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# CUSTOMARY LAW AND GENDER INEQUALITY OF TRIBAL SOCIETY WITH SPECIAL REFERENCE TO TAGINS OF ARUNACHAL PRADESH

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## ABSTRACT

*Customary law is unwritten traditional law which is usually prevalent in tribal society has great impact on live of the Tagin in the regard to matters such as marriage, inheritance, traditional authority, guardianship, and so forth. By focusing on this particular study was carried out in Tagin community of Arunachal Pradesh. This present study is attempted to examine the customary law and its impact on gender inequality among Tagin is considered for the study which is more descriptive and qualitative in nature. Study reveals that Society set norms and values are patriarchal in nature, this patriarchal structure sidelines woman by male domination in almost everything whereas men are considered as superior to women in given society. Customary Norms and values of this particular Community have been beautifully structured the role of genders which would bring social stability in society wherein women are assigned with easy task and men are hard on the basis of sex. In this community women are treated as inferior to men in any social setting.*

**KEY WORDS:** Customary laws, Gender inequalities, Tagin, Women status.

## INTRODUCTION

The Tagin is one of the major tribe of Arunachal Pradesh inhabitant in different part of Upper Subansiri District, the members of this group is larger designation of Tani clan. Tagin are well known for their warm hospitality, friendly and pure hearted being.

The customary law is made to believe that it helps its members to maintain the peace and order with other fellow members in societies. The traditional legal system of the Tagin is composed of following sources of Tagin customary law. It's legitimized form of law which is usually prevalent in tribal society. People act according to customary law. These systems are largely ethnic in origin and usually operate within the areas occupied by ethnic group.

It has been noticed that author highlighted the discrimination against daughters according to inheritance rules derived from customary law where traditional law is commonly applied in the matters of inheritance of family property. Supreme Court addressed matrilineal versus patrilineal land ownership where one argued that if there is no surviving of males in the family and women have right to inheritance the land property. Another claimed that women cannot have own land. The island court decision found that women to be the custom owner (Governance group, 2017, p. 28). Indigenous women are facing discrimination and violence from within their own

society where women are excluded from participation in decision making, especially outside the domestic sphere. As women are often stereotyped a being fit only for domestic work and excluded from community affairs. Women are inferior to men in many societies and all public affairs and local government are dominated by men (Christian Erni and Shimreichon Luithui, 2012, p.3). Traditional leaders are primary male elites who enjoy the significance social and political power. Women who challenge customary norms as violation of gender equality rights often enjoy considerably less political power within their community. Furthermore, the act of openly challenging custom and tradition exposes those women to increase stigma and ridicule within the community (Williams, Susan H. 2011, p.73).

Tagin is patriarchal in nature where men can have more than one or two wives. But women aren't allowed. The society doesn't endorse pre-marital sexual freedom. The virginity of girl is much valued in this community. Once bride price is paid to bride's family, girl considered to be the property of groom's family (Ashan Riddi, 2006). The stereotype notion of women being inferior to men still exist as is clearly seen in the traditional idea of women being confined to domestic domain only. Women are treated as inferior or lower to men in almost every sphere of life. Customary laws that are set for welfare of society have biases where women are inferior or subordinated to men (Kamei Pamei Roselina, 2014, p. 60).

The unwritten tribal customary laws recognized as binding their communities interact with the larger corpus of the



law enacted and enforced by the formal state. This interaction often overlooks their role in the maintenance of tribal solidarity and identity. Tribal customary laws focus on role they play not merely as traditional and normative rules of regulating their societies but keeping the tribe together (Walter Fernandes, Melville Pereira and Vizalenu Khatso, 2005, p.23). The marriage within an indigenous law system deprives women of her rights as equal partner in the marriage have been made by authors (Rita N. Ozoemena and Michelo Hansungule, 2009, p. 3).

Customary law is used to promote patriarchy and disempowered women. Exclusion of women from heir ship and consequently from being able to inherit property was in keeping with the system dominated by patriarchy which reserved for women a position of subordination (Tamar Ezer, 2016, p.66, 67). The system of inherited conception is expressed in symbol forms by which mean men communicate, perpetuate, and develop their knowledge about the attitude of life. Customary law is legal expression of cultural norms and values, it is dynamic and change based on social, economic, and legal development. Women aren't seen as active members of religion and cultural communities, notion of discrimination against women without attention to the multiples side of oppression in women's lives (Jahonna E. Bond, 2010, p.519).

## OBJECTIVES OF THE STUDY

To study the customary laws of Tagin tribe related to the gender inequality and its impact on gender roles.

## METHODOLOGY

The methodology approach for present study is descriptive and qualitative in nature. Participant observation technique is used in entire period of study. In order to examine the objectively, primary and secondary data were followed where secondary data has been collected from books and articles which are broadly focus on customary law and gender inequality. Primary data was collected through face-to-face interaction and unstructured interview guides with reference on customary law and gender inequality. A purposive and stratified sampling technique was applied to select 40 respondents (tentative) as a simple size for the study. The respondents were stratified into categories that were consisted of 5 Gaonburahs of village, 30 elderly persons (15 men and 15 women) and 5 youths.

## FINDING AND DISCUSSION

Tagin is traditionally rooted in customs and mythology of the community. Tagin society of Arunachal Pradesh is patriarchal in nature where men enjoy higher social status compared to women. Gender's role among Tagin tribe of Arunachal Pradesh can be best described through the nature of involvement in various socio-economic spheres.

## WOMEN PARTICIPATION IN ECONOMIC ACTIVITIES

Traditional economy of Tagin is mainly based on agriculture. It's based on extensive practices of Jhum or shifting cultivation. Every members of the community participated an equally in various agriculture activities. Tagin women play important role in agriculture production. They perform almost

numerous tasks which are assigned to men. Clearing of jungle is done by both men and women. Activities like sowing, weeding, harvesting, threshing and winnowing are mostly done by women. There is no hard and fast work to differentiate the occupation of men and women. But it's the moral and social obligation that the female members are assigned with easy task and males are assigned with hard works. Tagin, women usually share economic responsibilities by taking an active role in agriculture activities. Other secondary activities such as weaving, rearing of animals and birds are solely depended upon womenfolk.

## WOMEN IN RECREATIONAL ACTIVITIES

Tagin women have given right to perform all recreational activities if they desired. Generally unmarried women taking active participation in dance and song but married women busy in household activities and when they get time, they participate in these activities like song and dance on occasion. Their participation based on the nature of song and dance. There is song and dance for women only. Again there is song and dance for both men and women. Song and dance of women are very important in society because such activities make function enjoyable, and attractive. Generally men enjoy the dance performance of women.

## MATTER OF MATRIMONIAL RELATIONSHIP

In the matter of Matrimonial relationship, members of this particular tribe are governed by Local customary Laws, traditional customary law allowed its members to meet the girls after proper engagement but physical relations aren't permitted by the society. Marriage or sexual relation can be happened after becoming puberty. After engagement, girls are not allowed to choose her owns life partner as per the customs. In case of, girls committed such mistake should be punished as per the law set by society and moreover all paid bride prices have to be returned to groom's family. Bride price plays very important role in marriage as a medium of Transaction. After payment of bride price girls become the property of her husband. In Tagin, girls enjoy lower status than boys.

## GENDER IN HOUSEHOLD PARTICIPATION

In Tagin, the head of the family is male who has been given important tasks. Women are not traditionally entitled to the succession of the family. However boys and girls are equally welcome in family but somehow sons are preferred more. All important decision of family is usually taken by male members and women followed it. Household activities are divided on basis of sex performance. Women are assigned with important task of household activities after getting marriage. Meanwhile they worked along with outdoor activities. Traditionally women are assigned with all the domestic chores like looking after children, preparing of food, brewing of local drinks, carrying water, collection of vegetables, collection of firewood, cleaning and washing of utensils, clothes, , pounding of rice while men are assigned with house maintenance.



## PROPERTY INHERITANCE SYDTEM UNDER THE CUSTOMARY LAW

Inheritance of property right of Tagin community isn't governed by law which is enacted by Central or State government. It's fully governed by local customary law which is set by society itself. In this community women aren't entitled to obtain any immovable like community land accept some share of mother's ornaments. As customary law girls aren't given right to inherit any share or have no claim over land property, but she can use it as long as she is survived. The mode of inheritance of property would be discussed as below:

1. When deceased is survived by son or daughter. Property will be inherited by son only.
2. When deceased has no son but only survived by daughter or widow. Property will go to widow not daughter. Widow will be entitled the ownership of property till her life time. In case of death or remarriage, property will return to descendant of death brother.
3. When woman has acquired property by purchased or gift. Her property could be offered to daughter. But deceased is survived with no children then property will be entitled to descendant of her husband.

Inheritance in Tagin is fully determined by local tribal customary law which is patrilineal in nature. Most of time immovable property like land is entitled by male, not female. Society's structure is set up in patriarchal in nature wherein men enjoy entitled property of his ancestors. .

## GENDER PARTICIPATION IN RERIGIOUS ACTIVITIES

Traditionally Tagin believed in existence of supreme God "Donyi and Polo" by which means Sun and Moon. At the same time they believed in existence of Spirits which are traditionally rooted with indigenious believers. There has been role of women priest but their roles are lured with small or limited form. However in the religious ceremony women's role confined offering at altars, serving food and rice beer to priest, guests and relatives coming from different place.

## GENDER AND EDUCATION

In Tagin community, girl's education isn't given much important because they believed that after marriage girl become the primary members of groom's family and all property acquired her will be enjoyed by her husband's family. Most of women are usually engaged with household activities and other activities lie weaving from mother, relatives and elders of family. They are made to believe that they should look after the parent when they are at parent's house. And after married they are made to look after the husband's economics, children and domestic chores. Now government took various steps and schemes to provide best education to both girls and boys and motivated parents to send girl child to school. Now a day Tagin mothers are interested to provide the best education to their daughters in order to free from old system.

## STATUS OF WOMEN MARRIAGE

In traditionally Tagin women are given lower status compare to men in the terms of social position. In Tagin polyandry is strictly prohibited but polygamous forms of marriage is accepted where man can have more than one or two

wives and women are believed to look after husband's economics and domestic chores separately. Pre sexual marriage is not allowed in Tagin where virginity of girls is given much value and such mistakes committed by girls are to be punished as per the customary laws. Mithun play much important role in marriage ceremony as an economics transaction. And it's believed that once brides are paid to bride's family, girls become the property of husband. After death of husband, widow woman is to be married with kins brothers of her death husband. In case, widow woman married to outside of family members, all paid bride price have to be returned to death husband family. However, in Tagin Tribe, men enjoy higher social status in marriage.

