шедевры Адаба») также содержит множество хадисов, которые направляют отношения людей в правильном направлении. Например, хадис 220 гласит: «Те, кто делают добро в этом мире, достигнут добра в ином мире, а те, кто делают то, что считается злом в шариате, будут страдать от зла в в ином мире».[2]

Так же, как невозможно найти на планете двух людей, чьи отпечатки пальцев в точности совпадают друг с другом, невозможно найти два народа с одинаковыми национальными ценностями. Ценности - это бесценное благословение, которое на протяжении тысячелетий обеспечивает уникальность каждой нации, народа и народ цивилизации человечества. Ценностные, связанные с жизнью, образом жизни, прошлым, будущим и социальной средой, в которой живут конкретная нация, люди и люди, считаются национальными и исламскими ценностями. Национальные ценности отражают все важные для общества, и охватывает человека - свободу, добро, равенство, мир, истина, просвещение, культуру, материальные и духовные богатства, красоту, нравственные качества, традиции, обычай, традиции и другие.

Национальные ценности - это совокупность идей, выдержавших испытание историей, полностью воплощенных национальные интересы народа, способных соответствовать требованиям современного развития, и их ценность росла на протяжении веков. Хорошо известно, что в истории нет нации или народа, не имеющего собственных национальных ценностей. Примечательно, что такие ценности неразрывно связаны с историей, образом жизни, будущим нации, составляющими ее поколениями, неразрывно связаны с историей, полностью воплощены в совокупность идей, выдержавших испытание временем.

К сожалению, в колониальный период царской России бесценный язык, религия и национально-духовные богатства нашего народа были попранны. За семьдесят лет диктатуры развитие наших национальных ценностей было недопустимым. Напротив, была предпринята попытка привить нашему образу жизни коммунистическую идеологию, полностью противоречащую ценностям нашего народа. Бесценные ценности, обычай и традиции народа попираются, а использование родного языка искусственно ограничивается. Если времена, когда люди боялись жить по национальным традициям и хоронить родственные связи, когда взаимодействие и взаимоотношения между двумя людьми, чьи отпечатки пальцев в точности совпадают, невозможно. Их значение в мировом сообществе.

Всегда было известно, что более нации сохраняет свои национальные ценности и бережно к ним относится, тем выше ее роль, престиж, внимание и ценность в мировом сообществе.

За семьдесят лет коммунистической диктатуры развитие нашего народа было попранны. За семьдесят лет диктатуры развитие наших национальных ценностей было недопустимым. Напротив, была предпринята попытка привить нашему образу жизни коммунистическую идеологию, полностью противоречащую ценностям нашего народа. Бесценные ценности, обычай и традиции народа попираются, а использование родного языка искусственно ограничивается. Если времена, когда люди боялись жить по национальным традициям и хоронить родственные связи, когда взаимодействие и взаимоотношения между двумя людьми, чьи отпечатки пальцев в точности совпадают, невозможно. Их значение в мировом сообществе.


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бесценные ценностя. Благодаря независимости мы осознали свою идентичность, восстановили наше человеческое достоинство, традиции и ценности, нашу священную религию ислама, священные имена и наследие наших великих предков, святых и ученых, нашу гордость и достоинство. Наши праздники, такие как Рамадан Хаит и Курбон Хаит, признаны национальными праздниками в нашем национальном законодательстве. Возрождение праздника Навруз в нашей стране и объявление 21 марта праздником стало крупным светским событием. Такие важные исторические решения - это благородное стремление реализовать вековые мечты нашего народа, восстановить наши национальные ценности. Можно с уверенностью сказать, что с первых лет независимости вопрос о национальных ценностях поднялся до уровня государственной политики. По мере восстановления чистоты духа и традиций наших предков, лучших традиций, последовательно проводились реформы во всех сферах. Духовное наследие национальных ценностей приблизилось к основу нашего национального восстановления. Национальные ценности стали неотъемлемой частью духовности нашего народа, качеством, достойным зависти. К ним относятся национальные ценности нашего народа, такие как честьность, добросовестность, уважение к пожилым людям, уважение к малышам, взаимное уважение между детьми и родителями, между невестой и свекровью. С незапамятных времен наш народ лелеял такие качества, как гуманизм, патриотизм, национализм, скромность, справедливость, честность, порядочность, трудолюбие, гостеприимство, смирение, сострадание, стыд, и передавал их от предков как духовное наследие.

Одна из величайших ценностей узбекского народа, которая существует с древних времен до наших дней и никогда не теряет своего значения, - это высокое уважение родителей к своим детям, их достоинство и уважение. Одна из наших заветных традиций - навещать пожилых людей и получать их благословения накануне юбилеев, праздников и торжеств. Все это служит воспитанию высокодуховного, гармонично развитого поколения, укреплению межнациональной дружбы и солидарности, восстановлению нашего бесценного культурного наследия и национальных ценностей, созданных нашими предками на протяжении веков, и, самое главное, нашего самосознания. Поэтому что наши национальные ценности также имеют большую образовательную ценность, и у нашей молодежи есть способность развивать такие качества, как патриотизм, гуманность, честность и трудолюбие.

По мере развития жизни меняются ценности и так далее. Особенно сегодня, когда под видом «массовой культуры» возникают опасные угрозы, распространяющие идеи моральной разрухи и насилия, индивидуализма, эгоцентризма, направленные на подрыв тысячелетних традиций и ценностей других народов, мы понимаем важность наших национальных ценностей.

Система ценностей, являющаяся выражением национальных ценностей узбекского народа и их взаимосвязанности, формировалась под влиянием исторических рядов нашего народа, современных тенденций, различных социальных и политических процессов. Наши национальные ценности сформировались в связи с особенностями происхождения нации и территории нашего пространства. Социальное развитие братских народов продолжалось неразрывно связано с развитием их национальных и территориальных ценностей. Таким образом, в результате развития уникальных и ярких ценностей нашей нации он сформировал универсальные ценности и развил свои грани. По характеру национальных ценностей он не ограничивается узким кругом, а процветает, обновляется в процессе жизни, обогащается достижениями ценностей других народов. Очевидно, что у каждой нации, этнической группы, племени или нации есть свои традиции. Нецелесообразно измерять конкретные ценности по шкале людей, живущих в другом месте, по другому, или быть оцененными другими в этом вопросе. Чувство универсальности основывается не только на желании уважать, хвастаться и распространять ценности своего народа среди других, но также начинается с принятия и уважения ценностей каждой нации, народа и племени, как они есть. Значение и место ислама в развитии национальных ценностей остается актуальным, он обогатил наше национальное пространство, обогащается достижениями других народов. Наш национальный дух, культурные традиции, образ жизни, образ мыслей обогащается социальными, культурными, экономическими, политическими и другими процессами, обогащается богатством национальных преданий и традиций, которые были нами переданы от предков как духовное наследие.
неразрывной взаимосвязи друг с другом, сформировал уникальную систему национальных ценностей. В этой системе устойчивы ценности, обеспечивающие природно-историческое единство - единая вера, родство, культурная и духовная близость, прошлое и духовное наследие, чувство родины и т.д. Положение христианской церкви играло роль в социальной, политической и моральной культуре стран Европы, Америки и многих других континентов, исламская культура играла роль на Востоке. Ислам - третий и последняя религия в мире, основанная на монотеизме, то есть монотеизме. Эта религия также зародилась на Ближнем Востоке. Ислам распространился не только в арабском мире, но и на Ближнем Востоке, в Иране, Турции, Центральной Азии, Индии, Индонезии, Пакистане, Бангладеше, на Кавказе, в Поволжье, на Балканах, в большей части Африки и сыграл важную роль в истории и культуре этих народов. Ислам, как и его предшественники, не требует социальной реконструкции. Напротив, эта религия учит послушанию, благочестию. Праведник должен следовать иерархии социальной системы. Еще одним важным аспектом исламской культуры является то, что ислам решительно осуждает угнетение, которое является богохульством: «Аллах не направляет пророка на гонения» (Али Имран, 86).[3]

Ценности можно разделить на определенные типы по разным признакам: с точки зрения принадлежности к сферам общественной жизни ценностями являются: материальные; социально-политические, духовные типы. Ценности разделяются на разные типы содержания и охватывают все аспекты жизни. В частности, человек и его жизнь являются высшей ценностью. Глупо говорить о ценности чего-то там, где нет человека. Поэтому уважение человеческого достоинства, улучшение жизни, развитие образования и культуры, защита здоровья, защита жизни - основные направления нашей государственной политики.

Формировать моральные ценности в сознании студентов:
1. Прививать понятие уважения и любви к Родине и родителям в широком смысле;
2. Создание представлений о долге, совести, честности;
3. Расширение понятия дружбы. Социально-политические ценности занимают особое место в жизни человека. Свобода, равенство, братство всегда уважались и ценились человечеством. Свобода человека, его слава и достоинство - высшие ценности нашего общества. Конституция Республики Узбекистан гласит: «Республика Узбекистан основана на демократии, универсальных принципах, согласно которым человек, его жизнь, свобода, честь, достоинство и другие неотъемлемые права являются высшей ценностью. Демократические права и свободы защищены Конституцией и законами » [4].

Ценности делятся на национальные, региональные и универсальные в зависимости от области применения. Представление человека о том, к какой национальности он или она принадлежит,- это не просто идеи, но и эмotions. Если у человека нет национального самосознания и гордости, трудно представить, что он поймет свои национальные ценности, если не почувствует себя принадлежащим к какой-либо нации. В то же время мы все осознаем другую истину. Только по-настоящему просвещенный человек может беззаветно понять достоинство человека, ценности нации, словом, жить в свободном и свободном обществе, самоотверженно бороться за то, чтобы наше независимое государство заняло достойное место в мировом сообществе. Каждое государство, каждая нация сильна не только своей подземной культурой и наземными природными ресурсами, но также своей высокой культурой и духовностью, прежде всего своей военной мощью и производственным потенциалом. Чтобы понять значение такого богатства, достаточно вспомнить слова генерал-губернатора царской России в Туркестане М. Скобелева: «Вам не нужно уничтожать нацию, чтобы уничтожить ее, если вы разрушите ее культуру, ее искусство, ее язык, она скоро придет в упадок” Региональные ценности представляют собой совокупность природных и социальных явлений, которые служат интересам народов, экономика, культура, история, язык, религия, обычаи и традиции которых являются общими. Сама жизнь требует, чтобы наши народы, которые долгое время вдохновлялись духовным климатом, были более близкими и сострадательными в нашей истории, особенно в нынешний ответственный период, который требует ума, интеллекта и смелости, светского потенциала и национальной гордости. Универсальные ценности глубже и шире по содержанию, чем национальные и региональные, и имеют универсальное значение. Универсальные ценности соответствуют целям и целям всех наций, народов и народов мира. В набор общечеловеческих ценностей входит универсальное, которое связано с развитием человеческой цивилизации. Наиболее важными из них являются развитие науки на Земле, поддержание мира, прекращение гонки ядерных вооружений, международная безопасность, предотвращение различных заболеваний, охрана природы, искоренение бедности и неграмотности,
поставка промышленного сырья, материалы, энергия и пища, всеобщая и проблемы с освоением ресурсов мирового океана. Эти богатства служат человечеству с момента его зарождения. Когда до Рождества Христова Афинская демократия находилась в кризисе, греческие философы подняли вопрос о ценности. Впервые в истории общественно-политического, юридического мышления они показали, что «человек - высшая ценность», выступили за измерение всех сторон мироздания по «критерию человечности». Великий мыслитель Сократ спросил: «Что такое ценность?» на вопрос «каждый понимает свою идентичности». По характеру национальных ценностей он не ограничивается узким кругом, а процветает, обновляется в процессе жизни, обогащается достижениями ценностей разных народов. Очевидно, что у каждой нации, этнической группы, племени или нации есть свои традиции. Нецелесообразно измерять конкретные ценности по шкале людей, живущих в другом месте, по-другому, или быть оцениваемыми другими в этом вопросе. Чувство универсальности основывается не только на желании уважать, хвалиться и распространять ценности своего народа среди других, но также начинается с принятия и уважения ценностей каждой нации, народа и племени, как они есть и находятся.

Социальные привычки играют особую роль в регулировании и управлении человеческим поведением. Повторение моральных шаблонов укрепляет интуицию человека и становится для него привычкой. Помимо различных образовательных методов, национальные традиции также играют важную роль в регулировании поведения и этнитка человека. Это основа для создания духовного образа. Проживающие в нашей республике представители разных национальностей прошли трудный и яркий путь развития, оставаясь верными национальным и исламским ценостям. Гостеприимство, братство, дружба и преданность, присущие нашему народу, являются основой всеобъемлющей солидарности.

Социально-экономический, культурный и политический прогресс в нашей стране, мир и спокойствие на основе взаимной толерантности, упорная борьба за стабильность, толерантность и свободу совести, восстановление нашего духовного наследия, уважение к национальным и исламским ценностям, шаг за шагом. Шаги прогресса всегда обычно. осуществлялась на основе интеграции интересов. С первых лет независимости на каждом шагу чувствуется, что самым большим препятствием на пути развития нашей республики является идейологический разрыв. Сегодня в нашем обществе на основе человеческого совершенства, гармонии национальных и исламских ценностей создаются здоровая окружающая среда и широкие возможности для того, чтобы наша молодежь нашла свое место в жизни. Религиозные ценности, основанные на национальности, прививаются детям в школах, лицеях, профессиональных колледжах и университетах. Однако не секрет, что религиозное невежество также способствует росту аморальности, безразличия к родителям, неуважения к взрослым и эгоизма, особенно под влиянием «массовой культуры». Исходя из вышеизложенного, для воспитания в сознании молодежи гармонии национальных и исламских ценностей важна реализация следующих задач:

- прививать молодежи не только светские знания, но и благородные ценности национальных и религиозных знаний;
- обогащение обычных, традиций и обрядов, основанных на национальных ценностях, новыми ценностями, сформированными в период независимости;
- прививать нашей молодежи гармонию национальных и исламских ценностей с помощью работ, видео, шоу, передач и мероприятий, пропагандирующих такие понятия, как честность, толерантность, национализм, патриотизм, мораль, преданность науке и Родине;
- эффективное использование духовного и научного наследия мыслителей Среднеазиатского Возрождения, терпеливых достижений наших джадидов в духовном обновлении общества;
- Проведение мероприятий в сотрудничестве с семьями и образовательными учреждениями по анализу важности национальных ценностей в обществе;
- Объясняя молодежи, что сама жизнь является величайшей ценностью на основе сочетания образования и воспитания, целесообразно разрабатывать методы и инструменты для достижения всех поставленных целей только в том случае, если человек физически и духовно здоров.

В контексте духовного обновления общества при определении перспектив формирования у молодежи национальных и исламских ценностей целесообразно руководствоваться следующими принципами:

- Уникальность и гуманность узбекских национальных ценностей;
- то, что национальные ценности выдержали испытание веками;
- Повышенное внимание к гармонии национальных и исламских ценностей;
- привязанность религиозных ценностей к национальным ценностям;
- уточнение национальных ценностей в процессе общественного развития;
- гармония образования и воспитания рассматривается как ценность;
- человек - высшая ценность;
- Уважение к духовному наследию как к ценности и так далее.

Таким образом, национальное развитие требует постоянного определения потребности в ценностях, диалектического подхода к национальным и исламским ценностям.

В заключение можно сказать, что наши национальные и исламские ценности передавались из поколения в поколение на протяжении веков, и сегодня они являются еще более важными и нашей гордостью. Он имеет такие бесценные ценности, оттачивался веками, много видел, сегодня дышит воздухом свободы, осознает свое достоинство, человеческое достоинство, наследие великих людей, самореализацию, восстанавливает национальную гордость, занимает достойное место в мире на международной арене. Наши люди, которые растут, верят в свои силы и будущее, стремятся к благополучию своей страны и будущему своих детей, будут и дальше добиваться еще больших высот.

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INFLUENCE OF ELECTRON WARMING UP ON MAGNETIC RESISTANCE IN ELECTRIC AND QUANTUM MAGNETIC FIELDS

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ABSTRACT

The influence of heating of current carriers in electric quantizing magnetic fields on the magnetoresistance of a semiconductor is investigated. It was found that the magnetoresistance is directly proportional to B and inversely proportional to E. When the electrons are strongly heated, the magnetoresistance decreases significantly. Heating of current carriers in an electric and quantizing magnetic field leads to a change in the current-voltage characteristic of the semiconductor.

KEY WORDS: Quantizing magnetic field, magnetoresistance, heating of current carriers, oscillation phenomena, density of states.
При воздействии квантующее магнитное поле в полупроводнике появляется зависимость от магнитного поля скорости релаксационных процессов в электронной и фононной подсистемах. Разогрев носителей тока в электрическом и квантующем магнитном полях приводит к существенному изменению многих физических свойств полупроводников. Проявляются также качественно новые свойства зависимости электропроводности от электрического поля, нелинейные гальваномагнитные явления и т.д. [3 – 5].

2. Температура электронов в электрическом и квантующем магнитном поле.

Энергия, получаемая электронами от внешнего электрического поля, благодаря большой частоте межэлектронных столкновений быстро перераспределяется между ними. Из-за медленной передачи энергии от электронов к решетке возникает разогрев электронной системы. Поскольку дрейфовый импульс электронов релаксирует обычно значительно быстрее, чем их энергия, то частные межэлектронные столкновения в этих условиях обеспечивают максвелловскую форму функции распределения, но с эффективной электронной температурой \( T_e \) отличающейся от температуры решетки.

Эффективной электронной температуре при наличии квантующего магнитного поля \( B_z \), ортогонального электрического \( E_y \) и холодового поля \( E_y = 0 \) при \( \hbar \omega_c \gg kT_e \) получаем [4]:

\[
T_e = T \left[ 1 + \frac{1}{2} \left( \frac{cE\lambda}{kT} \right)^2 \left( \frac{kT\lambda}{\hbar s} \right)^2 \right] = T \left[ 1 + \frac{1}{2} \left( \frac{cE}{Bs} \right)^2 \right]
\]

где \( T \) – температура решетки, \( C \) – теплоемкость электронов, \( \lambda \) – магнитная длина \( \lambda = \left( \frac{c\hbar}{eE} \right)^{1/2} \), \( s \) – скорость звука. Оттуда видно, что разогрев может быть значительным даже в слабом электрическом поле \( eE\lambda/\bar{E} << 1 \), если рассеяние электронов решеткой является квазиупругим, т.е. \( (\hbar s/\lambda \bar{E} << 1) \). В случае низких концентраций электронов межэлектронным рассеянием можно полностью пренебречь (где, \( \bar{E} \) – средняя энергия электрона). Оказывается и в этом случае, параметр \( eE\lambda/\bar{E} \) мал и рассеяние электронов фононами является квазиупругим \( (\hbar s/\lambda \bar{E} << 1) \).