## CONCLUSION

Tagin is patriarchal in nature followed by Patrilineal, Parrilocal and inheritance of property is all set in male line accept movable property of female site such as Mother's local Ornaments. Marriage is patrilocal in nature wherein married couples starting living with groom's family after being married. Family structures are all set in patriarchal where men are regarded as head of the family. All system of society is governed by local customary laws. In this particular community, gender inequality exists right from the beginning wherein gender's roles are divided on the basis of sex. People behave or act according to the norms and value set by society. Somehow women are unsatisfied with setting of customary laws which is sideline women by male domination in every social spheres such as political, economic, education and so forth wherein women are always put in inferior position compared to men in given society. However, government has brought some schemes to provide good education to both boys and girls. Now parents are aware about importance of education which are motivated to their children especially girls child to impart the education. Regard to this, an education system play significant role in changing the mindset of the people. Now changes can be seen in Tagin Tribe wherein women are actively participation in socio-eco and political Spheres.

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# TEACHING WRITING SKILLS TO FOUNDATION STUDENTS

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## ABSTRACT

*There are many reasons for getting students to write, both in and outside class. Firstly, writing gives them more 'thinking time' than they get when they attempt spontaneous conversation. This allows them more opportunity for language processing that is thinking about the language whether they are involved in study or activation. When thinking about writing it is helpful to make a distinction between 'writing for learning' and 'writing for writing'. In the case of the former, writing is used as an aide memoire or practice tool to help students practice and work with language they have been studying. You might, for example, ask a class to write five sentences using a given structure, or using five of the new words or phrases they have been learning. Writing activities like this are designed to give reinforcement to students. This is particularly useful for those who need a mix of visual and kinaesthetic activity. Another kind of writing for learning occurs when you have students write sentences in preparation for some other activity. Here, writing is an enabling activity.*

**KEYWORDS:** *Teaching Writing, Writing Effectively, and Paragraph Writing to Foundation Students*

## INTRODUCTION

Writing for writing, on the other hand, is directed at developing the students' skills as writer. In other words, the main purpose for activities of this is that students' should become better at writing, whatever kind of writing that might be. There are good 'real life' reasons for getting students to write such as things as emails, letters and reports. Whereas, in writing for learning activities it is usually the language itself that is the main focus attention, in writing for writing you look at the whole text. This will include not just appropriate language use, but also text construction, layout, style and effectiveness. It is clear that the way you organize your students' writing and the way you offer advice and correction will be different on what kind of writing they are involved in.

## THE WRITING PROCESS

When a students are writing for writing you will want to involved them in the process of writing. In the real world this typically involved planning what you are going to write, drafting it, reviewing and editing what you have written and then producing a final version. Many people have thought that this is linear process, but a closer examination of how writers of all different kinds are involved in the writing process suggests that you do all of these things again and again, sometime in a chaotic

order. Thus, you may plan, draft, re-plan, draft, edit, re-edit, etc before you produce the final version. You will need to encourage students to plan, draft and edit in this way, even though this may be time-consuming and may meet with some resistance on their part. By doing so, you will help them students to enhance their skills.

## BUILDING THE WRITING HABIT

Many students either think or say that they cannot, or do not want to write. This may be because they lack confidence, think it is boring or believe they have nothing to say. You need to engage them, from early levels with activities not only become a normal part of classroom life but also present opportunities for students to achieve almost instant success. It is when students have acquired this writing habit that they are able to look at written genres and involved themselves in the writing process with enthusiasm.

## WRITING TECHNIQUES

### 1. Instant Writing Technique

One way of building the writing habit of the student is to use instant writing activities as often as possible with the students who are reluctant writers. Instant writing activities are those where student are asked to write immediately in response to a



teacher request. You can, for example, dictate half sentences for students to complete. You can give them three words and tell to put them into a sentence as quickly as possible. Instant writing is designed to make students comfortable when writing, and also to give them time before they say the sentences they have written aloud.

## 2. Using music and pictures Technique

Music and pictures are excellent stimuli for both writing and speaking. For example, you can play a piece of music and the students have to imagine and then write out the film scene they think it could accompany. You can dictate the first sentence of a story and then have the students complete the story, based on the music you play them. You can then dictate the first sentence again and have them write a different story. They can then read out one of their stories and the class has to guess which music excerpt inspired it.

Pictures offer a wealth of possibilities. You can ask students to write descriptions of one of a group of pictures, their classmates then have to guess which one it is. They can write postcards based on pictures you give them. You can get them to look at portraits and write the inner thoughts of the characters or their diaries or an article about them. All these activities are designed to get students writing freely in an engaging way.

## 3. Newspapers and Magazines Technique

The different kinds of text found in newspapers and magazines offer a range of possibilities for genre analysis, followed by writing within that genre. For example, you can get students to look at a range of different articles and ask them to analyze how headlines are constructed and how articles are normally arranged. They then write an article about a real or imaginary news story that interests them. You can do the same of genre analysis in newspaper and magazine advertisements. Students can learn a lot from analyzing the genre and being able to imitate it. In the same vein, agony column letters offer engaging writing practice. Finally, you can show students a story and have them respond to it in a variety of different genres and for different audiences. For examples, the report of a long traffic delay can prompt letters to the newspaper, emails, text messages, letters of apology etc.

## 4. Writers are the Best Writing Teachers

To teach effective writing, you must be effective writers yourselves. You can not teach what you do not know and when it comes to writing, it is important to continue honing your craft. If you have not engaged in much formal writing since college, you will remain a less effective writing teacher. No matter what subject you teach, try starting a blog, writing articles, or developing short stories all terrific ways to engage the mind and keep your skills sharp.

Reading is important, but reading alone is not enough to strengthen your writing skills, or to make you a credible authority on the subject. The author is not proposing that every teacher write online every day (though if you do, that is excellent). But

even if just once or twice a month, in some way, shape, or form, teachers should produce writing to be read by others. It is at least that important to practice what you preach.

## 5. The Value of Sharing

No matter what you teach, share your written work. The author always share with his students and ask for their feedback even their criticism. In that respect, it is essential for students to recognize not only your skill, but also your interest and engagement in constantly refining a crucial life skill. For one lesson, the author even share with students some of high school, college, and graduate school essays, and they analyze what need to improved upon over time. It was excited about sharing the author's work and that in turn helps to get students excited about doing the same.

## 6. Write for Your Students

No matter what you teach, write in front of students. When you are teaching about formal introductory paragraphs, for instance, history students think of a worthy historical question for me to tackle. With the projector on then write out the paragraph, sharing thought process along the way. Students observe how to work and rework my prose, and how to place a premium on concision. They also critique work, which in turn helps them not repeat similar mistakes. Admitting the weaknesses helps the students become less defensive about their own work, and in turn more open to criticism.

## 7. The Writing Workshop

Create workshop environments, with multiple stations focusing on different aspects of writing. In the classroom, appoint a student who is great at transitions to staff the "transitions" booth, and a student great at topic sentences to staff the "topic sentence" booth. Of their own volition, or at any suggestion, students visit whatever booth fits their needs. As far as instruction goes, this maximizes utility while freeing me to meet one-to-one with the neediest students.

## 8. Seeking Feedback

Urge students to share their work with each other and online. Few writers have ever improved by keeping their work to themselves. As the teacher, know that opinions carry significant weight. But the same is true of what others think, especially one's peers. In an increasingly flat world and a digital age, students must feel comfortable and confident about sharing their work for the whole world to see. To that end, teachers should help students produce appropriate, high-quality content.

## 9. Real-World Writing

Most importantly, teachers must do whatever they can to convey the importance and usefulness of writing more effectively. No matter what craft or profession students wish to pursue, make it clear at every turn that knowing how to write well will play a significant role in their success. From science, math, engineering, law, history, and journalism to anything else one can



think of the ability to express oneself clearly in writing is absolutely essential. Next year, to help get that point across, hope to invite various professionals to speak to the students about the role of writing plays in their lives.

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## THE USE OF PERFORMING ARTS TERMS IN CLASSICS (ON THE EXAMPLE OF ALISHER NAVOI'S WORKS)

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### ANNOTATION

*In ancient times, the Uzbek theater consisted of various performances and rose to a high level of art. This information is reflected in historical, artistic and cultural sources, as well as in classical literature. This article deals with the application and etymology of the concepts of spectacle in the works of Alisher Navoi.*

**KEYWORDS:** term, affixation, spectacle, mockery, theater, narrator, puppet, magician.

In particular, we find almost all the terms used in folk art in the XV century in the works of Alisher Navoi. Navoi's works are valuable not only as art, but also as a linguistic, spiritual and cultural treasure. The terms of folk art mentioned in Navoi's works can be classified as comedy, story-based performances, field performances, puppet shows:

1. We can give examples of **comedy**, which is based on humor, imitation, humor, cheerfulness and kindness. In particular, in the 6th article of Hayrat ul-abror, we read about the art of "mashara" (**masxara** - the Arabic plural is musahiru, the etymology is made of sahara) and its place in society:

Ulki soqol bog'labon el kuldurur  
Kulgu soqolig'a o'zi keltirur.  
Qilmoq uchun ko'zga fuzun ko'rkini,  
Boshig'a maymun chu qo'yar bo'rkini.  
Kulgu uchun kelsa ulus qoshig'a,  
Kulmas ulus yolg'uz aning boshig'a [2, p.165].

That is, when someone wears a beard and makes people laugh, the beard makes people laugh at him. When a monkey puts a burqa on its head to show off its beauty, when people come to laugh at it, they not only laugh at its head (they also laugh at it) [2, p. 405]. It is also mentioned in Lison ut-tayr:

Toj qo'ydi boshig'a ul masxara,

Davrida oning sarosar kungara [3, 62-b]... from his poems we can learn that the actors of Herat wore special clothes, make-up, wigs and changed their appearance, and the audience's attitude to the art of comedy. Because I'm talking about the actor's performance and the meaning of the play, Navoi calls it "laughing alone" [4, p. 232]. This means that the actors tried to attract the attention of the audience not only with their words and performances, but also with their appearance and costumes:

O'zidek yosab nechani yor sara,  
Yo'q sara, necha laimi masxara [3, p. 82].

Navoi also tells of the sharpness of the language of the mockers in Herat, and of the calamities that befell them. He said:

Harza erur chunki musha'bid so'zi.  
O'z tilini, ko'rki, kesar ham o'zi...  
Shaklda chun **masxaravash** keldi bum,  
Urmog'ig'a qushlar etarlar hujum [2, 165-b].

Obviously, the art of clowning has its own challenges and responsibilities. It has not been easy to entertain the audience, to expose the flaws in society through laughter, and to be courageous in the face of the pressures that may result from it. Navoi says that humor should be in moderation, that it should only serve to give people a light laugh and good mood. Unable to make people laugh, he harshly criticizes the ridicule that makes him laugh.

Masxara kulgu uchun boj yer,  
Bir diram olg'uncha ikki koj yer [2, p.165].

In Alisher Navoi's Explanatory Dictionary of the Language of Works (four volumes), "Humor is ridiculous; shame on you It is not clear whether the word means a clown or an actor. In 1991, in the work "Lison ut-tayr" published by "Ghulam" publishing house, in the prose statement of the verse "He put a crown on his head is a mockery..." "This clown put a crown on his head." is given.

In fact, Navoi used the word "mockery" not only in the art of clowning, in the sense of an actor, but also in active use today, in the "Explanatory Dictionary of the Language of Alisher Navoi's Works" (four volumes). It is also used in the sense of "laughing", "laughing":

Bo'lg'on ermish borcha naqding nosara,  
Nafs ila shaytong'a zoting masxara [3, p.58]. That is, "Your cash is a thin coin. The devil mocked the devil because of lust.

In Alisher Navoi's Majlis un-nafois, he also describes people who are elegant, humorous, ridiculous, and rare among the 459 poets. For example, Mawlana Burunduk was called



"Nadimvash and Hazzol man ermish" [5, p.19] hazloftab 'hazlomez ash'ari and continents are many and popular for man" [5, p.70]. Also, in the description of Mawlana Pami, "Abdul Sheikh Abdullah Devona and his master Dehdorki, who imitate and glorify many people in the face of adversity at the meeting of the King, are especially famous. There is one thing in Mawlana's takallum, which is anbi anga, he chews soap and his mouth is full of magic, and when he imitates takallum, both of them are praised by the people of understanding"[5, p.122]. As we have seen, these were the masters of their time. They delighted their audience not only with words, but also with meaningful imitations, like the ancient mime actors. [4, p.234].

We read in the 4-volume explanatory dictionary of the language of Alisher Navoi's works: **Hazzol** (Arabic) - a joker, a joker, a joker, a joker, **hazzoltab** '(hazzol - tab' = a. + A.), humorous in nature [6, IV, p. 135]. The word "hazzol" is interpreted in the Tajik dictionary as "humorous, very humorous, very funny" [7, p. 716]. This means that in Navoi's works we find the word "joke", but not "joker". It will be replaced by "hazzol". **Nadim** (Arabic) - servant, mahram, interlocutor; **nadimvash** (nadim + vash = a + a) - cheerful; **nadimsheva** - pleasant, pleasant conversation [6, II, p. 422]. It is also clear from the fact that the word Nadim is mainly accompanied by the words hazzol, shiringoy, which is used in reference to people who are clever, master of words, sweet conversations [4, p. 236]. Due to the fact that the famous people's actor Yusufjon called interesting askiyaboz "sweet sukhsans", Mamajon Rakhmonov also used the word "askiyabozlar", which is often used in "Majlis un-nafois" [4, p. 236] assumes.

The word **Mutayyib** (Arabic) is also a joke. Mawlana Abdurazzaq mut is said to be a "red heart" because of his humor [5, p. 164]. **Mutoyaba** is a joke in the sense of askiya: [8, p.106].

The word "mazah", which is still used in our language as a synonym for mockery, occurs in the form **mazah** (Arabic). Sayyid Ghiyasiddin... is the winner of the mazah and mutayiba client [5, p. 91]. In other words, Sayyid Giyosiddin is said to be a master of mutayiba and askiya.

**Muzhik** (Arabic) - funny; smile:

Most of the jat and gypsy are muscular movements and the salt method [8, p. 48].

**Muqallidism** (Arabic imitation) was also a form of mockery:

In the opinion of Fasaka, the greedy person is a laughing stock, as if the prostitute is a mirror of what the prostitute sees [8, p. 67].

**Elegant** (Arabic - plural jokes) were also people who gave eloquence, ingenuity and kindness to people at parties. In the 4-volume explanatory dictionary of the language of Alisher Navoi's works, the word "joke" is replaced by "1. Clean, tidy, witty, beautiful, graceful; pleasant, intelligent, delicate. 2. Wise. If we take into account the meanings of "zarofat" in the Uzbek dictionary, the mastery of eloquence, M. Kadyrov's We will know that it is not in vain for him to say,

**Bazla** (Arabic) - askiya, latifa, sharp word.

**Bazlago** (y) (bazla + goy = a. + F.) - an anecdote, a narrator; nice man

Humorous basics,

Atoridqa is always a flower [10, p. 30].

2. In the 14th and 15th centuries, actors, amateurs, musicians, singers, and dancers, as well as storytellers, sang, speakers, preachers as well. So let's look at how these professionals are described in Navoi's work:

**Balogatmaob** (balog '+ at + maob = a. + A. + A., Syntactically formed word) - speaker, good at expression:

Xiradmand bo'lsa balog'atmaob,

Ne bo'lg'ay ishi g'ayri royi savob [11, p.409].

**Balogatosor** (a.) - Fozils, sweet-spoken, mature speakers:

The Turkic-speaking poets also used this letter and did not appear in any verse [5, p. 222].

**Balogatshior** (a. + a.) - a mature speaker, good at expression:

Qilib chunki bo'lsa balog'atshior,

Masihodin anfosi jonbaxshi or [11, p.71].

**Maddohlig** // **Maddohliq** (a.) - As a few words in the definition of the word, Sheikh Nizami and Mir Khisraw... praised it, and he entered the madhha with this approximation and found this variety [12, p.705]. The word "praise" means to praise, to praise, to describe.

**Laffoz** (a.) - Among the words ul koni malohat laffoz, The people of my mind are very vocal [13, IV, p. 159]. The word means eloquent, master of words.

**Narrator** (a. + f.) - narrator, narrator, narrator, narrator:

Narrator - void and narrator - harzagufyor; everyone is insane or addicted, the tone of his campaign in his heart [8, p. 38].

**Qissaxon** (a. + f.) - narrator, narrator, bakhshi.

**Goyandalig** (Persian) - storytelling, poetry, singing: Ul dag'i barchasig'a... ne'matlar tortib, sozandalig' va go'yandalig'buyurub [14, p.535].

**Muzakkir** (a.) - a reminder, a reminder; preacher: He was a faqih and a speaker of the Majlis and a member of the Malik Madhhab. [15, p.95].

3. Examples of **field performances** include archery, violence, tyranny, and wrestling.

**Archery** (f.) - "Mawlana Baqoi - famous for archery".

**Violence** (f.) - "Zorgar also became a companion, No, the way to him is the awareness of resentment" [3, p. 74]. The meaning of the word "violent" is given in the 4-volume explanatory dictionary of Alisher Navoi's works as "violent". In the prose description of Lison ut-tayr, he is called a "hero." Art historians M. Rakhmonov and M. Kadyrov note that violence is one of the types of performing arts of the XIV-XV centuries.

**Tyrannosaurus** (f.) - considered sniper. "They say that tyranny is a science, we don't know" [5, p. 85].

**Kushtidonlig** (f.) - good knowledge of wrestling, wrestling, wrestling:

Nevchunkim, although he is the greatest man of his time in power and eloquence, but also in eloquence and eloquence [14, p. 89].

4. **Dorbozlik** uses the terms spectacle in Navoi's works as afsungar, afsunsoz, labafkan, lubatakboz, muhrabozlik, muqallid, mush'abid, huqqaboz, shubadaboz, naqboz, nayrangsoz, bozigar. The Explanatory Dictionary of the Language of Alisher Navoi's Works, Volume 4, explains these terms as follows:

**Magician** (a. + f.) - magician, sorcerer, witch:

Zahr ila yashil bo'lubon,



Bulbul aning boshida afsungari [2, p.46].  
**Magician** (a. + f.) - enchanting, astonishing:  
 Bo'lubon so'z demakka afsunsoz,  
 Qildi andoq sanou madh og'oz [16, p.46].  
**Magic** - witch, sorcerer, witch, sorcerer; fictitious approver:  
 Ichinda ikki ming kishi chorasoz,  
 Bari hiylapardoz-u afsuntiroz [11, p.272].  
**Cunning** (a.) - cunning, deceitful, cunning; wizard:  
 The lover of that light, astonished as the glass of the window of the blind eye, is like the glass of the eye of the blind, and the cunning of love throws himself out of the way of the window into the mind of the soul [8, p. 92].  
**Bozi // Boziy** (f.) - deception, deception, trickery, from which the words bozigar and bozicha are made. Bozigar is a swindler (Tama' qilma falakdin komkim xanjar qilur oshom, Yangi oy shaklidin har shom ul lo'lii bozigar [13, II, p.198]; And sometimes it means a toy, a puppet (Aql pirikim malak xayliga erdi muqtado, Ul pari ishq'i aro bozichai atfoldur [13, III, p.163].)  
**La'bafkan** (a.) - a trickster who plays, plays, plays:  
 Demayin muhrabozi sha'bada fan,  
 Balki lu'batnamoyi la'bafkan [16, p.27].  
**Labovar** is a playful player:  
 Birov yo'q ki hinduyi la'bovari,  
 Ne hindu ki joduyi donishvari [11, p.241].  
**Lu'batakboz** (a. + a. + f. + f.) - trickster:  
 Ko'raykim bu hisori lu'batakboz,  
 Yana ne nav' to la'b etgay og'oz! [10, p.344]  
**Trickery** (f.) - trickery, deception:  
 Muhrabozliq tasbihin evurmak va uzunroq namozdin g'arazi el ko'rmak [8, p.34]. The basis is the Muhra, the body; pearls, beads; means sock.  
**Mushabid** (a.) - a swindler, a swindler:  
 Bul'ajablig' ishq aro ko'rgilki, ko'nglum cheksa oh,  
 Zaxmi og'zidin musha'biddek sochar haryon o'tin [13, p.521].  
**Patterning** (a. + f.) - trickery:  
 Mavlono Yoriy... g'arazi naqqoshliq o'rganmoqdinnaqshbozlig' ekandur.  
**Nayrangsoz** (f.) - magician, sorcerer:  
 Chu aylab la'b har nayrangsozi,  
 Falak har lahza yeb o'n qatla bozi [10, p.38].  
**Shu'bada** (a.) - o'yin, nayrang. Va shu'badalarig'a e'joz tuhmati bog'ladilarva be'mani harzalarini vahy kisvatida jilva berdilar [8, p.105].  
**Shu'badaboz** (a. + f.) - clown, swindler, sorcerer:  
 Bu kechakim sipehri shu'badaboz,  
 Olam ahlig'a bo'ldi shu'badasoz [16, p.44].  
**Cheating** - cheating, cheating: Mawlana Ayazi - three years ago I saw a guy in Puli Molon, who also cheated [5, p. 62].  
**Shubadagar** is a performer of all kinds, a magician:  
 Shu'badagar shishasidek toshi sof,  
 Zimnida yuz makr ila zarqu gazof [2, p.23].  
**Shu'badasoz** (a. + f.) - a magician who hastens the mind:  
 Bu kechakim sipehri shu'badaboz,  
 Olam ahlig'a bo'ldi shu'batasoz [16, p.44].  
**Shubadafan** is a game connoisseur:  
 Demayin muhrabozi shu'badafan,  
 Balki lu'batnamoyi lu'bafgan [16, p.44].

**Huqqaboz** (a.+f.) – nayrangboz, fokuschi (huqqa – quticha): Ne qilg'ay necha jo'giyi sehrsoz, Biri muhraduzd-u biri huqqaboz [11, p.271].