В случае высоких концентраций электронов можно вводить понятие эффективной электронной температуры \( T_e \). Для нахождения ее составим уравнение баланса энергии, приравняв джоулеву мощность:

\[
I_z E_z = \sigma_{zz}(T, T_e, B) E^2
\]

Отсюда следует выражения для продольной электропроводности и электросопротивления

\[
\sigma_{zz} = \frac{n_z e^2}{m} \tau(T, T_e, B) \equiv \rho_{zz}^{-1}
\]

Из этого видно, что джоулева мощность растет с разогревом электронов быстрее, чем мощность, передаваемая решетке, поэтому возможна перегревшая неустойчивость.

В случае низких концентраций электронов при наличии квантующего магнитного поля \( E \) | \( B \) рассматривался в монографии [4]. Полученные результаты для всех квазиупругих механизмов рассеяния сводятся к тому, что область квадратичного отклонения от закона Ома оказывается аномально малой. В области больших значений энергии приводят к так называемому эффекту «убегания» электронов, где становятся существенными сильно неупругие столкновения, которые и стабилизируют функцию распределения электронов, разогретых сильным электрическим полем.

3. Влияние горячих электронов на магнитосопротивление.

Квантующее магнитное поле резко уменьшает отношение частоты межэлектронных столкновений \( \nu_{\text{אמנות}} \) к частоте электрон-фононных столкновений \( \nu_{\text{фонон}} \). Это происходит потому, что при невырожденной статистике электронов заполняется преимущество наименьший уровень Ландау, тогда как все прочие уровни содержат экспоненциально малое число электронов (предполагается, что энергия циклотронного кванта носителя \( \hbar \omega_c \gg kT \). В такой ситуации частota столкновений между электронами, квантовые
состояния которых принадлежат различным уровням Ландау, становится экспоненциально малой. Столкновения между электронами основной группы, находящимся на наименьшем уровне Ландау, вследствие одномерности движения становится упругими, не изменяющими состояние системы и не могут вносить вклада в межэлектронную релаксацию. Подавление межэлектронного рассеяния квантующим магнитным полем сильно снижает эффективность перераспределения электронов по квантовым состояниям, что приводит к существенному изменению вида функции распределения носителей. В случае максвелловской статистики с увеличением концентрации электронов частота межэлектронных столкновений возрастает и может превысить частоту столкновений электронов с фононами.

Перейдем к рассмотрению случая, когда холловский ток \( \mathbf{I} = 0 \), а \( \mathbf{E} \neq 0 \). Джоулева мощность в квантовом пределе описывается формулой

\[
IE = \frac{n_e m^*}{2\pi} \left( \frac{eE}{B} \right)^2 \frac{\sigma_{xx}^2}{\sigma_{yy}^2} \left( \frac{T}{T_e} \right)^3
\]  
(4)

где \( \omega^2 = \frac{4m_e e^2}{m^*} \). Приравнивая \( IE \) из (2) мощности передаваемой решетке также в квантовой пределе и находим уравнение баланса энергии в виде [2]:

\[
\frac{e^3 n_e^2}{2m^2 \omega^2} \frac{1}{\sigma_{xx}^2} \left( \frac{eE}{Bs} \right)^2 = \left( \frac{T}{T_e} \right)^2 \left( 1 - \frac{T}{T_e} \right)
\]  
(5)

где \( n_e \) - концентрация электронов и равно:

\[
n_e = n_0 \exp \left( - \frac{\left( N + \frac{1}{2} \right) \hbar \omega_e}{kT_e} \right)
\]  
(6)

\( n_0 \) - концентрация электронов на уровне Ландау \( N=0 \), практически равная при достаточно больших значениях \( \hbar \omega_e / kT_e \) концентрация электронов \( n_e \).

При \( \frac{e^3 n_e^2}{2m^2 \omega^2} \frac{1}{\sigma_{xx}^2} \left( \frac{eE}{Bs} \right)^2 \ll 1 \), что соответствует малым \( E \), имеется два положительных решения. Первое решение описывает разогрев электронов при увеличении \( E \) следующем виде:

\[
\frac{T}{T_e} = 1 - \frac{e^3 n_e^2}{2m^2 \omega^2} \frac{1}{\sigma_{xx}^2} \left( \frac{eE}{Bs} \right)^2
\]  
(7)

А второе решение приводит при \( E \to 0 \) к \( T_e \to \infty \). Это решение является следствием снижения скорости передачи тепла от электронов к решетке с ростом \( T_e \) и указывает нарушение баланса энергии при сильном разогреве электронов.

Из (7) можно найти магнетосопротивление полупроводника при разогреве электронов:

\[
\rho_{xx} = \frac{\sqrt{2} \pi m e \omega_e}{e^3 n_e} \left( \frac{B_s}{eE} \right) \left[ 1 - \frac{T}{T_e} \right]
\]  
(8)

Поставляя в (6) на (8) получаем выражения влияния разогрева электронов на магнетосопротивления полупроводника.
\[
\rho_{xx} = \frac{\sqrt{2}e^2n_0}{e^2n_0} \left( \frac{B_e}{cE} \right) \sqrt{1 - \frac{T}{T_c}} \exp \left( - \frac{\left( N + \frac{1}{2} \right)h\omega_c}{kT_c} \right) \]  
(9)

Отсюда видно, что магнетосопротивление прямо пропорционально на \( B \) и обратно пропорционально на \( E \). При сильном разогреве электронов магнетосопротивление значительно уменьшается.

4. Заключение.
Исследовано влияние разогрева носителей тока в электрическом и квантующем магнитном полях на магнетосопротивление полупроводника. Установлено, что магнетосопротивление прямо пропорционально на квантующем магнитном поле \( B \) и обратно пропорционально на электрическом поле \( E \). При сильном разогреве электронов магнетосопротивление значительно уменьшается.

Разогрев носителей тока на электрических и квантующих магнитных полях приводит к изменению вольт-амперной характеристики полупроводника. Прежде всего зависит от механизмов релаксации носителей тока, определяющих зависимость \( \sigma_{xx} \) от \( T_c \). При разогреве дюоулеева мощность растет пропорционально \( \left( \frac{T}{T_c} \right)^3 \), а мощность передаваемые электронами фононам, убывает с ростом \( T_c \).

Поэтому электрических полях превосходящих некоторое критическое значение баланс энергии невозможен. Система теряет устойчивость при разогреве, который снимает орбитальное квантование электронов магнитным полем. Из этого может изменятся вольт-амперная характеристика полупроводника.

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THE IDEA OF TOLERANCE IN ISLAMIC SOURCES

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ANNOTATION
This article analyzes religious teachings such as the worship of the Highest, peace and harmony between people, conscientiousness and honesty, purity and honesty play an important role in life not only in the life of the individual, but also of all strata and society as a whole.
KEYWORDS: religion, origin, people, profess, nation, denomination, idea, charity, principle, tolerance, view, religious studies, formal.

ИДЕЯ ТЕРПИМОСТИ В ИСЛАМСКИХ ИСТОЧНИКАХ

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Аннотация
Этот статье анализируется религиозных учений, такие как поклонение Всевышнему, мир и согласие между людьми, добросовестность и честность, чистота и честность играют важную роль в жизни не только в жизни отдельной личности, но и всех слоев и общества в целом.

Аннотация
Ushbu maqolada, Allohga sajda qilish kabi diniy ta’limotlar tahlil qilinadi, odamlar o’rtasida tinchlik va totuvlik, yaxshi niyat va halollik, poklik va halollik individual hayotida nafaqat muhim rol o’ynahsi balji butun jamiyat va barcha insonlarga oid bo’lgan qarashlar ko’rilgan.
Kalit so’zlar: Din, kelib chiqishi, xalqi, etiqod, millat, din, g’oya, rahm-shafqat, printsip, bag’rikenglik, ko’rish, dinshunoslik, rasmiy.
Ключевые слова
Религии, происхождение, народ, исповедовать, нация, конфессия, идея, милосердия, принцип, толерантность, зрения, религиоведения, формаль.

Несмотря на то, что религии имеют одинаковое происхождение, народы мира могут исповедовать разные религии, и даже представители одной нации могут принадлежать к разным конфессиям. Во многих религиозных учениях приоритет отдается идеям мира и добра, человеколюбия и милосердия. Все это лежит в основе принципа толерантности, который преобладает между представителями разных религий. Заслуживает внимания следующее суждение профессора А.Хасанова: «С точки зрения сравнительного религиоведения
существует два типа толерантности, резко отличающиеся друг от друга: формальная, то есть внешняя толерантность, и внутренняя — позитивная толерантность. Точно так же есть две формы нетерпимости: внешняя и внутренняя нетерпимость. Формальная толерантность — это простая терпимость к религиозным убеждениям другого человека, а не борьба против его или ее убеждений. Внутренняя (позитивная) толерантность требует хорошего знания других религий при условии прочности своих религиозных вероубеждений. Следовательно, положительная толерантность — более широкая, точная и жизненно важная необходимость. [4, стр. 89]

Религиозная толерантность означает, что, несмотря на существующие идеологические различия в убеждениях разных религий, они живут в гармонии и согласии. Каждый имеет право на свободу убеждений и признает право другого исповедовать свою религию. В этом отношении религия ислам проявляет наибольшую терпимость по отношению к другим религиям. Как правильно отмечали А.Саидов и А.Джулджаев, «Ислам — это религия большого терпения и компромисса, даяющая право каждому исповедовать свою религию» [5, с. 102].

Ислам с первых дней своего существования проявил себя как религия толерантности. Среди мировых религий только ислам четко провозглашает свободу вероисповедания: в аяте 256 суры аль-Бакара говорится: «Ла икхра фад-дин» — «Нет принуждения в религии». Кстати, враги ислама даже пытались «хулить» Коран, цитируя этот и два других аятов в следующем порядке: 1. «Да сгинут же, кто не уверовал!» (23:44); 2. «Нет принуждения в религии» (2: 256); 3. «Кто хочет, пусть верует, а кто не хочет, пусть не верует» (18:29). Между тем, если учесть причины и хронологию откровения этих аятов, то нет терпимости, а именно: 1. «Нет принуждения в религии»; 2. «Кто хочет, пусть верует, и кто не хочет, пусть не верует». 3. «Да сгинут же, кто не уверовал!», то тогда становится вполне очевидным их «диалектическая согласованность и взаимодополняемость». [4, с. 94].

Идеи религиозной толерантности, которые содержатся в исламских источниках и ценностях, разработанных на основе Корана, хадисов, “иджма” и “каяс”, в течение веков сыграли важную роль в социальной и духовной жизни мусульманских народов, особенно узбекского народа. Действительно, принципы религиозной толерантности выражаются в контексте доктринальных, социально-правовых, идеологических, духовно-нравственных предписаний ислама. В Коране есть много аятов, в которых говорится, что для людей естественно отличаться друг от друга и принадлежать к разным национальностям и религиям, но это не может быть причиной вражды, раздоров и войн между ними: «О люди! Воистину, Мы создали вас мужчинами и женщинами, сделали вас народами и племенами, чтобы вы знали друг друга, ибо самый уважаемый Аллахом среди вас — наиболее благочестивый. Воистину, Аллах — знающий, сведущий» (Сура 49 Комнаты, 13-аят). Действительно, человечество, состоящее из разных народов, наций и народов, живущее в Узбекистане не только для того, чтобы узнать друг друга, но и для того, чтобы жить в равенстве, гармонии, сотрудничестве и с одинаковыми правами и возможностями. Все это является płodom справедливой политики в межнациональных отношениях, которая проводится в нашей стране.

Тот факт, что исламский принцип ненасилия, не допущения притеснений и угроз в религии реализуется в различных сферах общественной жизни в Республике Узбекистан, используется в обеспечении мира и согласия в этических и межнациональных отношениях, имеет прочную правовую основу и является одним из приоритетов государственной политики.

«Каждому из вас мы установили [различные] законы веры и предписания. Если бы захотел Аллах, то он сделал бы вас одной общиной [верующих], однако [Он не сделал], чтобы испытать вас в том, что вам даровал. Так старайтесь же превозмогать друг друга в добрых деяниях. К Аллаху всем ваш возвращение, и поведет Он вам [истину] о том, в чем вы были не согласны друг с другом». (Сура 5 Трапеза, 48-аят). В нашей стране мирно живут люди разных национальностей и вероисповеданий. Благодаря разумной и справедливой политике, проводимой нашим государством, наш народ с честью выдерживает испытания Аллаха.

Согласно Корану (30:22), различия в языке и цвете кожи людей относятся к знамениям (чудесам) Бога для тех, кто размышляет. Коран пропитан духом терпимости в вопросах национального и
религиозного разнообразия и свободы религии. В целом, сотни аятов в более чем 50 сусах Корана призывают мусульман быть смиренными и терпеливыми, толерантными по отношению к другим вероисповеданиям. 

Мусульмане нашей Родины придерживаются мазхаба имама Аагазма (Абу Ханифы), относятся к направлению “Ахль ас-Сунна ва’ль-Джама’а”, беспрекословно следуют учению Посланника Аллаха Мухаммада (Да благословит его Аллах и приветствует). В основе всего этого лежит политика государства Узбекистана, направленная на развитие духовности и просвещения, на достижение конкретных целей и перспектив, на обеспечение интересов нашего народа. 

Хадисы, которые являются одним из основных источников ислама, также содержат глубокие идеи и указания о том, что ненависть и уважение людей других религий, особенно убеждений, являются большим грехом, независимо от его национальности или религии: 

Наш Пророк (мир ему) утверждал: «Самый лучший ийман (вера) — терпение и мир, и самым малым из них считается то, что эти качества входят в состав веры, которая является столпом ислама. Этим преданием смирение и терпение возводятся до уровня фарда (обязательного условия для мусульман). 

Существуют хадисы об отношении к представителям других вероисповеданий в мусульманском мире: «Кто был принят в другую веру, и его враг, и моя вражда будет в День воскресения», «Кто был принят в другую веру, и его враг, и моя вражда будет в День воскресения». Тот факт, что Мухаммад (мир ему и благословение Аллах) считал уважение иноязычных или неверующих важным напоминанием о мире сердца и мира сердца. Если человек не замечает своих недостатков, он замечает их у других. Если человек обвиняет других в тех грехах, в коих он сам грешен, и смеется над этим; если он обидел своего собеседника».

В исламе разработана правовая база религиозной толерантности и компромисса (муроса), которая в течение столетий играла важную роль в истории нашего народа. В частности, согласно мусульманскому праву, гражданину немусульманского государства, который пришел в мусульманское государство по коммерческим или другим причинам, также должна быть гарантирована безопасность при поездках в другие немусульманские страны. Эти и аналогичные правовые законы, относящиеся к религиозной терпимости, разработаны в Кодексе мусульманского законодательства “Хидая”, разработанного великим нашим предком Борханидидиным Маргани. Эти религиозные правовые основы веками служили опорой для установления мира, социально-экономических и торговых отношений между мусульманскими и немусульманскими странами. В то же время они способствовали укреплению и развитию доверия, дружбы и религиозной терпимости между разными странами и народами.
За годы независимости в нашу жизнь начали проникать иные идеи религиозной нетерпимости, политические силы и религиозные движения, которые противоречат принципам религиозной толерантности и вмешиваются в мирную жизнь нашего народа. Международный терроризм и экстремизм по сей день остаются серьезной проблемой, реальной угрозой для всего человечества. В этом контексте правительство Узбекистана неуклонно проводит политику религиозной толерантности. По инициативе Президента Республики Узбекистан Шавката Мирзиёева Генеральной ассамблеей Организации Объединенных Наций 12 декабря 2018 года была принята резолюция “Религиозная толерантность и просвещение”.

На земле Узбекистана дух религиозной толерантности и взаимного уважения между людьми разных веросповеданий имеет долгую историю и традиции, которые могут служить примером для всего мира. Важная задача, стоящая перед философами, религиоведами – углубить изучение тысячелетнего опыта Узбекистана в области религиозной толерантности и продвигать его в глобальном масштабе. Для этого есть все политические и духовные возможности.

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BUILDING TOLERANCE IN A GLOBALIZED SOCIETY

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ANNOTATION
Today we live at a historical stage of human development, in which there are sharp turns. The problem of conflicts of modern international relations covers almost all processes. The resolution of conflicts with different substantive bases is possible by changing the configuration of the corresponding spaces, which must be taken into account in each specific case. Tolerance as such is a characteristic of the way of communication or the conflict culture of subjects who occupy different ideological positions. Manipulations of the population’s consciousness led to antagonism and aggressiveness. One of the causes of terrorism in the modern world is manipulation in the cultural space of resource-bearing entities pursuing corporate goals. A fundamental solution to the problem of the conflict of the modern world is possible due to an adequate understanding of the formation of the information society and the corresponding reform of the space of subjectivity and resourcefulness on a global scale.

KEYWORDS: Tolerance, society, conflict, culture, information society

DISCUSSION
Today we live at a historical stage of human development, in which there are sharp turns. In the following years, dramatic geopolitical changes took place on Earth, which disrupted the system of security and stability on an international scale. The rapid movement of global processes not only fuels the capabilities of humanity, but also exacerbates conflicts, leading to a widening gap between developed and backward countries. As a result, there are various actions that undermine peace and stability, having a transnational nature in essence and scale [8, p. 33].

The problem of conflicts of modern international relations covers almost all processes. At the beginning of the twenty-first century, the most powerful power in the Western world had to openly resolve the conflict with elusive phantoms of another culture, which are even difficult to interpret adequately [1, p. 27].

The formal definition of "terrorism" expresses, at best, only one odious aspect of the implementation of conflict actions. The semantic and substantive part of the problem escapes the attention of researchers and politicians: we do not know what such a sharp reaction of many organizations and people is; we do not know what, what challenge these people, who are called terrorists, are so terribly responding to. And if the world community is not clear about the content of the phenomenon, the fight against its negative consequences is unlikely to be successful, political institutions will not be able to control the process, and the consequences of such conflicts may be the most unexpected. The first problem, without solving which it is difficult to talk about the conflicts of the modern world in a theoretical form, relates to the interpretation of the conflict space. This problem is incredibly complicated: we can distinguish at least three levels of substantial sources of conflictogenicity, which, moreover, are intertwined in the most bizarre way. By the three substantial foundations we mean in this case the contradictions of the pre-industrial, industrial, and post-industrial cultures. The substantiality of the good-industrial society was modified in the industrial society, which gave rise to its contradictions. In the modern post-industrial society, these two substantial sources of conflict are moving to a new level, driving almost to a dead end all attempts to resolve conflicts of a significant nature. For example, the conflict-prone nature of relations between the East and the West is both industrial and post-industrial. Within Uzbekistan, we can also distinguish the conflict spaces of quasi-industrial, post-quasi-industrial, and post-industrial types [5, p. 66].
The resolution of conflicts with different substantive bases is possible by changing the configuration of the corresponding spaces, which must be taken into account in each specific case. Otherwise, complex conflicts turn into a cultural black hole, in which resources, representatives of different elites, a significant part of the population of those regions that are involved in conflicts, and much more disappear. The modern conflict space has received a very complex configuration, which expresses the content of many very different processes of a global, regional and sub-regional nature.