**5. In Navoi's works we find terms such as arusak, lu'bat, lubatboz, kabuchchakchi, fonus khayol, chodar, which are typical for puppet shows.** These terms appear in more than a dozen of Navoi's works, not just one or two. For example, the term "lu'bat" is used only in the works "Khazayn ul-maoniyy", "Hayrat ul-abror", "Farhod and Shirin", "Sab'ai sayyar", "Lison ut-tayr". we will see.

Navoi uses the word **arusak** in Layli and Majnun. X.K. In Baranov's Arabic-Russian Dictionary, "arus" means bride and puppet, but there is no word "arusak" in this dictionary. In "Farhangi zaboni tojik" the bride is interpreted as an Arabic bride, and the bride is interpreted as a toy, a puppet. This leads to the assumption that Arusak is a Persian word. The 4-volume explanatory dictionary of the language of Alisher Navoi's works also says **arusak** - a toy, a puppet [6, I, p. 117]:

Qish mehrini chun itikrak etting,  
 Qorning sadafin arusak etting. [17, p.4]

**Bozicha** (forsa = bozi - deception, fraud, deceit) - a toy, a puppet [6, I, p. 306]:

Aql pirikim malak xayliga erdi muqtado,  
 Ul pari ishq'i aro bozichai atfoldur. [13, p.122]

Navoi also uses the term bozigar in his works. However, the term does not refer to puppets, but to magicians, magicians, who belong to the genre of puppetry.

**Lu'bat (lu'b + at = a. + A.) - 1. toy, puppet [6, II, p.170]:**

To'qqizinchi borgoh andoqki, lu'bat chodari,  
 O'ynatib charxi muloib anda yuz ming lu'batin [13,

p.489].

**2. play, playing, have fun; trick**

Shayx pandidin ne osig'kim qilur lu'batni man',  
 Menki, jonimni olur sho'xi lu'bat hasrati [13, p.457].

**Lu'bati** chin chehra nihon ayladi,

Zulfin ochib mushk fishon ayladi.

Ko'k bu **musha'bidning** o'lub chodari.

Axtar o'lub **lu'bati** siminbari [2, p.5].

**The word lu'bat is based on lu'b - 1. play, relaxation, entertainment, dance:**

Chun qarig'an chog'da men lu'batqa bo'ldum shifto,  
 Vah ne tong atfol lu'bining boshimg'a mehnati. [13,

p.468]

**2. trick**

Kim fusunu la'b birla tutti yer,

Shohi jo'ki ohi jo'ki qasrida [13, p.389].

Play; = art - a lube that means a game (dancer) is also made of "lub":

Kim chu shah bayram nashoti qilg'ali tuzganda jashn,  
 Har o'yunchi zohir etkan chog'da lu'biy san'atin [13,

p.489].

**Lubatboz** is a puppet player; trickster Here lu'b + at + boz is an affixation method, ie by adding the Arabic "lu'b", the Arabic "at" (plural suffix) and the Persian "boz" suffix. word made.

Bir shabistonda jilva aylab soz,

Falak ul la'blarg'a lu'batboz.

Lu'bati mahvashi sumanbar ham.

Shomdin zulfi mushku anbar ham [16, p.419].



It is known that today the words arusak, bozicha, lubat, which are in Persian and Arabic, have completely disappeared from use. It is not surprising that the puppet has survived because it is a Turkish word. The word is used in other Turkic peoples besides us. For example, Turkmen say "puppet", Kazakhs say "puppet", Kyrgyz say "puppet", and Tatars say "puppet".

Puppet (roast + chok + chi = t. + T. + T.) - a puppet player in a tent, a puppet [6, IV, p. 59]:

Balki qovurchoqchi kibi hiylagar,

Ko'rguzibon chodiridin ming suvar. [2, p.162].

The word "roast" used by Navoi is still used in Kashkadarya and Surkhandarya regions. Literary language has a "puppet" form. In fact, the words "roast" and "brown" have the same meaning. The word "puppet" is also used in Sheva.

It is especially noteworthy that Navoi called the master of puppetry a puppet master. In your opinion, puppet-frying is a very old Uzbek word, which refers to the independence and antiquity of the art of puppetry. [18, p.23].

In addition, Navoi uses the word "tent" in his works, which means that the puppetry was played behind a tent, and that the puppet show of that time - the tent - was imaginary.

**Chodar** (f.) – chodir, o'tov:

Mixu sutunsiz tikibon **chodarin**,

Davri etib **chodarining** paykarin.

In the following verse of the fourth article of the epic Hayrat ul-abror, the term "lantern" is used. However, we do not find an explanation of this word in the 4-volume explanatory dictionary of Alisher Navoi's works.

Harza hayolot ila hol aylabon,

Davrni **fonus xayol** aylabon [2, p.59].

Here is information about a type of puppet theater that has not survived, but is well known in the XIV-XVI centuries. This type of lantern is a fantasy, a shadow theater in which you play a puppet made of leather or wood in the light of a lantern. We think it was perfected and well known, especially in the 15th century. Otherwise, he would not have noticed Navoi and he would not have had a special term. However, the tent did not gain much popularity among the imaginary masses, and gradually became completely ignored [18, p. 24].

Now let's look at why Navoi used the terms "puppet" and "puppet." In the works of the great thinker, like some masters of art (Mahbub ul-Qulub describes singers and musicians, preachers, storytellers), he does not give a special description to the chefs. But using these words skillfully makes great analogies. For example, in the fourteenth article of the epic Hayrat ul-abror, the poet thinks of "the complaint of the court of aflok" and "the irony of the lust of the world" and likens the wheel first to a trickster and then to a "rookie".

Balki **govurchoqchi** kabi hiylagar,

Ko'rguzubon chodaridin ming suvar.

Mixu sutunsiz tikibon chodarin,

Davri etib chodarining paykarin,

Anda bo'lub jilyagari anjuman,

Har sori yuz **lu'bat** siymin badan.

Munchaki **lu'bat** chiqorib siymgun,

Qasdi bori elga firebu fusun [2, p.162]

Navoi means that this cunning sky, like a puppet, shows a thousand different pictures from his tent, sews his tent without nails, columns, and makes a circle. It features stars and

games with hundreds of silverware on all sides. Playing with a silver doll is a hoax. Navoi's mastery of the sky as a puppet, the dome of the sky as a puppet tent, the stars as puppets, and the stars that appear at night and disappear during the day - puppets. It is impossible not to be impressed by the fact that the sculptor's work resembles a magician's spectacle.

So, Navoi is a puppet - a puppet, a puppet, a puppet, a puppet; he used puppetry as a puppet-maker, a puppet-maker, while in the art of puppet-making, the focus evokes fantasy and tent fantasy.

In conclusion,

- During the reign of Timur and the Timurids, all types of performing arts were developed, well-known and widespread;

- Most of the terms used are Arabic, some Persian and a few Turkish;

- Terms are formed mainly by affixation;

- These terms, borrowed from Arabic and Persian, have completely disappeared from use, and those that have survived have lost their terminological properties (such as cunning, trickery, nagma, pattern-making);

- It is clear from the evidence that the works of Alisher Navoi can serve as an important source in the chronological study of the state of Uzbek theatrical terminology in the XIV-XV centuries.

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# THE EXPRESSION OF THE TERM SONG IN THE WORK OF ALISHER NAVOI

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## ANNOTATION

*The article describes how the term song, one of the genres of singing art, was used in literary, historical sources in the work of Alisher Navoi in Turkish, Persian and Arabic forms. On the examples, we also see that Alisher Navoi skillfully used not only the term song, but also related terms in the ways of affixation and composition.*

**KEY WORDS:** *song, terminology, work, weight, poem, etymology, analysis, poem.*

## Выражение термина песня в творчестве Алишера Навои.

### Аннотации

В статье описывается, как термин песня, один из жанров певческого искусства, употреблялся в литературных, исторических источниках в творчестве Алишера Навои в турецкой, персидской и арабской формах. На примерах мы также видим, что Алишер Навои умело использовал не только термин песни, но и родственные ему термины в способах аффиксации и композиции.

**Ключевые слова:** песня, терминология, произведение, вес, стихотворение, этимология, анализ, ода.

## Alisher Navoiy ijodida qo`shiq atamasining ifodalanishi.

### Annotatsiya

Maqolada qo`shiqchilik san`ati janrlaridan biri bo`lgan qo`shiq terminining Alisher Navoiy asarlarida turkiy, forsiy va arabiy shakllarini adabiy, tarixiy manbalarda qanday ishlatilganligi yoritib berilgan. Shuningdek, Alisher Navoiy birgina qo`shiq termini emas, unga ma`nodosh bo`lgan terminlarni affikisatsiya va kompozitsiya usullarda yasab, mahorat bilan foydalanganini misollar mobaynida guvohi bo`lishimiz mumkin.

**Kalit so`zlar:** qo`shiq, terminologiya, asar, vazn, she`r, etimologiya, tahlil, qasida.

It is no exaggeration to say that the period of Amir Temur and the Temurids was a period of real awakening, not only for the Uzbek people, but also for the musical arts of the entire Near and Middle East. To get acquainted with the art of singing of this period, it is necessary to refer to Khandamir's "Makorim ul-akhlaq", Bobur's "Boburnoma" and Alisher Navoi's works of all kinds. There are many poems about Herat actors, dancers, musicians, singers and puppets. That is, at that time, terms such as ayalgu, alxon, goyandalig, dasotin, surud, talolo, olan, qushuq, lahn, yirla, tarona, which refer to the types of folk singing were consumed as terms.

The medieval tradition required the inhabitants of the city to live as a community (neighborhood) according to their occupation. Well-known artists preferred to live in groups with

their colleagues, either by decree of the governors or for their own convenience. Accordingly, the "Singers' District", "Musicians' Neighborhood", "Composers' Street" were introduced. Creative schools of special creativity, performance and academic status have been formed around these professionals who have earned a special reputation and prestige. [2,36p.]. Especially in the 15th century, there is not a single word in the field of singing that is not found in Navoi's works. Praise be to Hazrat Navoi that the terms used in our language today are an alternative to all of them, of course, in the works of our great scholar. Alisher Navoi, known as a "teacher of masters" who puts his music teacher above everyone else, is not indifferent to the field of art, as we know from his work under the pseudonym "navo".



In the works of Alisher Navoi, **the term song is synonymous** with ayolg'ʻu, alxon, go'yandalig'ʻ, dasotin, surud, talolo, o'lang, qo'shuq, lahn, yirla, tarona. we can give an example of the terms.

**Ayolg'ʻu** (arab.) occurs in the sense of song, melody, song:

Holimg'a hajr bazmi aro tortsam surud,  
Bor navha maddi telba ko'ngling ayolg'ʻusi [3,597p.].

The term "singing" is used more than once. One is **ayolg'ʻu** and the other is **surud**. Both of the above terms are used in the sense of song. We can see how sharp Alisher Navoi's pen is when the writer skillfully uses two monosyllabic terms, or more precisely, bilingual terms (Arabic and Persian) in these verses.

**Surud** (fors.) song:

Men dog'i bu maynikim suzubmen,  
Turkona surud anga tuzubmen [4,97p.].

The following term is used in the works of Alisher Navoi in the sense of a song, while in the dictionary "Farhangi zaboni tojiki" it is called a person's singing. The dictionary also includes synonyms for the word surud such as surudan, saroidan, suroidan. [5,1566 p.]

**Alxon** (arab.) melody, song:

...andalib xush navosi nubuvvat bayoni bila va risolat **nag'mai alxoni** bila **surud** ko'rguzur (6,4 p.) here the words nagma, alxon and surud are used as synonymous terms for singing.

**Go'yandalig'ʻ**(persian+uzb.) short story, singing:

Ul dag'i barchasig'a... ne'matlar tortib sozandalig'ʻ va go'yandalig'ʻ buyurubdur [7,535p.]. The term Goyanda is a Persian term, from which the suffix (+ lik) is used to form a word based on the internal possibilities of the Uzbek language.

**O'lang** (Turkish) sing, song:

Shamar suvlar bo'lub oina ohang,  
O'lang aylab ayon ul ko'zguda zang [8,50p.].

The term "o'lan" is a Turkish term, and the variant "o'lan"(g) is widely used today. It is a term that clearly reflects the customs and traditions of the Uzbek people. The genre of folk art is mainly performed with or without accompaniment. In Hazrat Alisher Navoi it is used in the sense of a song.

**Qo'shuq** (turkish) song:

Anglamayin so'zda tuyuq bahrini,  
Qaysi tuyuq, balki qo'shuq bahrini [9,46p.].

... When a deep river appears in front of me, I fill it with a beautiful boat-shaped glass in my hand and drink it from a rose bush. "hay tulugim, hay tulum!" I sing; when someone can't sing to me, at least he sings and supports me [9,50 p.]. It turns out that Alisher Navoi first used the term "song" in Chapter XV of "Hayrat ul abror". Before our thinker, the term song was first used after the singing tradition, in the XI-XI centuries in Mahmud Qashqari's "Devoni lug'ati turk" ("Қошув") verse, song).

It is known that today the Persian and Arabic words ayolg'ʻu, dasotin, talolo are completely obsolete. Not surprisingly, the song has survived because it is a Turkish word. The term is used in other Turkic peoples as well: in Turkmen as "А́удым", in Kazakh as "Өлең", in Kyrgyz as "Ыр", in Tatar as "Жыр". The term song is also used as a Turkic term in Kyrgyz and Tatar languages, as the terms given **ыр** and **жыр** are found in Mahmud Kashgari's Devoni lugati turk.

Alisher Navoi uses the word **dasotin** in his work Saddi Iskandariy. In "Farhangi zaboni tojiki" the **saga** is a term

meaning Persian nagma, lahn, navo, maqom. Alisher Navoi's 4-volume explanatory dictionary of the language does not contain the epic form of the term. But the terms dasotin and doston have the same meaning.

**Dasotin** (fors.) epics; song, melody:

Navo ichra ming lahnsozing qani  
Dasotini xotirnavozing qani [ 8, 243p.]

In the 4-volume explanatory dictionary of the language of Alisher Navoi's works we read **Yirla** (t.) - in the sense of singing, chanting, singing. K. Sodiqov in his book of names of early and medieval Turkic texts Mahmud Kashgari in his work "Devonu lug'atit turk" uses the form **йыр-ыр: ол йыр кошди** - he wrote poetry (i.e. sang songs) [10, 22 p.] Alisher Navoi uses and explains this term in Farhod and Shirinda as follows:

Ketur, soqiy, chekib **yirlar** uchun un,  
Manga to'ydin ulush evur jomi gulgun [11,143p.].

Navoi also explains the meaning of the term song:

**Talolo** (fors.) melody, song; scream, shout:

Arig'ning ikki yonidin alolo,  
Nishot ahli tuzub firno talolo [11,124-b].

**Lahn** (arab.) sing, tone:

Chekti oncha lahn aro dilkash navo  
Kim simoin vaxshu tayr aylab havo [12, 196-b].

**Tarona** (fors.) sing, tune:

Va tog' jonibidin jo'yi Navro'ziy o'tarkim, sadosi  
g'ulg'ulasidin labtashnalar qulog'ig'a mujdai obi hayot  
taronasi yetar [13,170].

In short, during the time of the great thinker and scientist Alisher Navoi, all types of singing were developed, well-known and widespread. Most of the terms used are Arabic, some are Persian and a few are Turkish. Apparently, most of the terms used are affixed (feminine + chi). These terms, borrowed from Arabic and Persian, are completely obsolete, and those that have survived have lost their terminological properties (talolo, dasotin, nagma, etc.). Evidence suggests that Alisher Navoi's works were an important source in the study of the state of Uzbek singing terminology in the fourteenth and fifteenth centuries and left an indelible legacy for Turkic, Persian, and Arabic languages.

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# THE ROLE OF DIALOGUE IN THE DEVELOPMENT OF STUDENTS' SPEAKING SKILLS IN FRENCH LESSONS AND THE ROLE OF MULTIMEDIA LESSONS AND INFORMATION TECHNOLOGY

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## ANNOTATION

*There is a growing interest in modern methods of teaching French in many parts of the world as to how it should be done — how the curriculum, subject matter, and methodology should differ from familiar norms developed in the past. Much has been written about teaching traditional French, and until recently there was almost no information about modern methods of teaching French.*

*Many books and articles are currently being written on this topic. In this article, we will also look at modern methods of teaching French. One of the main ways to communicate in a foreign language is through speaking skills. Learning to speak a foreign language is an important factor because speech is a basic form of communication and a person with good speaking skills can communicate effectively with others.*

**KEYWORDS:** *Flashcards, Forvo website, MP3 player, dialogue, speaking skills, communication competence, style and methods.*

French is a very beautiful and rich language. If you suddenly need to learn it in 5 minutes, then you need to use the following methods. During the day you should easily memorize about 50 sentences in a foreign language. I mean

If you are new to French phonetics, the Forvo website can help. Here you can check yourself in the correct pronunciation at any time.

Great series in French. Of course, if you started learning the language yesterday, it's too early to watch it. But the basic level in the mastering process is worth connecting it to the lessons. Simple dialogues and phrases you need to learn to understand and hear what you already know.

It's a good alternative to regular TV shows, and it's hard for you to watch them.

French verbs are a separate story ... If you understand the logic, it won't be difficult for you to automatically combine them at different times, persons, and numbers. Not only separately, but also during the conversation. Communication with native speakers is possible through correspondence, conversations, and voice messages. At the initial stage, it is advisable to study the templates of tips and phrases that facilitate communication.

For someone who owns a computer, the best option for learning French would be one of the many released multimedia programs. The computer disc allows you to take almost the same language courses in full time in the classroom ... You can buy a multimedia course online or in a bookstore that sells educational literature and computer programs.

Using a computer app, you also get explanations on the grammar and syntax of the language, as you listen under the guidance of a real teacher. correct pronunciation and performance of tasks.

The program checks them itself, shows errors and helps to fix them. However, in addition to computer software, you will still need a French textbook, a grammar reference, and a French dictionary.

If you can't use a professionally designed multimedia course, learn French so you can do it yourself the other way around. Although in this case the work will be more difficult and progress will slow down. Try to get a good French first.

When choosing it, pay attention to where the book is written and how difficult it is to understand the material presented. Try to choose the most convenient publications.

Also, don't forget to buy large French-Russian and Russian-French dictionaries, a grammar guide, and, preferably, a French conversation book for tourists. With the help of a conversation book, you will learn the most common twists and turns. You will also need a notebook for notes. It is preferable to have separate exercise books for exercises and writing new words.

Work on a self-study guide, complete all exercises and assignments, and try to go through each lesson in sequence. If you don't understand something, don't try to skip the topic and continue, make sure you understand the difficult material.

Make it a rule to learn 10 new words every day to better master the basic vocabulary. Learn the words like this: Make small cards out of thick paper on a quarter of an A4 sheet.

On the one hand, write 10 new French words, with the Uzbek translation on the back of the same 10 words. Study the words based on the French originals and look at the translation only if you can't remember their meaning at all. Flashcards are handy because you can take them with you everywhere and learn the words every free minute. For example, while traveling by car or waiting at a bus stop.



Not an effective method for me- record French words and phrases, translate them to MP3 player and listen on the road during the day. That way, you'll have the lexical volume you need invisibly. From the beginning of reading, try to watch as many movies as possible in French and read simple books or newspaper articles. This experience will give you the required skill to understand a foreign language and apply it in daily life.

Therefore, it is important to include and integrate the four skills (reading, speaking, listening and writing) in teaching French. There are many techniques and methods that can be used to develop students' oral skills. Each style has its advantages and disadvantages. It all depends on the skill of the teacher, who has to adapt the methods to the topic, the age, ability and characteristics of the students and choose the right one.

According to the latest trends, the language should be taught more as a communication. Therefore, it is important to reflect not only the quality and characteristics of oral skills, but also the methods and techniques used to develop them in existing educational practices. One of the most effective ways to develop students' speaking skills in non-philological groups is to use a communicative approach. Therefore, we need to focus on developing students' oral skills.

Knowledge of a foreign language educates a person to be a modern, versatile person, and opens the way to the world of international business, to the whole world. We use listening comprehension, reading, dialogue, and monologue to develop students' oral speech. Dialogues can be on a variety of topics. First of all, when composing small texts or dialogues, the teacher introduces students to the words and phrases related to the topic, informs them about the rules of pronunciation, the order of their use in sentences.

If the teacher shows the students small videos as an example and then asks the students to work in pairs, the students will be able to avoid difficulties in using the language during the conversation. There are several ways to use conversations in the classroom: Dialogic speech - in which students talk to each other in a creative way. In modern French language teaching methodology, the use of dialogues is especially effective in developing speaking skills.

These skills can be developed through a variety of teaching aids, including fiction. Such dialogues allow you to avoid memorizing texts in the traditional way and narrating them in the same way, and to translate them into live French speech. It also helps students develop vocabulary and improve memory. During the dialogues, students practice fluency, quick reaction, acting skills, and, of course, grammar.

These skills can be developed through a variety of teaching aids, including fiction. Such dialogues allow you to avoid memorizing texts in the traditional way and narrating them in the same way, and to translate them into live French speech. It also helps students develop vocabulary and improve memory. During the dialogues, students practice fluency, quick reaction, acting skills, and, of course, grammar.

The student reads the text and explains the meaning. The reading process is interactive. Can use short stories, novels and other literary works written by famous Uzbek and French writers to read and create phrases, prepare, organize and present literary interpretations. Listening comprehension can help

students improve their speaking skills. Receptive form of auditory-speech activity. Explanation of speech during listening is mainly based on auditory sensations. As students listen, they pay attention to the tone of the words being spoken, and by repeating, these words are reinforced in memory.