The author's rooted position is that the interpretation of the conflict spaces of the modern world will be adequate only if we proceed from an understanding of the trends of post-industrial development. The main trends of this nature include: the globalization of culture with all subcultural processes; the dominance of Western centrism in the modern political and cultural mentality; the lack of a satisfactory ideology of the formation of the information society, and a number of others. The situation of modern Uzbekistan allows us to conclude that the inability to align the configuration of the economic space in the market meta-space leads to a natural unfolding of the political orientation of the cultural space. For example, at present, the policy of the world is aimed at turning it into a sub subject of the political space shared with the United States: confrontation and quasi-partnership can turn into a conglomerate integrity. Such integrity, with visible positivity, cannot but lead to an escalation of conflict in Uzbekistan due to an increase in political resources, which will allow us to preserve the negative state of our life, for example, a low standard of living, the separation of the elite from the population, etc. [2, p. 751].

This contradiction can be resolved only if the situation of the post-industrial crisis is understood, from which the information culture of a global nature is still spontaneously developing, and the corresponding ideology of an integrative nature begins to develop. For Uzbekistan, this contradiction can be resolved through an adequate understanding of our real situation, and not by attempts to implement a liberal transit or post-communist modification of consciousness. The current state of consciousness is such that it is almost impossible to distinguish between heroes and terrorists: passionary gets a spontaneous embodiment and, with the difficulty of subjectification, falls into the category of deviance of an anti-legal nature. In the practical sphere of activity, in this state of understanding conflict, the question of compliance with the proportionality or, if you want, the adequacy and correctness of relations between actors of different orientations in the formation of the communicative space becomes fundamental. The set of these problems includes the problem of tolerance of consciousness. Tolerance as such is a characteristic of the way of communication or the conflict culture of subjects who occupy different ideological positions. The opposite of tolerance in this sense will be antagonism or ideological intolerance. The nature of relations in the space of tolerance goes back to the dialogic mode of communication in ancient philosophy and rhetoric. As you know, the thesis and the antithesis in the process of dialogue communication are modified in such a way that it becomes possible to find a convention - a common position of the participants in the dialogue or to achieve the truth, meaning the coincidence of thought with the subject. Eristic communication is not aimed at creating a common intellectual product, but at winning the polemic of one of the parties by proving one's own truth or suppressing the opponent by normative or non-normative means of communication. Depending on the properties of the culture in which communication is carried out, the latter may correspond to the norms of antagonism or tolerance. For example, the ideological antagonism of inter-confessional, inter-racial, ethno-national, political, party and other forms of communication is well known. The development of democracy, liberalism, pluralism, equality and other forms of relations in a post-verbal society has led to the formation of a "tolerant" way of communication in Western culture, which allows at least to listen to each other to the parties to the discussion. At the same time, tolerance is difficult to interpret in a rigid way, so the form of this category is used mainly in psychology. We can say that tolerance can only exist in the space of trust or legitimacy. Outside of confidential communication, tolerance can turn into anything, up to criminal ideological treason. We can distinguish two forms of communication in the space of tolerance: equal-subject and different-subject [6. p. 20].

Equal-subject tolerance is natural and transparent: its implementation requires a convention that defines the common goals and form of interaction, as well as a synthesis of theses or resources that is adequate to achieve the goal set by the participants in the interaction. In the case of multi-subject communication, tolerance takes on a complex, contradictory character: the different status of subjectivity of communication participants and, in particular, the inequality in terms of resources make the communication system unbalanced. Traditionally, the dominant subject tends to form a goal-motivational space and extend its own interests to the space of the sub-subject. Even when the communication is of a proportionate nature, it psychologically and statuusy threatens the sub-subject with a reduction in his space, which is usually perceived painfully and sharply reduces the tolerance of the sub-subject. Based on our position, the
condition for tolerant interaction in multi-subject conditions will be a legitimate understanding of the processivity in a common space for communication participants with a conventional definition of all the parameters of the latter. Moreover, an adequate approach to the interpretation of the communicative space is very important, which can be considered a culture of tolerance. Post-industrial or information culture, which is presented to us in a crisis, emerging form, significantly increases the number of conflict-related aspects and limits the space of tolerance. We see a standard situation for people: everyone expects tolerance from a partner, but treats their position with incredible "trepidation", at the first opportunity turning to anger or "offended" restoration of violated rights [7, p. 32].

This situation is associated with many circumstances, first of all, with the entrenchment of liberal stereotypes in the mentality, in particular, the stereotype of equality, on the one hand, and the blatant real inequality of cultures, societies, countries, and people, on the other. The experience of global culture and the unconscious push people to understand the fact that the space of public resources is growing at breakneck speed, but because of the continuing diversity of subjects, this growth for most people on the planet means not the acquisition, but the loss of resources. Where is the guarantee that the wave of terrorism is not caused by a sense of destruction of the usual way of life due to the unrestrained and unilateral pressure of man-made, inhumane Western aggression? If we look at the situation in Uzbekistan, we will see the mentality of the people, whom the authorities over the past century have involved in a series of wars and revolutions that have brought death, grief and suffering to the population of several generations. At the same time, each new government, with the "naivety" of virgins, promises the population to create conditions for a decent life in exchange for the right to turn the population of Uzbekistan into a resource of the state. In this situation, tolerance can only be speculative and ideologized, representing another way of deceiving people. Tolerance in Uzbekistan can only be discussed if there is a conventional understanding of the communicative situation. If we take the traditional basis of "survival" for Uzbekistan as the basis of tolerance, then this should be done together, and not by concentrating resources in the elite sphere due to the total deprivation of the main part of the population. For this reason, killed the tsarist government and socialism. Such a scenario, except for the tolerance of hard labor, cannot give any tolerance. Thus, at the theoretical level, an adequate understanding of the communicative space and equality in the distribution of subjectivity and resources can serve as a condition for the development of tolerance. Ideologically, tolerance can take root on the basis of legitimacy.

Pseudo-tolerance can arise and disappear, acting as one of the ideologies that change each other in time. Manipulations of the population's consciousness led to antagonism and aggressiveness. One of the causes of terrorism in the modern world is manipulation in the cultural space of resource - bearing entities pursuing corporate goals. A fundamental solution to the problem of the conflict of the modern world is possible due to an adequate understanding of the formation of the information society and the corresponding reform of the space of subjectivity and resourcefulness on a global scale.

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FAMILY THEME IN MODERN WOMEN'S PROSE

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ТЕМА СЕМЬИ В СОВРЕМЕННОЙ ЖЕНАСКОЙ ПРОЗЕ

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Аннотация: В данной статье рассматривается тема семьи в современной женской прозе, изучается проблемы решения этой темы в произведениях современных писательниц.

Ключевые слова: женская проза, семья, современная литература, писательница, мысль семейная.

Отличительной чертой современного литературного процесса является современная женская проза. Появление на литературном горизонте столь ярких и разных писательниц, как Людмила Петрушевская, Татьяна Толстая, Виктория Токарева, Людмила Улицкая., сделало актуальным вопрос о том, что такое «женская литература», стоит ли вообще выделять ее из всей совокупности литературных произведений. Критик Т.Морозова считает, что «женской литературе принадлежит будущее, а может быть, уже и настоящее». Возникают споры по поводу самого термина «женская литература», звучит вопрос о том, стоит ли литературо делить по «половому признаку». Последние десять лет не умолкают дискуссии о современной женской прозе, активно заявивший о себе в конце 1980-х годов. Проблема женской литературы, как и вообще положение женщины в современной обществе, вызывает повышенный интерес. Один исследователи серьезно занимаются этой проблемой, другие склоняются, что концепция "женская литература" надуманное и не имеет под собой никаких реальных оснований.

Тема семьи - одна из основных тем современной женской прозы. В традиции русской классической литературы семья - это нравственная основа человеческого быта или бытия. «Мысль семейная», так или иначе, пронизывает практически все произведения XIX века. Век же XX - страшный и трагический - внес свои коррективы в восприятие этой темы. Революция, разрушающая привычную систему нравственных координат, практически разрушила семью. Достаточно вспомнить, как в романе М.Булгакова «Белая гвардия» рушатся семья и Дом - стол важные категории для всего творчества писателя, как в антиутопии Е.Замятнина «Мы» Единое Государство боится любви и нивелирует само понятие семьи. В эстетике социализма семья становится скорее символом буржуазности, чем
Символом счастья, «чинейкой» государственной машины. Совершенно закономерно, что к концу ХХ века «мысль семейная» перестала быть главной для литературы.


Современный беллетрист, Галина Дурстхофф, считает, что жанр русской семейной саги в последнее время становится весьма популярным и в России, и на Западе. Видимо, ностальгия по патриархальной счастливой семье охватила всю Европу. С Галиной согласен Валерий П. Адорно, который считает, что в литературе должна быть «древняя поэзия улучшения гнезда». Гнезда семьи, гнезда любви и спокойствия. Улицкая. Действительно, вопрос - а что творится сегодня с семьёй? - волнует, прежде всего, женщин - писательниц.

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семьи, любви, братства, умеет сопротивляться конкретному и бытовому злу. Но «озверелый мир» способен уничтожить и такой ДОМ.

Что же может разрушить чистоту семейных отношений? Деньги, власть, зависть… Об этом рассуждает Елена Габова в книге «И отец мой, и мама моя». Важно, чтобы современный читатель добрался до такого произведения и, читая, сопереживал несчастно героям.

Не изображают идеальной семьи Т.Толстая, Л.Петрушевская, Г.Щербакова. Эти авторы чаще пишут о деструктивных формах отношений, о семьях, где поселились драма, трагедия, страдание, конфликты.

Интересное решение этой темы предлагает Т.Толстая в рассказе «Чистый лист» Главный герой - Игнатьев. Читатель не знает его имени, не его профессии. Это типичный герой литературы конца XX века – «сердий массовый человек». Его семья - это жена и большой сын Валерик, слабенький и хилый, ради которого жена бросила работу и ... жизнь, семью. Ею одним одушевленным, абсолютно осязаемым членом семьи становится Тоска, которая приходит к Игнатьеву каждую ночь. Тоска не оставляет Игнатьева и днем, она сопровождает его повсюду, «то там, то тут выныривала ее плоская, тупая головка».


Пусть слабый, но живой, сомневающийся, но полный трепетной отцовской любви и нежности («толчком прыгнул и в дверь кинулся к зарешеченной кроватке»), мятущийся, но жалеющий жену и преклоняющийся перед ней («Жена – она святая»), Игнатьев был интересен автору. Перестав страдать, он перестал занимать писательницу. Какой он, человек бездушный, - знают все.

Таким образом, тема семьи стала главной и особенной в творчестве современных писателей, особенно писательниц. «Что творится сегодня с семьёй?» (тема семьи в современной женской прозе) знакомит с такими жизненно важными понятиями, как «семья», «любовь», «милосердие», «личность», «нравственные ориентиры» и другими; позволяет не только выделить болевые проблемы современного бытия, но и показать предлагаемые авторами пути выхода из аномальной современности. Герои прозы Т.Толстой, Е.Долгопят, Л.Петрушевской, В.Токаревой, А.Матвеевой, М.Палей, Л.Улицкой - типичные представители своего народа (Игнатьев («Чистый лист» Т.Толстой), подросток Коля, Дмитрий Васильевич («Два сюжета в жанре мелодрамы» Е.Долгопят), Ангелина («Как ангел» Л.Петрушевской), Анна и Хлоя Петровна («Я есть. Ты есть. Он есть» В.Токаревой и «Младенец» А.Матвеевой и др.), живые примеры современной жизни.

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BABUR: CONQUEROR OF CENTRAL ASIA

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RESUME

The name of Zakhiriddin Muhammad Babur in the history of Uzbekistan is on a par with such politicians and military figures as Jaloddin Manguberdy, Amir Timur, Ulugbek, Alisher Navoi. The Timurid prince, who created the Baburid empire in India (in Western sources, the "Empire of the Great Mughals"), was a devoted son of his homeland and fought for its well-being until the end of his days. Babur spent most of his life in military campaigns and battles. He unsuccessfully tried to unite the scattered regions of Maverannahr and create a new great state of Timurids

KEY WORDS: great poet, admire and inspire, developed countries, valuable source, ardent patriot, hereditary possessions, commercial and economic role,
весьма интересной личностью, в истории можно найти немало успешных полководцев и завоевателей, но чтобы они были столько разносторонние одарёнными людьми, это редкость.

Детство его прошло в Андижане, где он был счастлив. Здесь он получил образование, у него проявилась любовь к поэзии. Перед смертью он будет тосковать о Фергане. Уже в 11-летнем возрасте он был вынужден принять бразды правления Ферганским княжеством – его отец погиб 9 июня 1494 года в возрасте 39 лет. С самого начала правления Бабуру пришлось вести борьбу за свой удел и за Мавераннахр - регион между Амударью и Сырдарьей (Согдиана), включает в себя такие известные города как Самарканд, Бухара, Хива и др. Положение его было шатким. В это время шли постоянные усобицы. Здесь хватало феодальных вассалов, которые хотели отхватить что-нибудь у соседей, подчинить их, или просто пограбить. Против Бабура выступили даже родной брат, и ему пришлось поделить Ферганское княжество на два удела. Его главным противником был узбекский хан Мухаммед Шейбани (основатель государства Шейбанидов). Усобицы среди Тимуридов привели к тому, что Шейбани-хан 1501 году окончательно овладел Самаркандом и сделал его столицей своего государства. Бабур укрепился в Ташкенте, где пытался сколотить коалицию феодальных правителей против Шейбани. Однако из-за предательства нескольких князей, потерял поражение. В 1500—1505 годах Бабур был вынужден уходить в Афганистан, где создал новое государство со столицей в Кабуле. До 1512 года безуспешно пытался отбить Бухару и Самарканд. Замысел покорить Индию родился уже в 1504 году, когда Бабуру был всего 21 год. Однако из-за недальновидности родственников он будет тосковать о Фергане. Уже в 11...
воинов сложили головы в этом сражении. Дорога на Дели была открыта. 30 апреля 1526 года Бабур стал первым падишахом Дели, основавшим государство Великих Моголов. Разгром войска делийского султана при Паннипани, весть о его гибели стали шоком для Северной Индии. Бабур не мешкая, захватил два главных города султана – Дели и Агру. Его воины заняли все правительствственные здания, дворцы и сокровищницу. Сопротивления почти не было. Его войска немедленно занялись восстановление порядка в округе. Бабур сразу издал указ запрещающий грабить и обижать семьи поверженных врагов, что склонило на его сторону многих людей и не вызвало ответной волны сопротивления, которую мог вызвать террор. Бабур также сразу наградил своих соратников и воинов. Из индийских сокровищ военачальникам и простым воинам выдали денег, а также различные товары, оружие и коней. Кроме этих разных вело распределение земельных участков, угодий и пастбищ. Щедрые подарки получили Кабул, Газна, Кандагар и даже Мекка, куда их отправили через странников. Эта щедрость стала причиной множества слухов, которые дошли до соседних стран. Согласно одному из рассказанных Бабуром, одним из них при шли падишах сокровища Индии и ничего не оставил себе, действуя как странствующий дервиш. Сам владыка Бабур отразил эту мысль в стихах: «Я не принадлежу к братству дервишей, а также и до соседних стран. Согласно его преемниками. Несмотря на очень краткое тысячелетие, он не собирался отступать. Главная мечта его жизни сбывалась. В знак своей веры он приказал уничтожить винные запасы, хотя любил выпить и дал обет не пить (он его выполнил). Решающая битва раджпутов с армией Бабура состоялась при Кхануа (близ Сикири) в марте 1527 года. И вновь превосходство войск Бабура в артиллерии и ручном огнестрельном оружии сгулило решающую роль. Более многочисленные войска раджпутов атаковали оборонительные порядки Бабура. Однако их атаки разбились об умелую оборону и контратаки. Раджпутские князья потеряли сокрушительное поражение. Их предводитель Санграм Сингх (Рана Санга) был тяжело ранен и умер в этом же году. Ни один из его потомков не осмелился продолжить борьбу. Эта победа над конфедерацией Раджпута привела к окончательному установлению власти Бабура над Северной Индией. Добившись успеха, Бабур перенес свой центр вновь образованной державы в Агру. До конца своей жизни – 1530 года, он расширил свою державу, присоединив ее до границ Бенгалии. Он разгромил 6 мая 1529 года битве при Гогре правительей Бихара и Бенгала.

Часть афганского войска Бабура вернулась в Индию и сделала её домом для всех потомков Чингисхана и Тимура, были приняты не всеми. В войсках возникло возмущение. Появились дезертиры. Первым среди бежавших оказался первый советник падишаха Ходжа Калан, который уехал под предлогом раздачи подарков и стал правителем Кабула. Воины тяготили воинов сложили головы в этом сражении. Дорога на Дели была открыта. 30 апреля 1526 года Бабур стал первым падишахом Дели, основавшим государство Великих Моголов. Разгром войска делийского султана при Паннипани, весть о его гибели стали шоком для Северной Индии. Бабур не мешкая, захватил два главных города султана – Дели и Агру. Его воины заняли все правительствственные здания, дворцы и сокровищницу. Сопротивления почти не было. Его войска немедленно занялись восстановление порядка в округе. Бабур сразу издал указ запрещающий грабить и обижать семьи поверженных врагов, что склонило на его сторону многих людей и не вызвало ответной волны сопротивления, которую мог вызвать террор. Бабур также сразу наградил своих соратников и воинов. Из индийских сокровищ военачальникам и простым воинам выдали денег, а также различные товары, оружие и коней. Кроме этих разных вело распределение земельных участков, угодий и пастбищ. Щедрые подарки получили Кабул, Газна, Кандагар и даже Мекка, куда их отправили через странников. Эта щедрость стала причиной множества слухов, которые дошли до соседних стран. Согласно одному из рассказанных Бабуром, одним из них при шли падишах сокровища Индии и ничего не оставил себе, действуя как странствующий дервиш. Сам владыка Бабур отразил эту мысль в стихах: «Я не принадлежу к братству дервищей, но, как царь, я их брат по духу». [4, 1-8].

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сооружением на территории Индии, стал большой сад, именуемый Кабул-бахтом, основанный в Панипате в честь победы над делийским султаном Ібрахимом Лоді. В садах, разбитых в Индии, падишах впервые применил опыт по выращиванию дынь и винограда из Средней Азии. Во время своих многочисленных поездок по стране Бабур неутомимо планировал строительство дорог, которые должны были быть обрамлены тенистыми орошаемыми садами.

Бабур большое внимание уделял благоустройству подчиненных ему крупных индийских городов. Архитектура, планировка общественних и частных зданий, их внешние детали и внутренний интерьер, много взяли из стиля принятого в Средней Азии, в то же время смогли органично сочетаться с индийским стилем. В архитектуре произошёл синтез двух стилей. Этот процесс получил развитие и при наследниках Бабура.

Основатель новой державы деятельно стремился укрепить торгово-экономические связи с Афганистаном, Ираном, Средней Азией. Был издан указ Бабура о благоустройстве караван-сарая, строительстве специальных колодцев на торговых путях, заготовке продовольствия и фуража для путников. Все эти мероприятия были направлены на рост товарооборота с соседними странами и нормализацию отношений с ними. Бабур нормализовал отношения с Шейбанидами. Падишах даже незадолго до своей смерти Бабур отправил посла к русскому правителю Василию Ивановичу.

26 декабря 1530 года Бабур умер в индийском городе Агре. Его останки были перенесены и захоронены в саду в Кабуле — это было волей самого Бабура. Все завоеванные земли он разделил между своими наследниками.

Перед смертью Бабур назначил наследника — им стал старший сын Хумаюн. Остальные сыновья получили в уделы Пенджаб, Кабул и Кандагар, и были обязаны подчиняться старшему брату. [5].

Бабур отметил не только как выдающийся полководец и государственный деятель, но и как весьма образованный человек, умеющий ценить искусство. В своей столице Агре падишах собрал вокруг себя немало талантливых писателей, поэтов, художников, музыкантов, исследователей, которым уделял большое внимание. Он старался лучше изучить местные обычаи, традиции, отличался наблюдательностью. Изучал историю и культуру народностей Средней Азии, Афганистана и Индии. Заслуги Бабура как историка, географа, этнографа в настоящее время признаны мировой востоковедческой наукой. Отметился как видный поэт и писатель, написавший исторический труд «Бабур-наме». В этом автобиографическом сочинении падишах оставил описание великих городов Средней Азии, Хорасана, Афганистана, Ирана и Индии. Для современности его сообщения о Самарканде, Бухаре, Кабуле, Газни, Балхе, Фергане, Бадахшане, Дели, Девалпуре, Лахоре и других городах и местах, бесценны. Он также описывал караванные пути, тропы ведущие из Кабула в Индию, и в Среднюю Азию. В труде нашли прекрасное отражение описания природы, флоры, фауны, географии Средней Азии, Афганистана, Индии. В книге есть и сведения о политической жизни Индии, отрывочные данные об истории этой страны. В «Бабур-наме» много данных и по индийской этнографии: рассказано о кастовой системе, обычаях, быте простого народа и феодальной знати. Перец и Бабура также признавал трактат по поэтике; изложение в стихотворной форме мусульманского права и собственная разработка алфавита — «Хатти Бабури» («Алфавит Бабура»). «Алфавит» был создан на базе древнетюркских писем и отличался более упрощенным по начертанию, по сравнению со сложным арабским письмом.

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INNOVATIVE METHODS OF STUDYING THE SOCIAL ADAPTATION OF MENTALLY RETARDED CHILDREN

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ABSTRACT  
This article reveals the specific psychological and pedagogical aspects of the adaptation of mentally retarded children to social life. Theoretical data are presented mainly on the basis of a comparative analysis of the education of mentally retarded children.

KEYWORDS: mentally retarded child, social skills, integrated approach, correction, compensation, private approaches, education, upbringing

INTRODUCTION  
Due to the importance of preschool education in ensuring the active participation of people with intellectual disabilities in various social, economic and cultural relations of society, their well-being and effective social adaptation to different life situations, the issue of preschool special education is also a special pedagogical and is one of the urgent tasks facing the public education system.

MATERIALS AND METHODS  
Scientific research and projects are being carried out to involve mentally retarded children in pedagogically, psychologically and organizationally appropriate education and to intensively develop their social skills. The content and forms of the special and inclusive education system, which ensure the involvement and active participation of children with disabilities in the daily life of society, are being improved. Particular attention is paid to the social protection of the needy, strengthening state support for people with disabilities.

As a result, the ability to diagnose children with disabilities from an early age, to involve them in appropriate education based on the results of the diagnosis, to provide quality education, to address the complex infrastructure aimed at timely adaptation to social life has expanded.

It is even more important to substantiate the possibility of equipping mentally retarded children with healthy children with the knowledge, skills and competencies necessary for socialization from the very beginning of their involvement in education, ie in the preschool education process, and to improve their pedagogical learning methods.

It is known that for mentally retarded children, as well as healthy children, preschool age is an important period of complex development, the first age in the formation of the child's personality. During this period, their interactions with their peers create relationships that seem organizationally complex and affect the child’s personal development. In preschool, the world of mentally retarded children is unique and connected to the world of other children and adults. As a mentally retarded child gets older, he or she tends to communicate more with his or her peers or avoids the process. Preschool is a sensitive period in the formation of collective qualities, as well as arousing human relationships with other people. If the basis of these qualities is not formed in preschool age, it can negatively affect the child's personal development. As a result, there are barriers to child development. At this age, cognitive activity increases: cognition, visual thinking develops, buds of textual thinking appear. The increase in cognitive capacity leads to the formation of memory, voluntary attention.

The use of verbal expressions plays an important role in the study of the socialization of mentally retarded children. Because through speech, a mentally retarded child engages in a variety of activities. Preschoolers with mental disabilities perform verbal actions and tasks, learn the names and symbols of things based on the teacher's explanation. As a result, the mentally retarded child acquires the necessary skills to apply these things in daily life. Most importantly, the process needs to be visual.
The principles of the psychological study of social adaptation of mentally retarded children are as follows:

1. The principle of complex study of the psyche of a mentally retarded child, i.e. the study by narrow specialists involved in the overall development of the child. It involves taking into account the information obtained from the examination of a pediatrician, speech pathologist, psychologist, educator.

2. The principle of analytical-synthetic learning, that is, the examination of not only the cognitive processes of the child, but also the emotional-volitional scope and behavior.

3. The principle of systematic, targeted learning. This principle analyzes the circumstances that depend solely on the process that must be observed in the child.

4. The principle of an integrated approach. It refers to the interrelationship and interdependence between the manifestations of individual disorders in a child’s mental development, their hierarchy, and the relationship between primary and secondary disorders that result from them.

5. It is the principle of linear study of the child's psyche. According to this principle, in the study of the child, it is necessary to record the results obtained during the examination, to compare the previous and subsequent cases. Often educators do not pay enough attention to this principle, and as a result have to draw non-objective conclusions, relying only on the results of the study.

6. Underlying the dynamic principle is Vygotsky's views on the study of children's "immediate development zone", their potential in education. In other words, it is necessary to take into account the educational potential of the mentally retarded child, not to show what he knows and can do, but to show action by encouraging him to do something new.

CONCLUSIONS AND RECOMMENDATIONS

We recommended to practice the rules to be followed in the study of social adaptation of children of small preschool age. They are:

- The principle of objective study of the adaptation of a mentally retarded child, i.e. the creation of a natural state for the child in the examination;
- The rule of taking into account the age characteristics of the child when choosing the conditions and methods of examination, as the adaptation of a mentally retarded child is more pronounced in everyday situations;
- The rule of taking into account the basic skills of a mentally retarded child in the study of flexibility, especially self-expression, his activities, the performance of tasks.

We considered it expedient to adapt the process of psychological learning to the pedagogical process. Because it is necessary to avoid one-sidedness in the study of a mentally retarded child. As mentioned above, cases of non-moderate, long and short-term tension, agitation of a mentally retarded child indicate that the child's learning process must take place in different conditions.

We have divided the methods of studying the social adaptation of mentally retarded children of preschool age into three areas:

- Sensory direction (subject-practical, focused on intellectual activity);
- Communicative-emotional (based on verbal, nonverbal communication and types of psychological work);
- Complex-integration (based on the integration of various activities in the study of social adaptation of mentally retarded children).

It is expedient to define the tasks of the first stage of the complex study of children by studying the levels of mental retardation and the resulting defects, as well as the time of their occurrence. Preschool special education is the foundation in the social adaptation of mentally retarded children. Its basis and content are subject to the didactic principles of special preschool pedagogy and the special principles and methodological approaches of special psychology.

Our studied literature and observations on special education show that the environment has a great influence on the choice of methods of studying the socialization of mentally retarded children. The environment affects the overall development of a mentally retarded child. As a result, the mentally retarded child manifests himself in all aspects in the process of pedagogical and psychological learning. Parents are the first to teach the world around mentally retarded children. Therefore, the socio-cultural, physical and mental development of children should be approached responsibly by parents, educators and teachers.

Experiences and pedagogical views on the development of the individual show that social experiences are strengthened and manifested in different forms with the spiritual and material culture of mankind. A mentally retarded child, like a healthy child, naturally feels the need for different interactions with the people around him. As a result, the mentally retarded child becomes involved in a variety of activities, depending on the situation, expressing their wishes and desires, and engaging in a communication process. It is this process that allows the selection of appropriate methods for studying the social adaptation of mentally retarded children.

In mentally retarded children, the abnormality of cognition has a negative effect on him in self-analysis, in understanding and differentiating his desires, aspirations, state from an early age. Therefore, one of the most important factors negatively affecting the socialization of mentally retarded children is, first of all, the physiological and psychological condition of the child and the lack of
appropriate methodological approaches to the child's capabilities. As a result, the methods used in the periodic study of mentally retarded children may not show their effectiveness. This situation has a negative impact on the learning of a mentally retarded child. The educator, on the other hand, is required to prepare additional alternatives to the chosen method.

Pedagogical principles and modern technologies should be followed in selecting methods for studying the social adaptation of mentally retarded children of preschool age and identifying appropriate educational pathways. Consequently, modern technologies encourage and prepare mentally retarded children to be active, to organize self-service activities in a certain order, to apply their knowledge effectively in practice. It is also necessary to establish pedagogical conditions aimed at the continuous improvement of methods of studying the social adaptation of mentally retarded children to be active, to organize self-service activities in a certain order, to apply their knowledge effectively in practice.

In conclusion, the educator should choose a method that is appropriate to the situation, the age and ability of the child in the study of the child. To do this, it is recommended to use the categorized learning methods given above.

REFERENCES

THE ROLE OF EXAMPLE IN THE DEVELOPMENT OF THE NATIONAL MENTALITY

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ABSTRACT

The article scientifically substantiates the role of example in the formation of the national mentality. The concepts of national mentality, example and imitation are analyzed, and the author's definitions are developed.

KEY WORDS: mentality, national mentality, national character, example, imitation, national culture, national moral customs and traditions, society, unity.

INTRODUCTION

In today's reforms aimed at forming a new worldview in Uzbekistan, there is a need to focus on improving the national mentality and study it in terms of values.

At this point, we found it appropriate to dwell briefly on the essence of the concept of mentality. The concept of "mentality" has become the object of study, mainly as a socio-philosophical category associated with the period of independence of nations. This concept was not covered in the historical, philosophical, literary and encyclopedias of the Soviet era. This is probably why there is no consensus on the essence, specificity and evolution of development of the concept of mentality.

MATERIALS AND METHODS

In the popular scientific dictionary "Independence" "Mentality (Latin - intellect, perception) - is the level of thinking, spiritual potential, the ability to analyze the laws of life, the mental abilities formed in certain social conditions, described as psychic power[7]."

Another source devoted to the philosophical analysis of this problem reads: The level of thinking, spiritual, intellectual potential, the ability to withstand the challenges of life, the intellectual ability formed in certain social conditions, which is a decisive factor in the economic and political level of development of society, spiritual maturity[4].

The first definition is a mixture of many and logically unrelated aspects and processes. First, is it the level of thinking of 'society' and 'unity'? Doesn't "mentality" mean, first of all, a people, a nation, formed in a certain environment and living in a certain society, period?

There will be no level of thinking of "society", "unity", on the contrary, there will be a level of thinking of people formed in the form of people and nation living in society.

The terms “analysis of the laws of life” or “spiritual power” are also forcibly attached to the concept of mentality. Moreover, the phrase “community mentality” is also abstract and does not serve to clarify the problem. The word mentality is used to refer to a person and a nation. Although the essence of the issue is revealed in the second definition, but it has expanded a bit.

The encyclopedic dictionary of philosophy gives a different definition than the one above. It says, "Mentality - (Latin - mental) the level of mental ability inherent in an individual and a social group, spiritual potential"[1].

Although this definition is somewhat more concise than the one given earlier, it does not fully and clearly cover such a complex concept as mentality. This definition also emphasizes the level of reason and spiritual potential in distinguishing the mentality of one nation from the mentality of another nation.
If this definition is taken seriously, there is a risk that nations will be divided into intelligent, middle-minded, or lower-minded according to their mentality. In the "Encyclopedic Dictionary of Philosophy" mentality is also mentioned in the form of reason, and the ideas and sentences in the "Explanatory Scientific-Popular Dictionary of Independence" are repeated.

Among the researches devoted to this problem, in the comments of the historian R.H. Murtozaeva there are noteworthy aspects about the complexity and specificity of the problem.

R. Murtozaeva makes more concrete and realistic comments on the essence of mentality in the sources considered than the definition of "mind, intellect, intellect, perception" of a society, nation, unity or individual. “The national mentality (Latin mentalis) is the mind, the way of thinking, the way of thinking. That is, it is necessary to understand the national identity of the people, the national self-consciousness[6].

First, R. Murtozaeva clarifies the issue by adding the word "national" to the term "mentality"; secondly, it emphasizes the need to take into account the way of thinking of a particular people or nation when it comes to mentality; third, he approached the problem-solving approach by linking the mentality with the people’s understanding of national identity.

Thus, the national mentality is a historical requirement of the qualities that belong to humanity, other peoples and nations in general, and is formed as a brighter quality in a nation according to the socio-spiritual experience of the nation.

Based on the above general approaches, the national mentality can be defined as follows: National mentality is a way of life and thinking that reflects the ethnic history, language, religious beliefs, character, worldview, customs and traditions of a nation, its attitude to nature, man and society.

It is clear from the above considerations that in order to renew the worldview, it is first necessary to reform the way of life and thinking of the people in accordance with today's requirements. To do this, we must first develop tactics and strategies to reform the national mentality.

In our view, ethical categories, principles and norms play a tactical role in improving the national mentality. In this regard, we consider it expedient to substantiate the role of the concept of "example", which plays an important role in the categories of ethics, in improving the national mentality.

Example - to understand the wisdom, traditions, values formed in the form of natural processes, social events, religious, moral, artistic values in the life of man and society, passed down from generation to generation, which permeate the psyche of each individual and shape his human qualities which is the embodiment of a natural spiritual need.

Based on the logic of this definition, describing the inner and outer features of the example as a phenomenal phenomenon, we can conclude that if its inner basis is reflected in the human psyche, the feelings in the heart, its outward side is reflected in the mirror of life.

It is not in vain that the teachings of Islam, which is the core of our spirituality and the mirror of our national culture, encourage us to look at everything from an exemplary point of view.

According to the great thinker A. Avloni, "Our Shari'a in Islam is a moral hasana "- to behave with good morals, to look at everything with an exemplary eye and to correct one's behavior"[8]. By the eye of example, it is necessary to understand the separation of the best example, the necessary thing and the qualities from everything.

Commenting on this issue, President Sh.M.Mirziyoev said, "... representatives of different nations and peoples, cultures and religions have lived in peace on our ancient and generous land for many centuries. Hospitality, kindness, generosity of heart and true tolerance have always been inherent in our people and form the basis of its mentality"[5].

In our opinion, the formation of a sense of exemplary life among young people in terms of the peculiarities of our people and the basis of its mentality plays an important role in the development of a person who responds to today's reforms.

RESULTS

In many places, the national mentality tends to imitate rather than set an example.

Accordingly, the scientific similarity of the main similarities, differences and features of imitation with the role model is of special importance in the formation of personality traits and positive qualities.

First of all, the main difference between an example and an imitation is that an example has an essence. The first and most important stage in which a person learns from a certain process, event and reality begins with understanding the essence of that event or reality.

In imitation, there is more interest and passion. Although passion with curiosity, on the surface, seems to be related to the essence of a particular process, in reality it is more related to the variability characteristics of human emotions.

The place of imitation and imitation in the personality trait, either as an example or as an imitation, depends in many respects on a person's strong will, intentions and, most importantly, his intention.

If a person intends to learn something or to overcome the bad qualities in his behavior on the basis of the exemplary situation in which he is affected, and makes a determined effort to capture his will to do it, he will surely achieve his goal.
Conclusions
The fact that the socio-historical background of imitation is associated with a perceived need often leads to its exemplary growth. To do this, a person must first be aware of the historical past, values, scientific and creative heritage of his nation and people, and, most importantly, the vital customs, traditions and traditions of the people.

For this reason, in order to raise imitation to the level of an example, one must have a combination of intellect, knowledge and ingenuity.

Based on the above considerations, the following conclusions can be drawn:
- It is important today to form in young people a sense of exemplary life in terms of the peculiarities of our people and the basis of its mentality;
- In the works of classical philosophers, sages and writers of the East and the West, it is noted that the issue of example is a great spiritual factor in the system of moral education, the example is not only to learn from others, but also requires a certain ability, knowledge and experience;
- National mentality is a social phenomenon that determines the way of thinking and spiritual activity of the nation and the individual;
- The national mentality is a multi-layered spiritual unity in relation to the national character, which forms the basis for the manifestation and functioning of the national character;
- The national mentality changes to some extent under the influence of socio-historical events. In some cases, the positive qualities may be replaced by the negative ones. In the mentality of the Uzbek people, such things happened during the khanate period, under the dictatorial regime;
- Independence has created ample opportunities for the restoration of pure, original features of the national mentality, self-awareness in the consciousness and character of the nation and the formation of new mental qualities related to the future of the nation.

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ANTHROPOCENTRISM, BIOCENTRISM, CO-EVOLUTION AND NOOSPHERE DIALECTICS IN THE FORMATION AND DEVELOPMENT OF ECOLOGICAL ETHICS

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ANNOTATION
Ecological ethics, as a scientific field, focuses on the preservation of natural and human beings, offers a holistic approach to the current crisis and offers a variety of approaches to addressing the deeper pitfalls of moral culture, integrating nature and society and human interactions.

KEYWORDS: globalization, environmental ethics, anthropocentrism, coevolution, biocentrism, attitudes, processes, nature, society

Before commenting on the dialectical and dynamic nature of the direction of anthropocentrism in the formation and development of ecological ethics in the process of globalization, it is necessary to dwell on the emergence and formation of the direction of globalization in ecological ethics. Globalization is a sign of the growing interaction and interdependence between the economies, cultures, spiritualities, people of different countries. Of course, there are many definitions of the concept of globalization. For example, the French researcher B. Bandi gives three signs of the process of globalization:
1) globalization is a continuous historical process;
2) globalization is the process of homogenization and universalization of the world;
3) Globalization is the process of "washing away" national borders.

In the middle of the twentieth century, when the institutionalization of globalization, that is, the organization, intensified, this process itself became more intense. In today's globalization process, the main focus is on the economy. However, the moral and spiritual impact of this process on culture has not been sufficiently studied in the social sciences. In revealing the essence of the content of the process of globalization, we must first understand its balanced connection between environmental ethical norms and principles.

The general development trend of global problems is formed in the general and specific specificity and development strategy of philosophy. The Aral Sea problem, which has become one of the most pressing issues in Central Asia today, determines the priority of issues related to the formation and development and growth of moral relations. In order to gradually change the problem of the Aral Sea, first of all, the establishment and development of the basis of ecological and ethical relations requires the application of the positive features of this issue in a sense.