The dialogues heard as an experiment help the student to develop their skills in the process of starting a conversation in French. Learn French by watching short films and educational films. Nowadays, teachers take into account the needs of students to read books, magazines and newspapers, as well as to watch real movies. Not only can printed materials be a great source of instruction, but also songs and movies can play an important role in learning a foreign language.

The Importance of Vocabulary Teaching Dictionary is a key part of language teaching. In addition to learning new vocabulary, the reader struggles with unfamiliar vocabulary while listening to or reading a text, overcoming vocabulary gaps in speech and writing, and making good use of certain vocabulary. and should use strategies to learn new words.

As the teacher constantly rehearses the phrases used in daily life with the students in a communicative way in each lesson, the students' self-confidence, love of language and interest will be awakened. At the same time, it is important to encourage learners on a regular basis, to correct any shortcomings observed during the speech, and to give correct instructions. Through such communication, the student learns new words and is able to apply them in practice. During the conversation, he understands the content of the conversation and listens to the interlocutor and responds to him.

They will gain experience in using all the phrases and expressions they learn in the classroom around them and in real life. Learn to communicate fluently with native speakers. They learn to start and end a conversation, give suggestions and advice to the interviewee, answer questions, share information, identify the facts they are discussing, and discuss what they have read or heard. Such texts develop students' communicative competence, boost their self-confidence, help them develop basic listening and speaking skills in speaking activities, and express themselves fluently and clearly.

Using the above methods in teaching modern French will help teachers to use the perfect method in the classroom to help students learn in the right direction.

Speaking, as a type of speech activity, is the expression of an oral opinion. As a result of speaking, an opinion is expressed, and the short answer to a question is a "statement of opinion". Speaking in a foreign language is a three-part speech activity. are given.

There is a need to speak in this language. If there is a tendency to perform a verbal action, it is necessary to give an information, answer a question, or perform a non-verbal action (for example, a command). This part of the speech (intensity) appears.

In the expressive part of the idea, the analysis-synthesis process is started. The speaker chooses a word or grammatical unit that is ready in the memory, usually the events of the native language are ready in the memory.

The third part of speech is to perform, to express an idea, to pronounce it, that is, to express it in an external speech.

Teaching to express one's thoughts orally (speaking), written statement of thought, comprehension (listening



comprehension) of the speech of others are organized in close connection with the types of speech activities. Thoughts can be expressed orally in two forms: monologue and dialogue.

Teaching monologue and dialogue in French is one of the main requirements of the curriculum.

Exercises are central to any activity. Speech exercises include unprepared and prepared speech.

Speech Exercises: Exercises designed to improve speaking skills.

1. Explain and change ideas based on key words, speech plan, title, etc. ;

2. Expressing opinions using sources of information (pictures, movies, text);

3. Give feedback based on the topic studied.

Unprepared Speech Learning Exercises:

1. Speaking based on information bases such as story, picture, silent film in the native language;

2. Speak from a life experience that consists of thoughts that you have seen or read, thought, or imagined before.

Samples of prepared and unprepared speaking exercises are given

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# IMPACT OF DIGITAL MARKETING IN AGRICULTURAL SECTOR

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## ABSTRACT

*Digital Marketing is helpful to farmers to reach out the multiple buyers and get higher prices for their products. It empowers agricultural startups. With the increasing amount of literacy in rural areas and development in agribusiness infrastructures, young farmers are ready to adopt Digital marketing platforms. COVID-19, changes the mindset of farmers to adopt digital marketing. The present study aims at knowing farmers views, awareness and impact of digital marketing in agricultural sector. For this purpose, primary data was collected from 120 respondents. Data was tabulated and analyzed with the help of statistical tools to achieve the objectives of the study.*

**KEYWORDS:** Digital Marketing, Impact, Agriculture, Farmers

## INTRODUCTION

India is a country of villages. Rural development is most important element for the countries development. For rural development government has taken many steps. Digital marketing is one of the innovation developments by the government to sell products digitally without the intervention of mediators. Digital Marketing is helpful to farmers to sell their products globally. Digital India movement launched on the 1<sup>st</sup> July 2015 had its goals cleared of transforming rural India into a digitally empowered economy. After this movement many of the industries are started to sell their products digitally. Young Agriculturalist are ready to adopt digital marketing tools to reach their products globally. Even though digital marketing concept reaches all the business sectors, in agricultural sector digital marketing involvement is less because of the following reasons

1. Lack of Knowledge
2. Security Concerns
3. Startup cost
4. Lack of digital tools
5. Lack of Infrastructure
6. Fear to use
7. Not ready to accept new methods

## STATEMENT OF PROBLEM

The up-gradation of technological development has changing the marketing style of products and services. Today many of the companies are prefer to use digital marketing because of number of benefits like cost and time saving, affordability and flexibility. But in agricultural sector many of the farmers are not aware of digital marketing to sell their products. This study tries to identify the Farmers and dealers

views, Awareness level and positive & negative impact of digital marketing in agricultural sector.

## REVIEW OF LITERATURE

**Balu (2020)** stated that insufficient extension services and poor access to information leads the gap in the adoption of technology and lead to poor productivity levels in Agricultural sector. He also pointed out that right information at right time plays a crucial role for development of Indian agriculture. A digital technology tool helps young farmers to involve agribusiness in effective manner.

**Oseremen Ebhote (2020)** concluded that for agricultural development, digital marketing is strongly encouraged and effective transformation. Government has to take necessary steps to give more awareness of digital marketing to farmers.

**Sudhakar Reddy (2021)** point out that Digital marketing platforms are useful to the farmers as they increase the selling price and reduce the marketing cost of their agriculture output like Cotton Lint, Maize Grains, Paddy, Vegetables etc. Digital marketing is a valuable business and information tool. He also states that digital media helps the marketing of high volumes of agriculture. He suggested that Indian government and states governments must put forth the strategies and frame the policies towards the sustainable digital agriculture market development

## OBJECTIVES OF THE STUDY

1. To know the Socio – Demographic profile of the respondents
2. To study the Awareness level of digital marketing methods among farmers
3. To examine the Impact of digital marketing in agricultural sector



## HYPOTHESIS TESTING

1. There is no significant relationship between Educational Qualification and Awareness Level of Different Digital Marketing Tools.
2. There is no significant relationship between Age and Awareness Level of Different Digital Marketing Tools.

## RESEARCH METHODOLOGY

### Primary Data

Primary data conducted from farmers through interview schedules.

### Secondary Data

The various secondary information sources used for the present research include the journals and magazines and websites.

### Period of the study

The study was conducted during October 2021 –December 2021

## ANALYSIS AND FINDINGS

**Table 1: Demographic Profile of the Respondents**

Demographics	No. of respondents	Percentage (%)	
Gender	Male	97	80.33
	Female	23	19.17
Age(in Years)	18-25	17	14.17
	26-40	45	37.5
	41-50	32	26.67
	Above 50	26	21.67
Educational Qualification	No formal Education	16	13.33
	SSLC	36	30
	HSC	42	35
	Degree Level	15	12.5
No. of Members in a Family	Others	11	9.16
	2	5	4.17
	3	12	10
	4	39	32.5
Family Monthly Income	Above 4	64	53.33
	Below 10,000	25	20.83
	10,000-20,000	41	34.17
	20,001 -30,000	34	28.33
	30,001 -40,000	16	13.33
	Above 40,000	4	3.33

Source : Primary Data

Table 1 clearly states that demographic profile of the sample respondents. It reveals that Male respondents are higher than female respondents. Majority of respondents falls in the age group of 26 - 40 and Higher secondary educational qualification

### Area of the study

The study is undertaken in Coimbatore district.

### Sampling Design

The study covers only the selected farmers. In this study convenient random sampling technique has been used and 120 respondents were selected on random basis.

### Tools used for Data Analysis:

The data collected was analyzed through percentages, frequencies and Chi-Square tests are applied for the analysis of data.

## LIMITATIONS OF THE STUDY

1. Respondents may be hesitant to provide the necessary information
2. Only 120 respondents were selected for sampling
3. Data is collected only from Coimbatore District

are high as compared to other education groups. Majority of the respondents family have more than 4 members and majority of the respondents family monthly income fall under Rs.10,000 - 20,000.

**Table 2 : Source of Awareness about Digital Marketing Platform**

S.No.	Source of Awareness	No.of Respondents	Percentage (%)
1	Self Knowledge	21	17.5
2	Dealers	26	21.67
3	Advertisement	41	34.17
4	Through Friends and Relatives	32	26.67

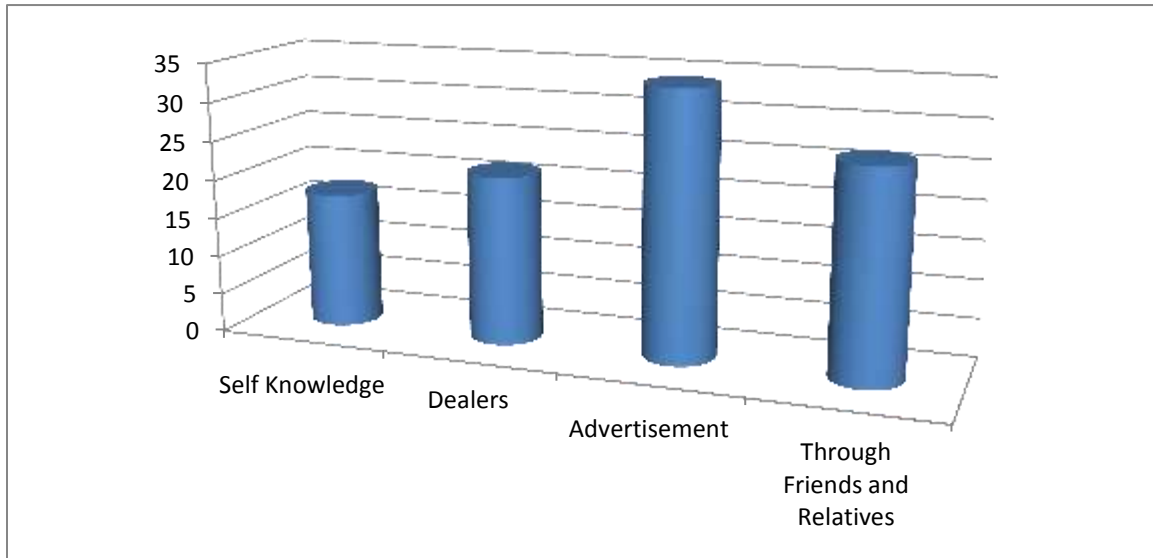
Source : Primary Data



The above table shows that various sources of awareness about digital Marketing platform. In which most of the respondents are

aware about digital marketing platforms through advertisement like TV, News Papers, Social media etc.