The predominance of moral principles and principles in the study of the relationship between nature and society today, along with the interpretation of the historically formed stages of these processes, there is a need to determine their scientific and practical significance. It is determined by the need to take into account the following theories in substantiating the basic principles and principles of environmental ethics.

Therefore, understanding the relationship between man and nature in conflicting global trends in solving this problem creates completely natural processes.

1. Anthropocentrism (Greek anthropo-man, center-center) is the study of man (as the highest value and nature (as his property); perception of nature as an object of human action; in the pragmatic world of the relationship between nature and man (in philosophy it is studied as a worldview). According to the Russian scientist A.
Guseynov, morality today dominates the worldview, according to which man and nature as the goal of the means, according to him, is the supreme goal of the creation of the universe, which gives man the right to study in terms of all interests. According to most scholars, anthropocentrism is seen more in the Christian religious ethic. (American theologian L. White) seeks to make the issue clearer and at the same time to reform the foundations of anthropocentrism. In Western philosophy, and es in Aristotle's teleology a process has taken its rightful place, as paradigms have begun to emerge that acceptable life is a guarantee of nature's existence, and that unjustified equality exists only as a means to support the ideas conveyed by human relations.

2. Ecocentrism is the focus on ecology and the absence of contradictions between man and nature, in which there is a balance between pragmatic and non-pragmatic interactions between man and nature as an equal object (an example of this approach can be found in Eastern religious systems and theories. The ideas of Francisco Assisi, the “founder of ecologists,” emphasize that man of greatness paid attention to all living things in nature and their intrinsic value); of course, it can be seen that this theory is also in a sense formed on the basis of a theological approach.

3. In biocentrism, it is recognized that absolutely all living beings, regardless of their level of organization, have the status of moral systems, ie (through self-disclosure of interests, inferior animals and unconscious plants that are subject subjects through self-interest).

In the current ecological crisis, the active attitude of mankind towards all living things on the basis of biocentrism can ensure that living things do not become extinct in the ecosystem when assessing the state of the planet's ecosystem. The realization of the values of bioethics and ethical relations leads to the emergence of ecological contradictions between the proponents of the ideas of biocentrism and utilitarians. Anthropocentric values dominate in their minds, hence the need to institutionalize the norms and values of bioethics, to create a normative-legal document, as well as to activate the instructions of animals, plants and other living organisms on the basis of regulating their relations.

The relevance of environmental ethics is manifested in the fact that in the process of classifying all of the global problems, different views and different interpretations of a number of problems are reflected. The formation of ethical relations today as a solution to the problems established on the basis of the United Nations is determined by the fact that it is important to target their normative and regulatory functions. Today's solutions to environmental problems are inherent in all social relations of the globalization process, in this regard, the globalization of moral relations is also determined by the interpretation and study of the dynamics and dialectics of moral relations in the development trends of morality. It can be observed that the globalizing features of environmental ethics serve to create mechanisms for regulating and managing ethical relations.

Coevolution - (ko in other languages, together, means integrity: lot evalitio-development). This interdependence constitutes a joint evolution. This concept defines the mutually adaptive variable mechanism of the elements that make up a whole system in modern science. This concept originated in biology and gradually gained the status of a nationwide category. In philosophy, this concept is used in two senses. In the "broad" sense, this concept refers to the evolution and variability of all biosystems, including the adaptation of the frontiers to the level of a single integrated biosphere. In the narrow sense, the concept of coevolution is applied to the system of "society and nature" in understanding the process of joint development of the biosphere and human society. The concept of coevolution of society and nature is an important factor in determining the importance of determining human needs and the harmonious relationship of the whole biosphere. However, there are two aspects to this: the desire of man to dominate nature and the need to avoid obedience to nature, which is reflected in the expression of the relationship between society and nature.

In theoretical and practical unity, there is a growing need to address the growing relevance and strategy of evolutionary development, artificial (technical) means, animate and inanimate nature, the dynamic disproportion of the coordination process in the development of society, and the growth of natural resource use. the need to understand the place and


position of the biosphere in responding to reality due to the destruction of ecosystem mechanisms is leading to the emergence of a global ecological crisis that threatens the stability of society and the future of mankind. The practical nature of environmental ethical principles in itself is an important tool in clarifying this very issue. ³

The philosophical understanding of nature is reflected in the origin of things, the existence of processes, the state of nature, man-made objects, and artificial ecosystems today. Naturalistic philosophy plays an important role in the study of the existence of nature. From the smallest particles in space and time to its whole integrity, it includes processes that exist in nature through the existence of infrastructure and man-made activity. All living organisms that exist in the existence of primary nature and the eternal, that is, the existing existence, the connection of the secondary nature arises on the basis of the activity of the human mind. The search for new acceptable ways of the relationship (coevaluation) of man and nature and the development of ecological consciousness on the basis of moral activity seeks to absorb new ideas through creative ideas. The existing attitude towards nature has a mythological religious and philosophical analysis. Knowledge of nature seeks to be studied on the basis of gnostic and axiological approaches. It was necessary for each time to determine and improve man's attitude to nature through methods specific to different periods. In this context, theoretical and empirical methods or experimental and dimensional methods of hypotheses in determining and justifying truth tend to be analyzed and synthesized. The fact that by analogy and classification it is possible to create and define idealized ways of relating nature to society and man shows exactly the holistic state of moral relations.

The notion of the unity and harmony of mankind with nature serves to form an ecological relationship between man and nature based on moral norms, culture. Of particular importance are the humanitarian ideas of this doctrine, which reflect the political, legal, moral, religious culture, which is in line with the specific way of life in the East. At the same time, these universal values, which are part of the philosophical heritage of Central Asia, are an important tool for embodying the ability to be dialectically renewed in the face of social needs and to resist unethical tendencies. The essence of man is manifested as the level of development of ecological ethical relations that can be the basis for ensuring his social existence. This does not negate the socio-ontological content of man, but rather emphasizes it. It follows that, from the point of view of any alternative philosophical doctrine, man is not against nature, but against his own existence. Therefore, a one-sided interpretation of human-nature relations is inappropriate. In a consistent study of the relationship between man and nature, we can see that the conceptual approaches of a number of scientists are reflected in society.

A number of coherence in the research of Western scholars can be explained on the basis of the views formed during the periods between Eastern scholars. M. Starting with the philosophical anthropology of Scheler (1874-1928), this trend is also reflected in the modern concepts of social biology in the works of R. Ardi, E. White, Z. Freud, E. Fromm and others. For example, according to M. Scheler, man has all the features that are manifested in the hierarchy of forms of existence of this life: emotion, development specific to a living being, natural selection, reproduction; intellectual, positive activity; It is a "sick animal" that combines associative memory, theoretical and practical technical perception, perception of innovation, and the achievement of changing proportions.

According to M. Scheler, "the difference between man and animal is that "the animal that strives for innovation" - man is not satisfied with the being around him, but seeks to transcend the boundaries of the natural environment in which he lives. If an animal is dependent on the natural environment in which it lives, then man is a conscious being "free" from the natural environment, capable of changing and assimilating an existing being. M. Scheler connects this ability with the spirit and believes that man himself is not the sole ruler of nature, because his existence and activities are required by vital needs and rely on internal driving forces, mechanisms.

The existence of the peculiarities of each period tends to explain the interrelationship of the relationship between society and nature. This, in turn, seeks to define the forms and means of relations in the development of concepts such as man and nature, society and the environment. The naturalistic conception of the relationship between society and nature may have originated in antiquity. In it, the beliefs of nature take precedence over nature and are deified in their essence. Later, with the passage of narcissism, it appears in the form of social Darwinism. At the same time, the laws of nature are reflected in the life of society, while society retains

³ P. M. Burak. coevolution and noosphere noosphere v panorama actually short review. Trudy BGTU series 6 №2. 2018

the right to natural choice. At present, the assumption that the naturalistic concept corrects the errors that exist in nature itself promotes the law of non-interference in nature. It can be seen that the concept of consumption was formed as a result of the revolution and development of technological and technocratic and globalized systems in the search for features that reflect the moral attitude of society to nature. The concept of consumption, or alternative development of needs, promotes its idea by putting the laws of society above the laws of nature. The concept of consumption also comes in handy in revealing the philosophical essence of anthropocentrism and pargmatism. It seeks to reveal the essence of capitalist views in the very essence of the idea. The concept of consumption seeks only to create a sequence of interests in the assimilation of nature. In doing so, man, by his very nature, becomes more active as he prioritizes his own needs. On this basis, one of the key issues at the moment is the need to maintain the balance of the biosphere, which has been going on for millions of years, to create a more efficient and rational approach to it, the balance. Which aspects we will focus on for this purpose will be appropriate. It is expedient to find new acceptable ways of the relationship between man and nature, to raise the ecological moral culture of the masses, to direct them to axiological thinking, to determine that the decision of the axiological attitude to nature will restore the balance between nature and man. In this regard, it is expedient to form an ecological ethical environment.

In an ecological ethical environment, a special respect for nature is expressed. It recognizes that man, along with the development of natural resources, strives to save and preserve them, to replace the used ones in a timely manner. Ecological ethics reflects the social-universal attitude of mankind towards nature. As a result of ethical environmental development, there is a need to identify sustainable areas that require the prior formulation of a prudent policy on environmental disasters. In particular, we strive to produce more products every year, this phenomenon significantly increases our impact on nature and the environment, creating the basis for its pollution. Production certainly affects the environment, its negative impact cannot be completely eliminated, but can be reduced. This conclusion does not mean that production growth should be stopped, but rather that it should be achieved through the use of harmless new technology. The formation and activation of a "national model" of environmental protection plays an important role in the application of new technologies. It is necessary to pay attention to the aspects that cause environmental damage:

1) to determine the number of enterprises producing pollutants in the area;
2) study of the level of waste above the REC, their amount, duration of pollution, the level of environmental safety;
3) Consistent elimination of the causes of untreated and decontaminated effluents, wastes and wastes in water bodies and the atmosphere;
4) follyization and optimization of the ethical environment among those responsible for air and water pollution, especially those who have caused disastrous consequences due to incorrect instructions;
5) legal resolution of the actions that led to the criminal consequences, the time of their occurrence and duration, the factors that create the possibility of mitigating the harmful consequences.

In conclusion, the importance of man and his essence, human evolution and progress in the philosophical worldview of anthropocentrism, biocentrism, coevolution and noosphere dialectics in the formation and development of ecological morality in the process of globalization. The limit of the influence of the human mind and perception on the universe is that the entry into a new progressive world leads to the formation of a noosphere environment. Unless man determines his level of consciousness, it is inevitable that he will face the brink of his own destruction, according to scientific predictions. One of the environmental problems in the globalization of the damage caused to the environment by human activity is determined only by the penetration of man and his activities into the noosphere, in a sense, by the desire to prevent destruction based on the actions of moral activity in it.

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INFLUENCE OF INDEPENDENT LEARNING EDUCATION ON EDUCATIONAL EFFICIENCY

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ANNOTATION

The article presents the advantages of conducting lessons through teaching that encourages independent learning compared to traditional lessons, as well as recommendations and suggestions for their use in the educational process.

KEYWORDS: Traditional lesson, non-traditional lesson, goal setting, control, monitoring, decision making, self-assessment, independent planning, theoretical and practical assignments, learning effectiveness, imitation.

World scholars point out that the importance of independent study is enormous, it is one of the key factors in economic development and will serve to make the country more competitive in the world market. There are clear guidelines for enhancing human capacity for independent learning, such as the Malaysian Eighth Plan. The Plan emphasizes that in order to achieve the Mission 2020 goals, the system of secondary special, vocational education (VET) should focus on the training of multidisciplinary staff, and such employees should “regularly work on themselves, gain in-depth knowledge in their field and especially, to innovate in the field of modern technology. For this reason, the independent learning method is widely promoted and supported in order to increase the knowledge levels of student youth. [1]

Nowadays, when it comes to the learning process, experts have started to use the phrase “independent learning” more and more. Indeed, in today’s world of ever-increasing information flows, rapid advances in modern technology, declining jobs, and uneven pace in other areas of society, it is useful to seek and learn independently, and thus to work on oneself.

Independent learning is a natural form of learning. Our children are always active and constantly on the move, and thus, with their play, they slowly begin to conquer the world of knowledge. They learn a lot because of the results they achieve as a result of their efforts and aspirations. When they go to school, however, they are surrounded by completely different conditions, and, of course, they are not yet accustomed to such a situation. Suppose our children, who were free to roam yesterday, now have to follow a certain order, listen and observe at all times. They need to listen to the person in the classroom, who is constantly talking about what they think is fun for the kids. [1]

Our young people now receive information of interest not only from their parents, teachers and coaches, but also from their friends and mainly from social networks and the Internet. Young people have the ability to digest large amounts of information. The more educated our children are - the more confident they are in their own strengths and abilities, the more confident they are in themselves - the more independent they become. [1]

The results of recent research by psychologists have shown that there is an integral link between doing something and learning. The fact that human ability to perform and learn is a single unit has also been proven during this research. For the past thirty years, human behavior has been the focus of research by these psychologists, who have called their theories “Behavior Management”.

Behavioral management theory is a psychological theory of human behavior. This theory focuses on how a person sets certain goals in their mind and what they should do before achieving such goals, as well as the process of developing a clear plan. In other words, The integral connection between “doing” and “learning” constitutes the content of this theory. According to him, the desire and effort to perform any practical exercise arises, first of all, in the human mind. Doing the right thing is proof of right thinking. Doing a job at this point means being able to plan the specific tasks you need to do to get that job done.

The activities of teachers in traditional education can be summarized as follows:

1. The teacher sets the objectives of the lesson topic. It identifies the knowledge and skills
that students should acquire at the end of a given topic. Explains the importance of the knowledge and skills acquired, ie provides information on how this knowledge and skills can be used in the future. They remind students of the results they have achieved. Reads introductory lectures on topics that need to be explored.

2. The teacher explains the steps needed to complete the task and demonstrates them with his or her actions while naming them. Students are asked to observe carefully. More information will be provided through demonstrations. When covering more complex topics, students are required to write down the name of each stage and the information provided.

3. The teacher carefully corrects the students' repetitions. Students try to replicate as much as possible the actions of their teachers. They explain the actions they are taking and say the name of each stage aloud.

4. Students apply the knowledge and skills they have acquired to a variety of work situations. The teacher evaluates the results: he determines the level of competence and explains the situations that need to be improved. Students' performance levels are assessed by the teacher.

The four stages described above are suitable for acquiring simple qualification knowledge, but teachers also use it to impart complex knowledge. They explain complex practical topics using lectures that usually last for hours. Students will be required to familiarize themselves with an excessive amount of theory before embarking on practical training.

A more effective and less time-consuming way of teaching is to introduce these students to a brief introduction to a topic and then encourage them to do independent research and study. Students find the information they need independently, and teachers now give comprehensive lectures on the topic from time to time so that students can complete assignments independently. The method of encouraging independent learning requires very active learning.

Teachers who are well versed in teaching methods that encourage independent learning should encourage students to find their own ways of completing assignments and to approach other issues through their own methods.

It is possible to create an independent learning process by conducting it in the form of a lesson focused on the formation of independent thinking. The training can be conducted in the following five stages, which encourage independent study [2]:

Step 1. In this case, students must independently achieve the goals based on the task (assignment) assigned to them, or set a specific goal themselves. Students must set their own specific goals, that is, to set a goal from completing the experimental work.

The teacher helps the students to identify the set of actions, materials and time needed to set their goals, and gives their advice.

Phase 2. Students determine the required stages individually or in groups, for example, how they plan to do the experimental work in the practice sessions. At the same time, the availability of the necessary equipment, laboratory equipment, didactic materials for the work is checked. Taking into account the number of laboratory equipment, depending on how many people can perform the work at a time, they develop a work plan, which is based on guidelines for performing experimental work.

The teacher gives the students their own advice on finding the necessary sources of information and, depending on the need, can give them the information they need [2].

Step 3. Students will be tested on their theoretical knowledge to carry out the experimental work according to their plans, using the test questions provided in the guidelines for conducting the experimental work. When students come to a decision on their plans, they present it to the teacher.

The teacher identifies possible errors and omissions in the decision and gives the student his or her own advice on how to remedy those errors and omissions.

Step 4. Students carry out the work in accordance with their work plans and the order of performance of the work given in the guidelines for the implementation of experimental work, and monitor their actions and the results achieved.

The teacher interferes in students 'work processes only if a dangerous situation arises (or could arise) when using the equipment, if the students do not follow the health and safety rules, or if they deviate significantly from the intended goal path.

Step 5. Students calculate the unknown quantities based on the results of the measurements given in the guidelines for performing the experiments and draw the required graphs, charts, or diagrams by filling in the appropriate tables. In this case, the initial assessment of how the task is performed, ie the experimental work, is given by the students themselves. To do this, they fill out evaluation sheets prepared by the teacher.

These assessments are then reviewed by the teacher and can also be modified as needed. In addition, students prepare a report (presentation) on their work and its results and submit it to the teacher individually [3].

Thus, the effectiveness of the lesson increases when the experimental lessons are conducted through the stages of the lesson, which encourage independent learning, because each student is forced to work independently and prepare accordingly, and they evaluate themselves. Therefore, no student will be left out during the
course and student mastery rates will increase significantly.

If knowledge is independently understood, felt, studied in the face of difficulties, then this knowledge will be fully and deeply mastered. All this will depend on the responsibility of the science being studied, the ability to learn, the effective use of time in planning activities, self-control, error correction, and so on. Regular mental activity by the student develops the need for mental activity and teaches students to use time wisely. In this way, it will be possible to develop the independent educational activities of future professionals, to ensure the joint teaching and research work, to involve students in research work, on the basis of which to improve the quality of training of mature professionals [4].

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BLENDED CLASSROOM OUTCOMES: TEACHING WRITING BY USING PROBLEM BASED LEARNING FOLLOWED BY PEER ASSESSMENT

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ABSTRACT
The article focuses on effective using educational platforms as well as face to face learning modes in the example of academic writing class held with B2 level students of economic faculty. Six research questions were investigated in this study: What are the different attitudes towards blended learning? How to achieve active engagement of students in writing classes? How can PBL be used in process writing? What are the advantages of seminar classes function in Moodle for peer checking? What competencies and skills are assessed in the class under discussion? The study concludes by drawing the implications and results of the investigation.

KEY WORDS: blended learning, problem based learning, process writing, peer checking, educational platform.
teaching. Distant learning mode brought by Covid 19 to Uzbekistan, was a completely new experience which was quickly acquired by both teachers and students, has now combined with traditional learning style as it was all over the world. The computer which has succeeded to penetrate into every aspect of our lives in a quite short time, now become an indispensable part of all communal process. It is impossible to be oblivious to computers in educational field just like any other fields. According to Alcan [1], increasing burden of education, rapid growth in student population as well as in amount of information, lacking of teacher, questioning individual talents and differences are the basic elements that encourage demand for computers. Computers which are perceived as a savior in educational field for most educators and researchers, especially at the times when it was first developed, are still accepted as an only alternative in educational field as Setzer and Monke state [3].

Any kind of learning mode let it be online, offline, flipped class or e-learning mode is the best as long as it provides learners’ active engagement in language acquisition process which is the paramount target of teaching any discipline. The idea of bringing face-to-face learning and e-learning together to complete each other has occurred as a result of this sentiment [3]. I have been working as an English teacher at the University of World Economy and Diplomacy since 2014 and I am mostly engaged with ESP content area which is English for Business and Economics. Students of the faculty, who are from different cultures and nationalities, in class are of B1 and B2 level. The challenges we face in teaching mainly connected with the use of language in speaking and writing classes. Especially in writing classes students suffer from lack of vocabulary to express themselves and searching for ideas and information to use in their writing papers. Below is given a short overview of the seminar lesson held in Moodle platform [4] with the 1st year students on writing a short formal report following the instructions below:

The World Health Organization asked you to prepare an informative report on current situation in your country during the quarantine. As an independent researcher prepare a short report including the following:

- Current statistics on infected and healed people
- Social distancing and following the rules on self-isolation
- Using items of personal hygiene (face masks, gloves and sanitizers)
- Functioning businesses and businesses in lockdown
- Education under lockdown conditions

The focus of the writing was using generalization in formal reports.

Objectives of this class were:

- conduct small research and gather information from different sources
- present collected information in class
- select and use information gathered during research
- use appropriate layout and structure of short report
- use generalization elements
- use topic specific vocabulary accurately
- peer assess and provide feedbacks for one of randomly chosen work in Moodle platform

During the planning stage of the lesson, integrating diverse language skills like speaking, listening, vocabulary, reading and writing was taken into consideration to achieve higher student engagement. As it was process writing where there are several steps to complete a written assignment by which it differs from product writing, we did it in 4 steps approach. 1st step was to study theoretical part of the class (report structure, grammar focus on present simple passive, generalization technique, topic specific vocabulary), 2nd step - outside research conducted by students to collect data to be used in report (searching information to related topic from different external sources like internet, messengers, newspaper, TV programs and etc.), step 3 writing report and uploading it in Moodle platform for public access as in the next step, step 4 students were to assess each other’s works using provided criteria and give feedbacks. At the end of the process students were asked to summarize the lesson in a form of a group discussion. The students were highly motivated even those who are the mediocre ones, because the subject was interesting as well as the activities of different types using not only writing but also research, speaking, learning the new vocabulary, reading and assessing made the class appealing to learners.

According to the summaries given by students the following conclusions were drawn:

- as writing is the most challenging and dreary process, from the point of view of students, engaging different activities (studying theory, collecting information, uploading the task to the platform, checking and giving feedbacks, group discussion-in this case) to motivate participants make the process more lively and attractive;
- real life based topics are more appealing (situation under lockdown-in this case) to students than those taken from course books and have nothing to do with current situation;
- switching to one mode from another, using blended classroom approach is very suitable
for process writing as it helps to stay interested in activity;

- conducting research and relying on the information collected by the learners while writing (PBL – in this case) was the most exciting part of the process which encouraged them to write and see the results.

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ASSESSMENT OF INTERNAL CONTROLS FOR THE
MANAGEMENT OF ENVIRONMENTAL QUALITY AND
WAYS TO IMPROVE THEM

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INTRODUCTION
The first environmental reports began to appear in the late 80s, they are represented by companies such as BASF, Norsk Hydro and British Airways.

Additional stimulus to development of the system environmental reports gives the Program of Environmental Management and Auditing (PEMA) of the EEC. Under this voluntary program, focused on the use of individual companies, it is proposed to put in place an environmental management system, which must be certified by an independent expert. To obtain registration PEMA company must also publish a report on the environmental situation.

THE COMPLEX MONITORING SYSTEM OF COMPANY
The system of production and environmental monitoring is a part of system of nature management, and currently in the process of its implementation. The high level of depreciation of fixed assets of enterprises require constantly updated information about the dynamics of the state of the equipment, the adoption of measures to prevent accidents having including the release into the environment. To find solutions to these and many other problems should be oriented system of production and environmental monitoring company.

Integrated monitoring system should be established as a company within the inner strict confidentiality. Its main task - to create a management and operational structures of the dynamic picture of the current and future state of the company at all levels of evaluation of industrial, financial and social consequences of the evolution of this state (emergency nature). Together with the system software and analysis of control action monitoring system should be the basis for making management and production decisions at all levels of the company.

Complex monitoring system is designed to ensure the receipt, processing, organization of information at a higher level. This system must be certified in the prescribed manner an official confirmation of its compatibility with the state monitoring and control system. An important component of this system is audit. The system can also be applied for the examination of claims.

The system of internal monitoring (audit) pays off in 2-3 years due to the increasing efficiency of managerial and operational decision-making; prevent damage from accidents and emergency situations, as well as in commercial orders, etc.

Production and environmental monitoring should be built as multi-level system that allows providing reliable and timely information on the status of all zones of the environment air and water, soil, geological and social environment, falling under the influence of technogenic enterprise of company.

The monitoring covers all the main production units of the company.

The lower level of the system production and environmental monitoring (PEM) is a part of ASM companies providing their engineering and technological service information on the status of major equipment and situations associated with elevated levels of emissions into the environment as a
result of its operation. On the lower level of the system shall be provided, in addition to standard procedures, the software implementation of key tasks, such as:
- Regular assessment of the ecological state of the object;
- Identification of the preliminary situations;
- Carrying out the operational environmental monitoring during emergencies, forecasting its development, damage assessment as a result of an accident or other emergency situations, etc.

Information generated as a result of the system of production and environmental monitoring can be used by different departments of the company to justify the dispensation of works related to upgrading production facilities. In connection with this system PEM be used in the process of forming a database associated with the evaluation level state of equipment of the company.

Estimation of economic efficiency PEM system based on the following assumptions:
- A general indicator of efficiency - the result of a comparison of costs and benefits;
- Results of the PEM are the information, completeness, timeliness and accuracy of which shall ensure the environmental safety of the operation of enterprises of companies;
- From the use of information about the state of the environment in terms of environmental performance should be considered as the prevention of damage from pollution produced by anthropogenic influence of enterprises. These figures are calculated as the difference between the damage calculated before and after the environmental protection measures;
- In cases of really prevented environmental damage should include the system's ability to predict the occurrence of emergencies associated with the release into the environment;
- In the lower level of production and environmental monitoring is provided to generate evidence of changes in the background level of background contamination of the environment over a long period of substances produced in one or another form of equipment. Summary information in this area allows the engineering services of the enterprise to make an informed decision about the providence of measures to upgrade production facilities and process improvements;

- Analysis of the costs of environmental measures shows that the system requires strengthening environmental monitoring accidents on enterprise lines, leading to the need for a large amount of work on land reclamation and return them into economic circulation;
- Information accumulated eco-system monitoring over a long period of its operation, it may serve as a basis for the organization of public health monitoring, both for employees and for the residents of settlements within the area of its human impact.

So formed integral system (complex) monitoring and auditing of the company in the field of nature as an information base for decision-making.

**ASSESSMENT SYSTEM OF INTERNAL CONTROLS FOR THE MANAGEMENT OF ENVIRONMENTAL QUALITY**

Critical analysis of the theoretical developments convinced that such an audit before performing an environmental audit procedure, as evaluation of the existing internal control system (ICS) for the management of the quality of the environment (OS) of the internal environmental control, it is necessary to conduct a survey to assess the environmental performance of the enterprise. Environmental auditors give an overview of the environmental policy of the company, may proceed with the study and evaluation of CRS (SIEC) environmental subject, which should include a proper accounting system (in our case, and ecological) accounting control environment and the individual controls.¹

Specific activities are reflected in relevant standards of Enterprises and operating instructions for specific types of equipment and process units.

To assess the overall structure of SUKOS established by the company can be offered the test - a questionnaire (see. Appendix 1).

## Appendix - 1
### Test-questionnaire «Assessment SIC (SIEC) Enterprise»

<table>
<thead>
<tr>
<th>General questions</th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
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<tbody>
<tr>
<td>1. Does the company has its own environmental department or environmental service, or it uses the services of specialized firms?</td>
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<td>2. Is there in the staff officer, to which would be vested with the authority to establish requirements for the system of environmental protection, their implementation in accordance with ISO 14000?</td>
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<td>3. Do the number of environmental workers scale and specificity of production?</td>
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<td>4. Are there special provisions in the companies or programs in the field of operating systems and methods to implement them?</td>
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<td>5. Has control over the observance of standards in the production process?</td>
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<td>6. If not, what regulations are not complied with, and how this affects the GC?</td>
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<td>7. Are the activities Enterprises Environmental Compliance?</td>
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<td>8. In what form the reporting is made on the environmental costs?</td>
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<td>9. Are the established statistical forms of environmental reporting, or the company has developed its own forms of accountability?</td>
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<td>10. Can it be compared the data from the underlying documents with summary reports?</td>
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<td>11. Is there a computerized version of companies conducting environmental reporting?</td>
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<td>12. How often is compiled environmental reporting?</td>
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<td>13. Is it controlled by MPC, MPE, MPD for Companies?</td>
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<tr>
<td>14. Who does control it?</td>
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<td>15. From what sources there is a basic pollution?</td>
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<tr>
<td>16. Whether or not the conformity assessment of environmental performance indicators required by law?</td>
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<tr>
<td>17. Are being developed any programs on the prevention of further contamination of the GC?</td>
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<tr>
<td>18. Is the analysis of the current environmental management system?</td>
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<tr>
<td>19. Is there a systematic control of those aspects of your business that have an adverse impact on the SE, and what measures are being taken?</td>
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</table>

Evaluation of the structure of the system of environmental management established by the company, it is possible to carry out the following test-questionnaire. In the test - a questionnaire has sections: General questions, answers and comments. Common questions are divided into organizational, regulatory developments, to comply with environmental legislation, drafting reporting forms, the presence of a computerized version of environmental reporting, MPC, MPE, MPD in the enterprise, identify the sources of pollution, the analysis of the current system of environmental management. The results of the test - a questionnaire analyzed in the course of pre-planning and are the audit documentation of the audit.

Basic organizational structure of, units are included in the management structure, which are part of a system for monitoring environmental indicators. Environmental issues are the responsibility of the Department of Nature Protection and the Department of Safety. Environmental protection department evaluated data on the environmental situation, related to the impact on the environment, monitoring and EIA under the operational control of regulatory compliance. In terms of environmental issues to be considered at meetings of the Technical Council, includes measures for the prevention and elimination of emergency situations, the study plan of action in emergencies.

Thus, evaluation of internal environmental control (SIEC) can be built on the basis of standards laid down in the general rules of the audit examination and evaluation of accounting systems and internal controls, but taking into account the peculiarities of the audited environmental object.

**CONCLUSION**

Conclusion of environmental audit is the final document drawn up by the results of an environmental audit. The minimum information to be included in the conclusion of an environmental audit of any facility shall include: the study and analysis of the exploded state of the environment, identify sources of toxic, chemical, physical and other...
impacts, the establishment of all kinds of effects on the audit object components of the natural environment, the definition of environmental, social and economic effects of the activities of the audit object, the development of proposals for technical, technological and environmental measures aimed at protecting the environment and natural resource management, recommendations for prospective mode of operation of the audit object.

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CORPORATE GOVERNANCE CHALLENGES IN
BUSINESS ENTERPRISES
(IN INDIAN PERSPECTIVE)

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ABSTRACT

Ethics in business are of utmost importance. The supreme content of any strategy for growth of an organisation comes from ethical consciousness. When we violate ethical standards, the gains, however big, will be short-lived. So the real issue in building up an effective corporate governance system is the genuineness in the management's ethical stance. The ultimate focus of business is people and the governance objective should facilitate in reaching them. The Indian corporate governance system has evolved over a period of time, drawing from the British legacy initially and from the US practices recently. After SATYAM debacle India requires strict Corporate Governance follow up. New norms on Corporate Governance declared by SEBI in the year 2014 are also incorporated in Research work carried out by the Researcher. More recently TATA Group was also in news.

KEY WORDS: Corporate Governance, globalization, Commerce, Management.

INTRODUCTION

The corporate world is not free from economic changes from the fast changing business environment and Indian corporate world is not free from it. At present there are many players with different interests. However, the common goal and expectation is honesty, integrity and business and moral credibility (missing largely in Indian corporate world!!!). Towards this goal, professionals, groups and organisations which include the corporate try to acquire skills, methods and technologies that may give them an ethical competence to face moral challenges. Many a time, a disconnect between the organisation and the individuals value leads to a crisis, in Indian corporate world, which, in turn affects the image of the corporate and also the expectations of the share holders and investors.

We have seen from time to time the dubious role played by individuals, which has led to the fall of strong corporates. Many a time, the business is liquidated not only because of the market and policy changes but also due to scandalous acts of some key individuals in the corporate s in Indian corporate culture.

ASSUMING GREAT IMPORTANCE

It is in this context that corporate governance has assumed great importance in Indian context. It is increasingly demanding our attention and has moved to the centre stage. The Enron and World.com scandal in the US have clearly shown to the world the necessity of having good corporate governance in corporate world. In our country, where we are embracing globalisation, liberalisation and deregulation, corporate governance is very critical. The simple mechanism is to draw procedures and follow them strictly. A corporate enterprise should have the prime objective of conducting business as per ethical standards which ultimately makes a company a good or a bad one. Ethics in business is of utmost importance. Management Gurus and accounting experts may give the best of routes and models for establishing market leadership or attaining higher profits, but the supreme content of any strategy for growth and progress of an organisation comes from ethical consciousness.

Corporate governance is practised through a code of best practices. On account of the interest generated by Cadbury Committee Report, the Confederation of Indian Industries (CII), the Associated Chambers of Commerce and Industry (ASSOCHAM) and the Securities and Exchange Board of India (SEBI) constituted Committees to recommend initiatives in Corporate Governance. The recommendations of the Kumar Mangalam Birla Committee, constituted by SEBI, led to addition of Clause 49 in the Listing Agreement. These recommendations, aimed at improving the standards of Corporate Governance, are divided into mandatory
and non-mandatory recommendations. The recommendations have been made applicable to all listed companies, their directors, Management, employees and professionals associated with such companies. The ultimate responsibility for putting the recommendations into practice lies directly with the Board of Directors and the management of the company. The other development include constitution of a high powered Committee by Department of Companies affairs, Government of India, headed by Shri Nareshchandra, on August 21,2002, to examine various corporate governance issues.

Other developments include the constitution of a Committee by SEBI under Chairmanship of Shri N.R.Narayana Murthy, for reviewing implementation of the corporate governance code by listed companies and issue of revised clause 49. Another Committee has been constituted by Department of Company Affairs known as the Working Group for examination of suggestions received on good corporate governance.

A high powered Central Coordination and Monitoring Committee(CCMC) co chaired by Secretary, Department of Company Affairs and Chairman, SEBI was set up to monitor the action taken against the vanishing companies and unscrupulous promoters who misused funds from the public. It was decided by this committee that seven task forces be set up at Mumbai,Delhi, Chennai, Kolkata, Ahmedabad, Bangalore and Hyderabad with regional Directors/Registrar of Companies of respective regions as Convenor and regional offices of SEBI and Stock Exchanges as members.

WHERE INDIAN COMPANIES NEED TO IMPROVE

It is difficult to offer a broad based response to Corporate governance. This because the Indian industry is not one homogeneous cluster. It has several subdivisions and categorisations. We need to look at those categories and explore what needs to be done. For instance in the US and in the UK, the pattern of corporate governance which is generally followed is based on dispersal ownership. In other parts of the world including India, corporate ownership is not dispersed, it is concentrated in the hands of dominant shareholders. The dominant shareholders are family groups and domestic groups like big industrial houses and government institutions. Then there are multinational groups with their subsidiaries and affiliates in our country. Other group is the state owned corporations where the state is dominant owner- the Public sector under takings. It is natural that the publicsector has a dominant role in certain areas which are key to in certain areas which are key to socio economic growth or strategic to the country’s defence and integrity .Often, they are run as if they are wholly owned by the state even where substantial proportions of its equity are held by other investors. So irrespective of the nature of concentrated or dominant ownership, all the companies require appropriate mechanisms to ensure effective and transparent governance.

At present, it is seen some foreign institutional investors (FIIs) going for corporations saying that they are taking a risk in the short term and the rewards may compensate them adequately for their risk. They may be right in an economic sense, But if they succeed in that it will set a bad pattern for the industry. Indian corporate should have proper enforcement laws. Our problem is is not the lack of or in adequacy of legal framework, but its speedy and effective enforcement.

There are companies which operate in the global markets and are obliged to have global standards. They have to present themselves as well governed companies by the standards of corporate practices expected of them in their host countries. Then only, they can get established in the international market. Apart from meeting international governance requirements, they have the opportunity to adopt new standard in their domestic environment as well as and move forward. Those companies which are still living in the past should try to become global by aspiring for improvement in the quality of corporate governance. It is for the companies to choose the areas for improvement for the corporate governance on the strength of their present standards.

No big corporation can be managed on anyone’s hard earned money so what corporations should practice is what Mahatma Gandhi prescribed decades ago “Trusteeship”.

RECENT DEVELOPMENT OF CORPORATEGOVERNANCE IN INDIA

As per leading national newspaper, Times of India of 14th February 2014, SEBI has suggested following major changes in the area of Corporate Governance:

- Listed companies should have compensation committee.
- Panel will first have remuneration policy.
- Listed firms should have compulsory whistle blower mechanism.
- No stock options to independent directors.
- Enhanced disclosures of remuneration policies.
- Maximum number of boards an independent director can serve on listed companies restricted to 7 (seven).
- Total tenure of an independent director restricted to two terms of five years.
- New Norms for all listed companies to be effective from oct.1 2014.
- It also said that there should be atleast one woman director on the board of every company.
TRANSFORMATION REQUIRED TO COPE UP WITH GLOBALISATION

The Indian corporate sector requires a lot of changes and major change required is to professionalise their business. And to determine where the core sector lies, Indian corporates have gone into all sorts of businesses which they neither understand nor have resources for it. They have to find out their strengths, the core sector they should confine themselves to, and resources available to go for the best technology. So they began to suffer when they faced so much competitions with globalisation. The corporate sector has to restructure their business as they have the manpower and resources for that. They have to get technically qualified professionals to run their business and be transparent in all their economic activities. To introduce corporate governance, that sort of transformation is required, so that they can produce good quality products at very competitive prices to face tough global competition. The collective ability, in terms of knowledge and skill of the board of directors to effectively supervise the executive management, determines the effectiveness of the board. Corporate governance is an issue one of mindset.

GOOD CORPORATE GOVERNANCE

In the backdrop of efforts to further governance practices, how do we visualise the future of Indian corporate sector? In the years to come, the Indian financial system will grow not only in size but also complexity as the forces of competition gain further momentum and variedness plus they acquire more financial depth. We can only hope that the policy environment will remain supportive of healthy growth and development with accent more on operational flexibility as well as greater prudential regulation and supervision. The real success of our financial sector reforms will however, depend primarily on the organisational effectiveness of the various financial institutions including cooperative banks, for which initiatives will have to come from banks themselves.