**Exhibit No. 1 : Source of Awareness about Digital Marketing Platform**



**Table 3 : Awareness Level of Different Digital Marketing Methods**

S. No	Digital Marketing Methods	Extremely aware	Moderately aware	Somewhat aware	Slightly aware	not at all aware
1	Social Media Marketing	45 (37.5%)	39 (32.5%)	19 (15.83%)	8 (6.67%)	9 (7.5%)
2	E-Mail Marketing	16 (13.33%)	25 (20.83%)	32 (26.67%)	36 (30%)	11 (9.17%)
3	Website	19 (15.83%)	29 (21.67%)	32 (26.67%)	31 (25.83%)	9 (7.5%)
4	Content Marketing	6 (5%)	23 (19.17)	27 (22.5%)	29 (21.67%)	35 (29.17%)
5	Mobile Marketing	42 (35%)	32 (26.67%)	25 (20.83%)	13 (10.83%)	8 (6.67%)
6	Radio and TV ads	52 (43.33%)	35 (29.17%)	15 (12.5%)	16 (13.33%)	2 (1.67%)

Source : Primary Data

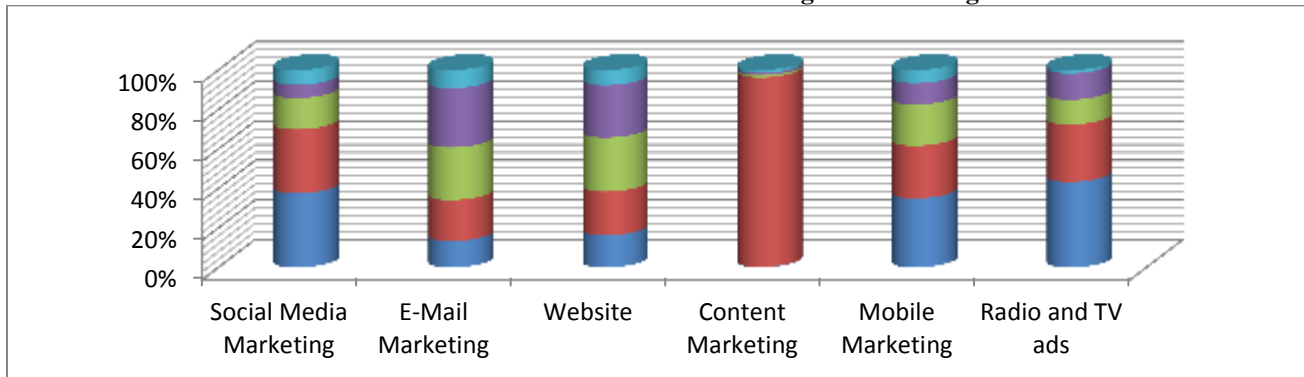
The above table clearly states that the awareness level of different digital marketing tools.

37.5% of the respondents are extremely aware of Social Media Marketing, 30% of the respondents are slightly aware about E-Mail Marketing, 26.67% of the respondents are somewhat aware

about website marketing, 29.17% of the respondents are not at all aware about Content Marketing and 35% of the respondents are extremely aware about Mobile Marketing and 43.33 % of the respondents are extremely aware about Radio and TV advertisements.



Exhibit No.2 : Awareness Level of Different Digital Marketing Tools



### CHI-SQUARE TEST

#### Null Hypothesis 1

There is no significant relationship between Educational Qualification and awareness level of different digital marketing tools.

Chi-square value =27.35

Table value =35.47

Significant level =5%

**Result:** Thus the  $\chi^2$  value is less than table value we accept the hypothesis. Therefore there is no relationship between

Educational Qualification and awareness level of different digital marketing tools.

#### Null Hypothesis 2

There is no significant relationship between Age and awareness level of different digital marketing tools.

Chi-square value = 32.39

Table value = 28.23

Significant level = 5%

**Result:** Thus the  $\chi^2$  value is more than table value we reject the hypothesis. Therefore there is relationship between Age and awareness level of different digital marketing tools.

Table 3 : Ownership of ICT Gadgets

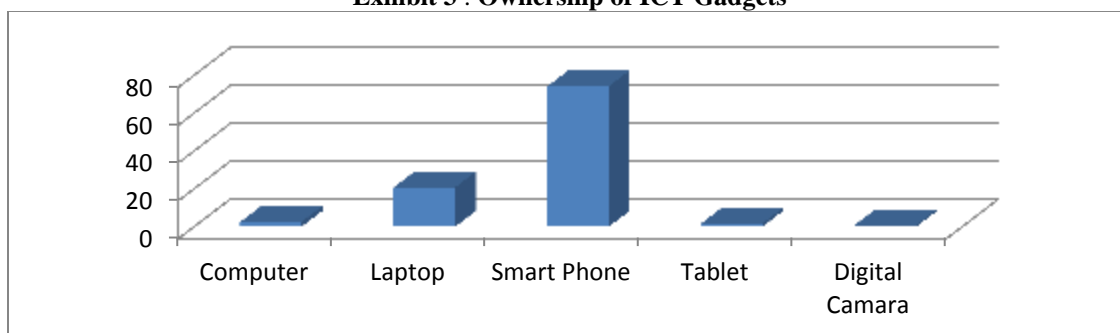
S.No	ICT gadgets	No.of Respondents	Percentage (%)
1	Computer	3	2.5
2	Laptop	25	20.84
3	Smart Phone	89	74.17
4	Tablet	2	1.66
5	Digital Camara	1	0.83

Source : Primary Data

The above table clearly shows that various ICT gadgets owned by the respondents.74.17% of the respondents are having smart phone,20.84% of the respondents have Laptop, 2.5 % of the

respondents own computer, 1.66 % of the respondents have a tablet and only 0.83% of the respondents own a Digital Camera.

Exhibit 3 : Ownership of ICT Gadgets





## SUGGESTIONS

1. State and Central Governments give adequate training to the farmers about digital marketing tools and techniques, Give awareness campaigns about How to use digital marketing in a effective manner to increase their sales.
2. Governments give a technical and financial support to the young and old farmers to increase their sales and profit through digital marketing. During Covid-19 many farmers are affected because of lack of logistic support. If they do their sales through digital marketing definitely their life style and income will grow.
3. Many of the old age farmers hesitate to adopt digital marketing because of fear and security concerns. So the state governments give a proper awareness to them.

## CONCLUSION

Digital Marketing plays crucial role in Pandemic period. It helpful to the farmers to increase the selling price and reduce the marketing cost of their products. Many young farmers are ready to adopt digital marketing. Central and state governments conduct awareness campaigns about digital marketing to farmers and make a policy towards the sustainable digital agricultural market development.

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# MOST EFFICIENT PART OF A PLANT FOR BIOCHAR PRODUCTION

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## ABSTRACT

The aim of the study was to examine the efficiency of different bio char parts as an adsorbent to remove the organophosphate pesticide (malathion) from water. Three types of adsorbents, namely water hyacinth leaves, water hyacinth stem, water hyacinth root were prepared.

Biochar is a powder material having carbon-rich form of charcoal derived by pyrolysis process at temperatures ranging from 300°C to 800°C under oxygen-limited conditions. Biochars shown effectiveness at removing heavy metals and organic pollutants from wastewaters through a process known as adsorption. Biochar produced from water hyacinth (*Eichhornia crassipes*) has been demonstrated to be a very effective adsorbent for removal of some heavy metals and pesticide and also as a means of control for this highly invasive species.

In this study we find out which part of a plant is best biochar which will adsorb more pesticide from water using HPLC.

## INTRODUCTION

Because of increases in population, and industrialization, water contamination has increased globally. Water can be contaminated by the disposal of toxic metals from industries, pesticides and by other pathogens. Moreover, rapid industrialization to ensure self-sufficiency, the quality of water resources is under serious threat. These type of pollutants are very dangerous for all living beings and they can cause negative effects on the ecosystem. Therefore, there is a need to focus research on the preservation of water quality.

Biochar is a carbon-rich form of charcoal derived through pyrolysis at temperatures ranging from 350 C to 800C under oxygen-limited conditions. The preparation and its characterizations are best explained in reference [2]. Biochar is an adsorbent widely used to remove contaminants from polluted water [2]. Some studies have reported higher potential for heavy metal adsorption from biochars derived from rice husks, banana peels, and other waste feed-stocks when applied to wastewaters. For enhance the sorptive capacity of biochar, some of the researchers used magnetic modification to increase the surface area and pore volume, or alkaline treatment that impregnates biochar with metal ions. Feedstock composition, the pyrolysis temperatures, and residence time are strongly influences the physio-chemical characteristics of biochar, including the adsorption capacity for heavy metals. Biomass conversion technologies Biochar applications Modified biochars for water filtration are well explained in reference [3].

## BIOCHAR

Biochar can be considered as a type of heterogeneous mixture of solid residues remaining after pyrolysis, which comprises the range of char, charcoal, graphite, ash, and soot. The original biomass is various type of organic materials such as plant residues, sludge, animal manures, etc. From the chemical point of view, biochar has a high content of recalcitrant aromatic forms of organic carbon (two fold higher carbon content than the feedstock) characterized by irregular-arranged rings of six carbon atoms linked together without oxygen or hydrogen [8]. Because of the high interactions between biochar and the compositions of soil and/or water (e.g., ions, mineral particles, and organic materials) and also the slow rates of biochar degradation, the carbon of biochar can not be easily be returned to the atmosphere as CO<sub>2</sub> also under favorable environmental and biological conditions and can remain in the environment for more than thousand years [11]. Annual atmospheric flux of CO<sub>2</sub> and consequently decreasing the earth warming. Interests in the application of biochar are heightened by its potential co-benefits. In agriculture, soil application of biochar as a conditioner enhances soil quality physically, chemically, and biologically. Biochar stabilizes or even increases soil organic matters, reduces soil deterioration, retains water and nutrients, and releases them in the soil slowly improving crops yield and quality [9]. Some biochars have high pH can act as liming agents to increase the pH in acidic soils. This soil amendment increases the micro elements bio-availability and consequently prevents these nutrients deficiencies in plants [10]. It can also



stabilize heavy metals and decrease their release at levels toxic to the soil.

Water hyacinth biochar has recently shown that it is potential for metal adsorption from industrial, agricultural, and household wastewaters evaluated biochar derived from water hyacinths, generated at four different pyrolysis temperatures, as a method for adsorbing element cadmium from the aqueous solution. In their study, maximum cadmium removal (70 mg g<sup>-1</sup>) was achieved at a pyrolytic temperature of 450°C in a nitrogen gas environment. Alginic acid and magnetic modification, has been used to improve heavy metal removal efficiency and to generate a higher density particle. Alginate encapsulation results in the surface functional groups that bind with cations, such as heavy metals, through ion exchange of the crosslinking cations. Significant research has been conducted on the use of alginate capsules or gels to remove pollutants from wastewater. Specifically, alginate-based composites have been used to remove Cd<sup>2+</sup> from aqueous solutions with sorption

capacities ranging from 9.3 to 191mg<sup>-1</sup> under different temperature and pH conditions. The reusability of biochar-alginate capsules (BAC) through consecutive adsorption-desorption cycles was evaluated and demonstrated that the BAC can be used up to 10 times while maintaining almost 70% of the initial adsorption capacity.