To sum up, good corporate governance is about putting the good of the corporation ahead of individual good, and being a good corporate citizen. It is about civilised behaviour and about and long-term orientation. It is about making the life better for the next generation of leaders in the corporation. This is what civilised societies are about, and history has shown that it is civilised societies that have progressed. This should be the lesson in this for all of us.

CONCLUSION

Further cultural reforms are still needed. Broadbased reforms should be introduced and implemented by altering current system of business education and introducing “value based education system”. Additionally, issues of corporate governance should be given more publicity in order to them permeate more into Indian business. Finally, board of directors should play part in cultivating more positive corporate culture. For Corporate governance in India to become sustainable it must become integral and indispensable part of Indian corporate culture. Indian Government has taken steps to improve corporate governance in India by creating National Foundation for Corporate Governance. Whose main purpose is to promote good corporate governance in India. Corporate Governance standards will improve by implementing it whole heartedly and not by mere formulation.

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RELATIONSHIP BETWEEN INFORMATION AND COMMUNICATION TECHNOLOGY AND PERFORMANCE OF DEPOSIT MONEY BANK IN NIGERIA

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ABSTRACT

This study on relationship between information and communication technology and performance of Deposit money banks in Nigeria, identified how some of the challenges confronting implementation of ICT in organization could be classified into three classes as human, operational and technical constraints. The human constraints include physical disability, poor sight, illiteracy and ageing. The operational constraints include insecurity of funds transferred, frauds and standardization of channels. The main objective of this study is to examine the relationship between information and communication technology and performance of deposit money bank in Nigeria. The study adopted survey research design; the population of the study comprises staff of First bank and Unity Bank Plc. Mubi totally 48 staff all together. The instrument used for collecting data from the respondents is the questionnaire, and the hypotheses were tested using correlation analysis. The result shows that there is significant relationship between variables of the study since (r = 0.876, 0.743, 0.922 and P < 0.05). The finding revealed that IT infrastructures (digital devices, internet facility) are regularly maintained in the bank, web portal network for e-filling of customer is always available for employee to performance their duties. Finding also revealed that having online facility in employees’ desk help to aid customers satisfaction. Employees have ICT trainings in the daily working procedures in the organization. Also the finding further revealed that, there are adequate computers available to attend to customers’ complaints of any kind in the bank. The study also recommends that the management of First Bank should continue to maintain good ICT infrastructure of digital devices and internet facility that enable her employees to have access to web portal network for e-filling of their customers, this will go along way to increase the bank performance and customers level of satisfaction.

KEYWORDS: Communication, deposit, effect, information, performance & technology

INTRODUCTION

Today’s business environment is very dynamic and undergoes rapid changes as a result of technological innovation, increased awareness and demands from customers. Business organisations, especially the banking industry of the 21st century operates in a complex and competitive environment characterized by these changing conditions and highly unpredictable economic climate. Information and Communication Technology (ICT) is at the centre of this global change curve.

The need for efficiency and effectiveness in the running of the Banks as leading players in the cohort of financial services providers of a nation thus cannot be overemphasized (Binugo and Aregbeshola, 2014). Before the coming of information technology, the transaction of businesses especially in the financial sector was difficult and stressful; hence, the low performance level of banks in Nigeria. Technology has indeed influenced the performance of all Nigerian Banks in the last decade. This period has been associated with the provision of dynamic customers focused on banking services, improved regulation and high profitability.
Binugo and Aregbeshola (2014), assert that recent advances in the technological world giving birth to the emergence of information and communication technology (ICT) have led to remarkable changes in the ways businesses are run in contemporary times. This development is underscored by contemporary advancements engineered by the knowledge economy. It is also important to state that modern banking in Nigeria is driven by the outputs from robust local and global research and development.

Wohrerem (2000), claimed that only banks that overhaul the whole of their payment and delivery systems and apply ICT to their operations are likely to survive and prosper in the new millennium. He advises banks to re-examine their service and delivery systems in order to properly position them within the framework of the dictates of the dynamism of information and communication technology. The banking industry in Nigeria has witnessed tremendous changes linked with the developments in ICT over the years. The quest for survival, global relevance, maintenance of existing market shares and sustainable development has made exploitation of the many advantages of ICT through the use of automated devices imperative in the industry.

The sector that has been most radically affected by the information technology developments is the banking system. The information technology has become a critical business resource because its absence could result in poor decisions and ultimately business failure. Technology has opened up new markets, new products, new services and efficient delivery channels for the banking industry. Online electronics banking, mobile banking and internet banking are just a few examples.

Information Technology has also provided banking industry with the wherewithal to deal with the challenges the new economy poses. Information technology has been the cornerstone of recent financial sector reforms aimed at increasing the speed and reliability of financial operations and of initiatives to strengthen the banking sector (Saeid, 2011).

Some of the challenges confronting implementation of ICT in organization could be classified into three classes as human, operational and technical constraints. The human constraints include physical disability, poor sight, illiteracy and ageing. The operational constraints include insecurity of funds transferred, frauds and standardization of channels. The technical constraints are centered on the lack of supporting infrastructures such as erratic electricity supply, interdependence and lack of encryption on short message system (SMS) messages (Agbada, 2008).

Despite the rapid growing adoption of the information technology tools to improve banking operations through the use of SMS, internet, online banking and real time gross settlement, Nigerian banks are still facing the challenges of continually modernise their operations so as to increase their productivity, enhance quality of service delivery and also minimise the average operating cost and time.

Similarly, studies were conducted and find a positive relationship between information and communication technology and banks performance Dabwor, Ezie and Anyatonwu, 2017; Luka and Frank, 2012; Madueme 2010; Binugo and Aregbeshola 2014; Nwakoby, Sylvester & Philip, 2018; Abubakar, Nasir, & Haruna, 2013). while others identified a negative relationship between information and communication technology and deposit money performance (Wilson, Odo and Ikenna, 2014; Maiyaki and Mokhtar, 2010). Even though in most of the studies reviewed, the researcher noted that there were divergence of methodology and scope of studies.

However, from the aforementioned, researches has been conducted on ICT and it effect on deposit money performance. Based on the review, this study will focus on conducting a research to answer the question of whether there are any new ICT strategies adopted by First Bank and Unity Bank Plc, Mubi, Adamawa State in improving their performance.

Therefore, this study tends to bridge this gap by looking at components of information and communication technology i.e. (ICT infrastructure, ICT capacity and ICT utilization) and how each of the variables influence performance of deposit money bank with specific reference to First Bank and Unity Bank Plc, Mubi, Adamawa State.

The following hypothesis was formulated for the study:

H0 : Information and communication technology infrastructure does not have significant relationship with performance of deposit money bank in Nigeria;

H0 : Information and communication technology capacity does not have significant relationship with performance of deposit money bank in Nigeria; and

H0 : Information and communication technology utilization does not have significant relationship with performance of deposit money bank in Nigeria.
LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Concept Information and Communication Technology

It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels. ICT deals with the physical devices and software that link various computer hardware components and transfer data from one physical location to another. Roger (2016), opined that ICT is a synergy between computers and communication devices and forms an important part of the modern world. Thus the most significant shortcomings in the banking industry today is a wide spread failure on the part of senior management in banks to grasp the improvement of technology and incorporate it into their strategic plans.

Yousafzai (2012), asserts that ICT Banking adoption is a complex and multifaceted process and joint consideration of customers’ personal, social, psychological, utilitarian and behavioural aspects is more important than adoption itself and will ultimately result in the intended behaviour. It is imperative that all these innovations aimed at having a competitive edge are related to the profitability of banks (Akombo, 2011).

Information Technology (IT) is the automation of processes, controls, and information production using computers, telecommunications, software and ancillary equipment such as automated teller machine and debit cards (Khalifa 2000). It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels.

Irechukwu (2000), lists some banking services that have been revolutionized through the use of ICT as including account opening, customer account mandate, and transaction processing and recording. Information and Communication Technology has provided self-service facilities (automated customer service machines) from where prospective customers can complete their account opening documents direct online. It assists customers to validate their account numbers and receive instruction on when and how to receive their cheque books, credit and debit cards. Communication Technology deals with the Physical devices and software that link various computer hardware components and transfer data from one physical location to another (Laudon & Laudon, 2001).

Concept of Bank Performance

A lot of studies exist in the literature on the performance of banks adopting e-banking. The reason is that e-banking has cost and revenue implications and hence on the profitability of banks adopting it (Guru & Staunton, 2012). Ahmed and Khababa (2009), in their assessment of bank performance in Saudi Arabia employed three ratios as measures of performance – ROE, ROA and percentage change in earnings per share. Sinkey (1992), posits that return on asset is a comprehensive measure of overall bank performance from an accounting perspective being a primary indicator of managerial efficiency as it indicates how capable the management of a bank has been in converting the bank’s asset into net earnings.

Rose and Hudgins (2006), however maintain that ROE is a good measure of accounting profitability from the shareholders’ perspective. It approximates the net benefit that the stockholders have received from investing their capital. On the other hand, Malhotra and Singh (2009), examined the impact of internet banking on performance and risk tracing the experience of Indian commercial banks during June 2007 and found that that the profitability and offering of internet banking does not have any significant association, which was correspond to the findings of DeYoung (2015).

In addition, Mohammad and Saad (2011), examined the impact of electronic banking on the performance of Jordanian banks over the period (2000-2010), using OLS regression and found that electronic banking has a significant negative impact on banks performance which was similar to the findings of Delgado et al. (2007). Hernado (2016), examined the impact of the adoption of a transactional web site on financial performance using a sample of 72 Spanish commercial banks over the period of 1994-2015 and found a positive impact on profitability, which was similar to DeYoung (2015), who found that internet banks are more profitable than non-internet banks, though no specification were made as to time of significant reality.

Concept of Information & Communication Technology Infrastructure

Turban (2007), defined information technology infrastructure as the physical services, and the management that support all computing resources in an organization. They further stated that it supports all organizations ICT applications including Operations, documentation, integration, and maintenance. Mckay and Brockway (2006), stated that it is the base foundation of ICT capability budgeted for and provided by the information system function and shared across multiple business units and functional areas. However, he further noted that ICT includes both the technical and managerial expertise to provide reliable service. The definition of Information Technology Infrastructure encompasses a variety of components.
Based on previous studies, Duncan (2005), stated that information technology infrastructure includes a group of shared, tangible information technology resources that provide foundation to enable present and future business prosperity. Broadbent and Weill (2007), noted that information technology infrastructure capabilities enable the various types of information technology application required to support current and future business objectives, also enable the competitive positioning of business ideas.

According to Xia and King (2004), information technology infrastructure is a set of information technology resources and organizational capabilities that are shared across the organization and that provide the foundation on which information technology applications are developed and business processes are supported. Perrison and Sanders (2006), defines ICT infrastructure as everything that supports the flow and processing of information in an organization, including hardware, livewire, software, data and network components. ICT infrastructure refers to the composite hardware, software, network resources and services required for the existence, operation and management of an enterprise ICT environment. It allows the organization to deliver ICT solutions and services to its employees, partners and/or customers and is usually internal to an organization and deployed within owned facilities.

Concept of Information & Communication Technology Capacity

The term capacity refers to the skills, knowledge, relationships, values and attitudes among many other attributes such as health and awareness (Matachi, 2006), that enable countries, organizations, groups and individuals to carry out functions and achieve their development objectives over time. Therefore, ICT capacity can be said to refer to ICT skills, knowledge, relationships, values and attitudes that enable an individual or an organization carry out ICT functions and achieve their development objectives over time.

The definition of ICT capacity adopted by the recent ICT skill for Life Curriculum incorporated a concept of purposeful use which is very intuitive. Capacity building is the establishment of conditions that will allow individuals to engage in the process of learning and adapting to change. Such conditions include providing infrastructure, maintenance of ICT equipment and training of personnel. Today, everyone needs a basic understanding of ICT and how to make productive use of it. Staff of organizations therefore needs the prerequisite ICT skills to be able to provide ICT mediated instruction to the benefit of the customers. The acquisition of basic computing skills can be achieved through incidental learning provided the learners are given access to a suitable computing facility, with entertaining and motivating content and some minimal (human) guidance (Ernst & Ganiatsos, 2004).

Concept of Information & Communication Technology Utilization

According to Yusuf (2005), ICT utilization is the presentation and distribution of instructional content through web environment or systems offering an integrated range of tools (stand-alone computer instruction, CD ROM amongst others) to support learning and communication. Utilization is the use of tool by its nature. It is also the optimum and proper use of a tool. Therefore, ICT utilization is the update and accurate use of ICT to increase utility and value.

Bamiro and Liverpool (2002), observed the utilization of ICT and computer has already invaded and dominated organizations in the developed world, while in Nigeria it has been painfully slow. Akin to this is the report that no real effort has been made in IT development both at individual and corporate levels and that most universities still process results manually (the Guardian Editorial, 2006). More so, most lecturers are yet to acquire the requisite ICT skills and where opportunities exist for them to do so, they shun because of the phobia they have developed over the ICT.

According to (Aniebonam, 2008), Studies have confirmed that lack of computer skills exists among faculties at universities in Nigeria. As such, they are unable to incorporate the benefits of computer technology in their teaching, research and service to the university community. Less than 12 percent of the Nigerian academic curricula have digital content. However, the development of ICT in the last two years show that most organizations and institutions now have access to a wide variety of ICT facilities, materials, and texts to improve their content knowledge and instructional pedagogy.

Effect of Concept of Information & Communication Technology Infrastructure on Performance of Deposit Money Banks

IT infrastructure flexibility is the ability of the infrastructure to support a wide variety of hardware, software and other technologies that can be easily diffused into the overall technological platform, to distribute any type of information (data, text, voice, image, video) to anywhere inside of an organization and beyond, and to support the design, development and implementation of a heterogeneity of business applications (Broadbent, Weill & St. Clair, 2008). From a practical perspective, the findings contribute to
a more thorough understanding among top management of the importance of IT infrastructure flexibility. On one hand, a large investment in IT infrastructure flexibility beyond current needs can allow a system to better cope with future changes. Flexible IT infrastructure characteristics allow managers the freedom to take full advantage of an IT system because it is able to accommodate and respond to new initiatives more efficiently. If the IT infrastructure is not flexible, extra money, effort and time for either new IT implementation or other business operations will result (Byrd & Turner, 2001). Marchand, Kettinger and Rolins (2000), studied the link between information technology and firm performance and their study revealed that three set of factors keeps a firms’ performance, the quality of IT management practices, IT management processes should sense, gather, organize and disseminate information in other words IT management is positively related to a firms’ performance and continual existence.

Effect of Concept of Information & Communication Technology Capacity on Performance of Deposit Money Banks

The impact of IT will necessarily be differentiated, depending on a whole range of macroeconomic factors such as the overall macroeconomic and technological capacity of a nation, the available skills and technological capabilities of the workforce, general literacy levels, and the interventionist capacity of the state to move decisively and effectively in determining the rate and direction of technical progress (Ernst & Ganiatsos, 2004). Kyakulumbye, Muhenda and Namanya (2009), in a study among Uganda local governments suggested that it is very important for an organization to determine its employee’s knowledge or skills of IT because such knowledge or previous experiences may influence the organization’s decision in adopting and utilizing ICT.

Effect of Concept of Information & Communication Technology Utilization on Performance of Deposit Money Banks

ICT use has continued to permeate virtually every organization and is being applied in a wide range of areas. It has provided new ways to store, process, distribute, and exchange information within companies and with customers (Kollberg & Dreyer, 2006). The recent ICT developments have enormous implications for the operations, structure and strategy of organizations (Buhalis, 2003). Application of ICT to enhance the performance of organizations of all types around the world do not only help to cut costs and improve efficiency but also for providing better customer services (Ashrafi & Murtaza). Spanos, Prastacos and Poulomenakou (2002), posit that ICT has the ability to enhance, coordinate and control the operations of many organizations and can also increase the use of management systems.

Conversely, Ongori and Migiro (2010), maintain that the impact of globalization has obliged many organizations to adopt ICT in order to survive in the present competitive era especially in the area of competing with large organizations. Bresnahan, Brynjolfsson and Hitt (2002), argue that durable productivity gains have been achieved in enterprises that use ICT. This is traceable to the fact that ICT helps in the effective low of data in organizations thereby assisting organizations to obtain information at any given time, which in turns helps these organizations to reach their desired target. Furthermore, ICT brings about changes in businesses and helps to create competitive advantage hence, organizations of all types tend to adopt the innovation (Apulo & Latham, 2011). Investment in ICT is worth the while for management of banks in South Africa, emphasis should be placed on policies that will enhance proper utilization of ICT equipment rather than additional investments. However, it is worthy of note that the impact of ICTCE on performance of banks is more than that of ICT investment.

Empirical Review

Study conducted by Dabwor, Ezie and Anyatonwu (2017), on the effect of ICT adoption on the competitive performance of banks in an emerging economy: The Nigerian experience, the study adopted both inferential and descriptive design using a t-test, where P < 0.05. Their findings of the study revealed that a positive relationship exists between ICT and banks performance in Nigeria. Another study by Wilson, Odo and Ikenna, (2014), on impact of Information and communication technology on bank profitability, using a sample comprising one-quarter of the banks in Nigeria quoted on the Nigeria stock exchange. Their study adopted the OLS regression techniques, where P > 0.05, the result of the regression result was in conflict with the aprori expectations, which indicates that IT spending in the study period had no significant impact on future operating performance.

Oyinkola (2018), carried study on the impact of information technology on banking operations in the First bank of Nigeria PLC. The data used was primary data and the research instruments used are questionnaires and personal interview for staff and customer of the bank. Simple frequency percentage was adopted as the statistical and the hypothesis was
analyzed using Chi-square, where P-value < 0.05, the result revealed that IT has greatly improved the growth and performance of Nigerian commercial banks and has led to increased customers’ satisfaction.

The above empirical reviews succeeded in identifying the relationship between information and communication technology and performance of money deposit bank, Study conducted by Dabwor, Ezie and Anyatonwu (2017), examine effect of ICT adoption on the competitive performance of banks, their study only focused on IT without specifying what components of ICT the study centered on. Another study by Wilson, Odo and Ikenna (2014), the study identified that ICT had no significant impact on future operating performance, their study didn’t recognize the importance of ICT and also failed to test the reliability of their research instrument, in the same vein Oyinkola (2018), his study revealed that IT has greatly improved the growth and performance of Nigerian commercial banks, his study succeeded in identifying the significant of IT on performance of banks, but failed to pinpoint other ICT components like structure, capacity and utilization.

**Theoretical Framework**

The study dwelled in resource-based theory, the reason for chosen this theory is because the theory tries to identify the links the performance of organizations to resources and skills i.e. relationship existing between employee and the organization, the theory look at how well employee can manage, utilize and manipulate ICT infrastructure.

**The Resource-Based View**

The resource-based view (RBV) of the firm posits that firms compete on the basis of “unique” corporate resources that are considered to be valuable, rare, difficult to either imitate or substituted by other resources. The theory stemmed from the area of strategic management research and widely attracts attention as a suitable tool to examine the value delivered by IT resources (Melville, 2004; Wade & Holland, 2004). The resource-based theory rationalizes firm’s superior performance to organizational resources and capabilities. The resource-based view of the firm links the performance of organizations to resources and skills that are firm specific, rare and difficult to imitate or substitute (Barney, 1991). Hence, it is a theory that is mostly preferred by researchers in this area of study.

Resources can be broadly defined to include: assets, knowledge, capabilities, and organizational processes (Bharadwaj, 2000). Grant (1991), however distinguishes between resources and capabilities and further classifies resources into tangible, intangible and personnel-based resources. The tangible resources include: financial capital and physical assets of the firm such as plant, equipment, and stocks of raw materials whereas, intangible resources include reputation, brand image, and product quality while personnel based resources include technical know-how, and other knowledge assets including dimensions such as organizational culture, employee training, loyalty, etc. The ability of a firm to create competitive advantage depends on its capability, which is the extent to which the organization can assemble, integrate, and deploy valued resources to create or sustain competitive advantage in the industry to which it belongs (Russo & Fouts, 1997).

**METHODOLOGY**

Survey research design was used in this study. This study was carried out in First Bank Plc Mubi and Unity Bank, Plc, Mubi. The population of the study comprises staff of First bank and Unity Bank Plc Mubi totally 48 staff all together. The study was carried out on the whole population, i.e. 48 respondents, because of the small size of the population. 48 questionnaires were distributed randomly to the respondents, while nominal scale measurement was used in assigning membership to respondents, because nature of options to be selected in the questions involved: strongly agree, agree, disagree and strongly disagree. While the hypotheses are tested using Spearman Rank Correction analysis at 0.05 level of significance.

**ANALYSIS AND RESULTS**

Questionnaire is the instrument of collecting primary data that was used in this presentation and analysis of the data collected.

Out of 48 questionnaires distributed;

<table>
<thead>
<tr>
<th>Returned</th>
<th>41</th>
<th>x 100 = 85.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unreturned</td>
<td>7</td>
<td>x 100 = 14.6%</td>
</tr>
</tbody>
</table>

41 were successfully returned and valid, representing 85.4%, while 7 were not returned, representing 14.6%.
Hypotheses Testing

Hypothesis One

H_0 : Information and communication technology infrastructure has no significant relationship with the performance of deposit money bank in Nigeria;

Pearson’s correlation between the perceived response on information and communication technology infrastructure and bank performance

<table>
<thead>
<tr>
<th>Source</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.876**</td>
</tr>
<tr>
<td>Significant(2-tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>41</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

The above analysis shows a linear relationship between the test results scored on the perceived response on the relationship between information and communication technology infrastructure and bank performance. Pearson’s bivariate correlation coefficient shows a positive linear relationship between both test scores \((r = 0.876)\) that is significantly different from zero \((p < 0.05)\). This implies that information and communication technology infrastructure has significant relationship with the performance of deposit money bank in Nigeria.

Hypothesis Two

H_0 : Information and communication technology capacity has no significant relationship with the performance of deposit money bank in Nigeria.

Pearson’s correlation between the perceived response on information and communication technology capacity and bank performance

<table>
<thead>
<tr>
<th>Source</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.743**</td>
</tr>
<tr>
<td>Significant(2-tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>41</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

The above analysis shows that there is a linear relationship between the test results scored on the perceived response on the relationship between information and communication technology capacity and bank performance. Pearson’s bivariate correlation coefficient shows a positive linear relationship between both test scores \((r = 0.743)\) that is significantly different from zero \((p < 0.05)\). This implies that information and communication technology capacity has significant relationship with the performance of deposit money bank in Nigeria.

Hypothesis Three

H_0 : Information and communication technology utilization has no significant relationship with the performance of deposit money bank in Nigeria.

Pearson’s correlation between the perceived response on information and communication technology utilization and bank performance

<table>
<thead>
<tr>
<th>Source</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.922**</td>
</tr>
<tr>
<td>Significant(2-tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>41</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

The above analysis shows there is a linear relationship between the test results scored on the perceived response on the relationship between information and communication technology utilization and bank performance. Pearson’s bivariate correlation coefficient shows a positive linear relationship between
both test scores ($r = 0.922$) that is significantly different from zero ($p < 0.05$). This implies that information and communication technology utilization has significant relationship with the performance of deposit money bank in Nigeria.

**SUMMARY OF FINDINGS**

The following findings were derived from the hypothesis tested above:

i. Finding revealed that IT infrastructures (digital devices, internet facility) are regularly maintained in the bank, web portal network for e-filling of customer is always available for employee to performance their duties. Finding also revealed that having online facility in employees’ desk help to aid customers satisfaction. Employees have ICT trainings in the daily working procedures in the organization. Also the finding further revealed that, there are adequate computers available to attend to customers’ complaints of any kind in the bank.

ii. Finding from the above analysis also revealed that employees have been motivated through provision of ICT system to put in their best effort in their job, also the management monitor the use of ICT to avoid any irregularities in bank. In addition, the finding further revealed that there is flexibility among banks staff in adapting to changes and the organization ensures accurate use of ICT to increase utility and value.

iii. Furthermore, the finding also revealed that employee share instructional content through web systems offering an integrated range of tools. Also shows that organization encourages support learning and communication, employees have access to a wide variety of ICT facilities in their organization. Moreso, the finding further revealed that ICT improve employees’ content knowledge and instructional pedagogy and the organization always update ICT in order to add value to their customers.

**CONCLUSION**

Inline with the research questions and findings, the following conclusions were derived; information and communication technology infrastructure has significant relationship with the performance of deposit money bank in Nigeria; IT infrastructures (digital devices, internet facility) are regularly maintained in the bank, web portal network for e-filling of customer is always available for employee to performance their duties. Having online facility in employees’ desk help to aid customers’ satisfaction. Employees have ICT trainings in the daily working procedures in the organization. Also, there are adequate computers available to attend to customers’ complaints of any kind in the bank.

The paper further concludes that information and communication technology capacity has significant relationship with the performance of deposit money bank in Nigeria; Moreso, employees have been motivated through provision of ICT system to put in their best effort in their job, the management monitor the use of ICT to avoid any irregularities in bank, there is also flexibility among banks staff in adapting to changes and the organization ensures accurate use of ICT to increase utility and value.

Lastly, information and communication technology utilization has significant relationship with the performance of deposit money bank in Nigeria, i.e. employee share instructional content through web systems offering an integrated range of tools. The banks encourage support learning and communication; employees have access to a wide variety of ICT facilities in their organization. In addition, ICT improve employees’ content knowledge and instructional pedagogy and the organization always update ICT in order to add value to their customers.

**Recommendations**

The following recommendations were derived from the above findings:

i. The management of First Bank should continue to maintain good ICT infrastructure of digital devices and internet facility that enable her employees to have access to web portal network for e-filling of their customers, this will go along way to increase the bank performance and customers level of satisfaction.

ii. Since the employees are wiling to adopt and utilize any available ICT facilities in the bank, the management is advice to provide all the necessary ICT tools that will enhance employees’ performance and also to establish strong monitoring teams that will checkmates any forms of fraud and irregularities in the bank that will lead to customers’ dissatisfaction.

iii. The management should continue supporting their employees through encouraging them to utilize the web system integrated range of tools that will lead to high customers’ satisfaction. Also more access of wide varieties of ICT facilities should be granted to
employees in such a way that it will help them to always get update of ICT devices which will add value to them and their customers.

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OCCUPATIONAL WELL-BEING AMONG SECONDARY SCHOOL TEACHERS

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ABSTRACT
Occupational Well-being is the sum total of physical, psychological and economic factors which affect the occupation. Occupational Well-being indicates the extent to which teachers can enhance their personal lives through their work environment and experience. For effective development of the system of education, Occupational Well-being of teachers is essential. The main intention behind the present study was to study the level of Occupational Well-being among Secondary School Teachers and to compare the Occupational Well-being of Secondary School Teachers with respect to Gender, Locale and Type of Management. The present study was conducted on a representative sample of 300 Secondary School Teachers belonging to Kozhikode, Malappuram and Wayanad Districts of Kerala. For the present study, the investigators used a recently developed Scale of Occupational Well Being. Percentage analysis was used to assess the level of Occupational Well-being for the total sample and Mean Difference Analysis was used to compare the Occupational Well-being of Secondary School Teachers with respect to Gender, Locale and Type of Management. From the study, it is evident that majority of the Secondary School Teachers have average level of Occupational Well-being and there is significant difference between the secondary school Teachers’ Occupational Well-being based on different categories.

KEY TERMS: Occupational Well-being, Secondary School Teachers,

INTRODUCTION
Education of children and young people is at the core of teachers’ work and learner’s success underpins the daily effort, enthusiasm, and commitment from teachers. It is well acknowledged that teachers are the most important in-school factor contributing to student success, satisfaction and achievement. It is emphasized that, to make any process of education a success, the quality, competence and character of the teachers were the most important aspects. If the teacher acquire personal competency and commitment, and if they are able and empowered to perform their multiple tasks in classrooms and in the community in a professional manner, then a chain reaction can begin - starting with a sound teacher performance and culminating in high quality learning among students in cognitive, affective and psychomotor areas of domains.

Teacher wellbeing is deeply connected to the quality of their work, and its impact on student outcomes (CESE, 2014). Consequently ensuring teacher wellbeing is of critical importance for the future of education. Long ago Confucius identified that all teachers contribute to the education of the whole child. It is therefore critical that policymakers, employers and all stakeholders take seriously the wellbeing of all teachers.

Teacher’s Occupational Well-being is a pleasurable positive emotional state, resulting from the appraisal of one’s job experiences. It results from the perception that one’s job fulfils or allows the fulfillment of one’s important occupational values providing and to the degree that these values are congruent with one’s needs. There are number of factors which influence Occupational Well-being like working conditions, nature of the work group and institutions etc.

Need and Significance of the Study
Teachers are extremely important in any society for a multitude of reasons. The role of teachers is not only limited to impart knowledge but also they act as an important formative force in the development of society. All teachers have the ability to teach but what more important is the belief in their ability to teach. In order to teach effectively, teacher must not only feel psychologically and emotionally comfortable, but teachers must have some sense of belief that they can
make a difference to the lives of children they are teaching and that those children are learning. They must feel that their professional work is bringing about positive change in their pupils.

Occupational Well-being is the sum total of physical, psychological and economic factors which affect the occupation. Occupational Well-being indicates the extent to which teachers can enhance their personal lives through their work environment and experience. For effective development of any organization Occupational Well-being of employees is essential. Various problems like job dissatisfaction, occupational stress, lack of freedom, competition with colleagues, poor social relationships etc. act as the barriers to quality of work life of teachers. Only a teacher with high Occupational Well-being can make on the development of children. So it is important to assess the Occupational Well-being of teachers.

The present study aims to find out the Occupational Well-being of Secondary School Teachers. There were very few studies related to this topic Occupational well-being of Secondary School Teachers in Indian context. Lack of such studies in India is evident from review of related literature. This motivated the investigator to study the Occupational Well-being of secondary school teachers.

**Objectives of the Study**

The objectives of the study are as follows.

1) To study the level of Occupational Well-being among Secondary School Teachers.
2) To find out whether there exist any significant difference in the Occupational Well-being of Secondary School Teachers with respect to Gender, Locale and Type of Management.

**METHODOLOGY**

The methodology adopted for the present study is the following.

**Sample of the Study**

The present study was conducted on a representative sample of 300 Secondary School Teachers belonging to three districts of Kerala i.e., Kozhikode, Malappuram and Wayanad. The sample was drawn using Stratified Random Sampling Technique giving due representation to different strata i.e. Gender, Locale, Type of management.

**Tool for the Study**

For the present study, Scale of Occupational Well Being (Hameed & Jincy, 2019) was utilized. The scale consists of 50 items out of which 30 items are positive and 20 items are negative.

**Statistical Techniques used for Analysis**

In the present study Percentage Analysis was used to assess the level of Occupational Well-being for the total sample and Mean Difference Analysis was used to compare the Occupational Well-being of Secondary School Teachers with respect to Gender, Locale and Type of Management.

**RESULT AND DISCUSSIONS**

The occupational well-being among secondary school teachers for the total sample was established by calculating Mean score and Percentage Analysis.

**Percentage of Secondary School Teachers belonging to Different Levels of Occupational Well-being**

The percentage of different levels of Occupational Well-being among Secondary School Teachers for total given in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample</th>
<th>Levels</th>
<th>Size of Sample</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Well-being</td>
<td>Total (M=121.293 S.D.11.49)</td>
<td>High</td>
<td>43</td>
<td>14.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>208</td>
<td>69.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>49</td>
<td>16.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>300</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 1 reveals that, out of 300 Secondary School Teachers, 208 (69.33 %) teachers have average levels of Occupational Well-being. The remaining 43 (14.33 %) and 49 (16.33 %) teachers possess high and low level Occupational Well-being respectively. Hence, it can be concluded that majority of the Secondary School Teachers have average level of Occupational Well-being.

**Results of Mean Difference Analysis**

Mean difference analysis was attempted to compare the mean scores of Secondary School Teachers for the subsamples formed on the basis of Gender, Locale and Type of management. The data and results of the test of significance of difference between means based on Gender are presented in Table 2.
Table 2
Data and Results of the Test of Significance of Difference between Means Score of Rural and Urban Secondary School Teachers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male</th>
<th>Gender</th>
<th>Female</th>
<th>t value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N_1</td>
<td>M_1</td>
<td>σ_1</td>
<td>N_2</td>
<td>M_2</td>
</tr>
<tr>
<td>Occupational Well-being</td>
<td>150</td>
<td>121.83</td>
<td>12.282</td>
<td>150</td>
<td>120.75</td>
</tr>
</tbody>
</table>

Table 2 indicates that the obtained t-value for the Occupational Well-being of Secondary School Teachers based on locale is 1.775 which is not found significant even at 0.05 level of significance. From this it is clear that there exists no significant difference between rural and urban Secondary School Teachers in case of their Occupational Well-being. The data and results of the test of significance of difference between means based on Locality are presented in Table 3.

Table 3
Data and Results of the Test of Significance of Difference between Means Score of Rural and Urban Secondary School Teachers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rural</th>
<th>Locale</th>
<th>Urban</th>
<th>t value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N_1</td>
<td>M_1</td>
<td>σ_1</td>
<td>N_2</td>
<td>M_2</td>
</tr>
<tr>
<td>Occupational Well-being</td>
<td>150</td>
<td>120.12</td>
<td>12.716</td>
<td>150</td>
<td>122.47</td>
</tr>
</tbody>
</table>

Table 3 indicates that the obtained t-value for the Occupational Well-being of Secondary School Teachers based on locale is 1.775 which is not found significant even at 0.05 level of significance. From this it is clear that there exists no significant difference between rural and urban Secondary School Teachers in case of their Occupational Well-being. The data and results of the test of significance of difference between means based on Type of management are presented in Table 4, 5 and 6.

Table 4
Data and Results of the Test of Significance of Difference between Means Score of Government and Aided Secondary School Teachers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of Management</th>
<th>t value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Government</td>
<td>Aided</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N_1</td>
<td>M_1</td>
<td>σ_1</td>
</tr>
<tr>
<td>Occupational Well-being</td>
<td>147</td>
<td>119.66</td>
<td>12.218</td>
</tr>
</tbody>
</table>

Table 4 indicates that the obtained t-value for the Occupational Well-being of government and aided Secondary School Teachers is 0.984 which is not found significant even at 0.05 level of significance. Hence, there exists no significant difference between government and aided Secondary School Teachers regarding their Occupational Well-being.

Table 5
Data and Results of the Test of Significance of Difference between Means Score of Government and Unaided Secondary School Teachers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of Management</th>
<th>t value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Government</td>
<td>Unaided</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N_1</td>
<td>M_1</td>
<td>σ_1</td>
</tr>
<tr>
<td>Occupational Well-being</td>
<td>147</td>
<td>119.66</td>
<td>12.218</td>
</tr>
</tbody>
</table>

Table 5 indicates that the obtained t-value for the Occupational Well-being of government and unaided Secondary School Teachers is 3.313 which is found significant at 0.01 levels. Hence it can be concluded that, there exists significant difference in the mean scores between government and unaided...
Secondary School Teachers regarding their Occupational Well-being.

Data and Results of the Test of Significance of Difference between Means Score of Aided and Unaided Secondary School Teachers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Aided</th>
<th>Unaided</th>
<th>t value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Well-being</td>
<td>94</td>
<td>59</td>
<td>2.534</td>
<td>0.05 Level</td>
</tr>
</tbody>
</table>

Table 6 indicates that the obtained t-value for the Occupational Well-being of aided and unaided Secondary School Teachers is 2.534 which is found significant at 0.05 level. Hence we concluded that, there exists significant difference in the mean scores between aided and unaided Secondary School Teachers regarding their Occupational Well-being. The result also shows that unaided Secondary School Teachers have more Occupational Well-being than aided Secondary School Teachers.

CONCLUSION AND SUGGESTIONS

Teachers well-being is important in teaching learning process. Only a teacher with high Occupational Well-being can make on the development of children. So the teachers Occupational well – being needs to be balancing act and take necessary steps to improve well-being of teachers at their working conditions. The present study reveals that the Occupational well-being of secondary school teachers are average. This stresses the need to consider the well-being of teachers at different levels. Another major finding of the study is that unaided secondary school teachers have more Occupational Well-being than aided and government secondary school teachers.

The outcome of this study has direct importance for teachers, and authorities. The present study shows that government and aided teachers have average level of Occupational well – being. Professional support and improvement of the working conditions should be a priority in order to achieve raised levels of well-being and subsequently healthy school climate.

Teachers well-being is important in teaching learning process. Only a teacher with high Occupational Well-being can make on the development of children. So the teachers Occupational well – being needs to be balancing act and take necessary steps to improve well-being of teachers at their working conditions.

Educational Implications

Government must take concrete steps to develop an environment for the healthy and effective functioning of secondary school teachers. It must be recognized that teachers are the most critical factors for the effective functioning of both the teacher and the school. Teacher education institutions should play a significant preventive rote in developing well-being and reducing stress by training the pupil teacher. The on-going in-service teacher education programs should be evaluated in terms of their effectiveness in developing wellness, emotional intelligence and techniques reducing stress among teachers for their inwards transmission to new generation.

The work – related strain and its management and professional competence, development needs have also been detected in working conditions and working communities. Developing working conditions from different viewpoints must be taken seriously, as poor working conditions should be taken in to consideration due to teachers performance is strongly influenced by good atmosphere and personal relationship in the working community.

The result of the research indicated that there should be a lot of school based development programmes for promoting Occupational Well-being, and actions must target the areas of worker and work, development of school community, professional competence or working conditions. It is not feasible to simultaneously develop all aspects of Occupational Well-being, but it is important to prioritise and schedule planned activities.

REFERENCES

using a multifaceted approach: Associations with physical health, life satisfaction, and professional thriving. Psychology, 5(6), 500-513.