### PROCEDURE OF BIOCHAR PRODUCTION

First collect the water hyacinth and clean it using distilled water then allow to dry in sunlight. After drying one whole day sunlight separate the plant into 3 parts such as leaves, stem and root. Again dry these in sunlight for 1 day. Then reduce its size and place in oven for one day at 60 degree Celsius and then powder it and pyrolysis. Mark these 3 type biochar separately.



Fig 1.1 Water Hyacinth (WH)



Fig 1.2 Drying in Sunlight



Fig 1.3 Leaf



Fig 1.4 Stem



Fig 1.5 Root



Fig 1.6 Powder Form



Fig 1.7 Biochar



## BEST BIOCHAR SELECTION

Add 10 mg of leaf biochar into known concentration of pesticide solution (water and 0.1 ppm melathion solution). Mix well and place in magnetic stirrer about 2 hours. Then filter the solution and finding the remaining concentration of pesticide in the solution using HPLC. Then finding the percentage removal of pesticide. Repeat the procedure using stem and root and finding the percentage removal of pesticide.

## RESULTS

Biochar of water hyacinth leaves, water hyacinth stem, water hyacinth root are prepared.

The removal percentage of pesticide from water by leaf of the water hyacinth biochar is 62%. The removal percentage of pesticide from water by stem of water hyacinth biochar is 65% and the percentage removal of pesticide from water by root biochar is 71%.

## CONCLUSION

Which biochar adsorb best is selected using HPLC. Then concluded that the biochar of root of water hyacinth will absorb more. It absorb almost 71% of pesticide from water.

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# ASSOCIATION OF SOCIO-ECONOMIC CHARACTERISTICS OF HOUSEHOLDS AND ACCESS TO WATER, SANITATION AND HYGIENE FACILITIES: AN ANALYSIS BASED ON NATIONAL SAMPLE SURVEY 2018

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## ABSTRACT

*Using the 76th round of the National Sample Survey (NSS) Drinking Water, Sanitation, Hygiene, and Housing Condition survey, this article demonstrates that there is significant interstate disparity in access to individual and combined WASH facilities. According to the findings, the odds of a household having access to WASH facilities increase if it is headed by a female and the household head has a higher level of education.*

## 1. INTRODUCTION

According to official reports, India has seen a tremendous improvement in the provision of WASH facilities as a result of significant investments and policies like the Swachh Bharat Mission (SBM) and the National Rural Drinking Water Program (NRDWP) (Iyer, 2019; UNICEF India, 2019). In fact, on the 150th anniversary of Mahatma Gandhi's birth in 2019, India declared itself to be open defecation-free (The Hindu, 2019). India's impressive progress is also highlighted in the recent Joint Monitoring Programme report (2020), which states that between 2015 and 2020, India increased basic sanitation coverage by 15 percentage points while decreasing open defecation by 14 percentage points. However, according to the same report, only 46% of India's population has access to safely managed sanitation services. It also states that, while open defecation has decreased significantly across all Indian states and union territories, regional inequality in open defecation persists. Furthermore, according to the report, approximately 38% of the population does not have access to basic hygiene services, and approximately 34% of the population does not have access to a water source on-premises. Despite huge investments and claims of the government, several articles and scholars working in the field have expressed concern about the prevailing WASH situation in the nation (Gupta et al., 2020; Hindustan Times 2021; Down To Earth 2021). The 76th round of the National Sample Survey further added fuel to these fears.

Clean water, sanitation, and hygiene are critical for human health, well-being, and development. According to studies, a lack of proper WASH facilities is responsible for approximately 90% of diarrhea deaths in India

(Gaonconnection, 2021). Inadequate access to WASH is estimated to cost India a total of 53.8 billion dollars, accounting for a 48-dollar per capita annual loss in 2006 (WSP, 2011). From a gender perspective, water and sanitation provision has been argued as a means of reducing violence against women and empowering them (Sommer et al., 2014; Dickin et al., 2021). Because of its sheer importance, the United Nations General Assembly explicitly recognized it as a fundamental human right (Russell & Azzopardi, 2019), and targets 6.1 and 6.2 of the Sustainable Development Goals have been designated for it (Dickin et al., 2020).

Given the current state of COVID-19, it is becoming increasingly important to maintain good hygiene and appropriate WASH practices (Das et al., 2020; World Bank, 2020.) As a result, from a policy standpoint, assessing the country's WASH status becomes critical. The following article provides an overview of the household WASH facilities. Furthermore, an attempt has been made to comprehend the impact of socioeconomic characteristics on household WASH practices.

## 2. EXAMINING INTERSTATE DISPARITIES IN HOUSEHOLDS WASH STATUS

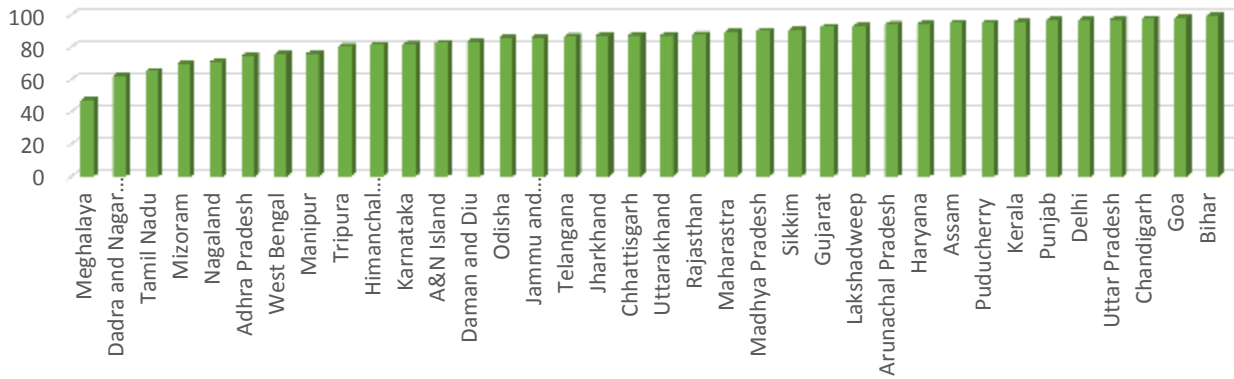
The data used here comes from the 76<sup>th</sup> round of Drinking Water, Sanitation, Hygiene and Housing Condition survey conducted by National Sample Survey (NSS) in the year 2018. Following the study of Ahmed et al., (2021) basic water, sanitation and hygiene facilities at household level were identified as follows:



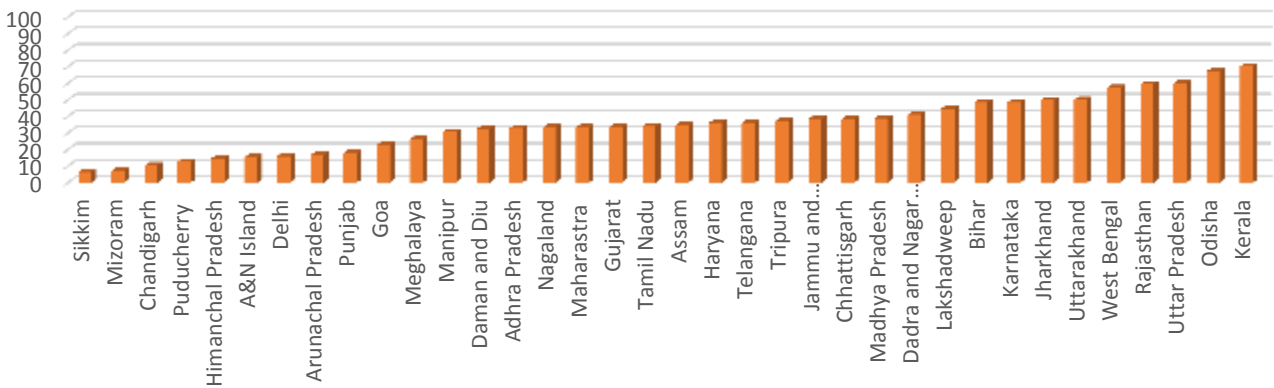
- Basic Water: Households have access to improved water sources as defined by WHO, as long as the round-trip collection time is less than 30 minutes.
- Basic Sanitation: Households have exclusive access to either of the following sanitation facilities, i.e., flush/pour-flush to: piped sewer system, septic tank, ventilated improved latrines, pit latrine with slab, and composite latrine.
- Basic Hygiene: Members of the household regularly wash their hands with water and soap/detergent after defecation.
- Combined WASH: Percentage of households that have access to basic water, sanitation and hygiene facilities.

Figures 1–3 show that coverage of basic WASH facilities at the household level varies significantly across Indian states. According to data, the prevalence of basic water facilities is highest in Meghalaya and lowest in Bihar. Sikkim has the highest proportion of households with basic sanitation, while Kerala has the lowest. Basic hygiene was highest in the state of Chandigarh and lowest in Tamil Nadu. In terms of combined WASH facilities, Figure 4 clearly demonstrates the country's stark interstate disparity. The state of Meghalaya had the highest overall combined WASH facility coverage, while Bihar had the lowest.

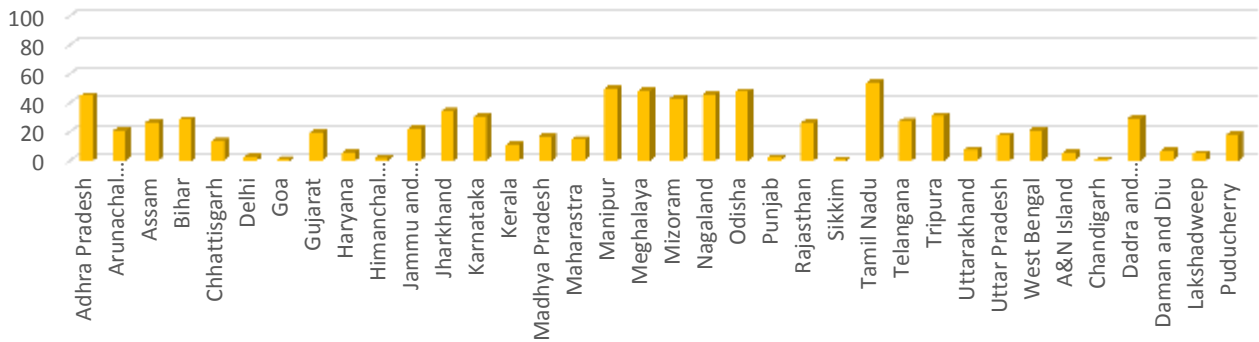
**Fig 1: Percentage of household not having access to basic water**



**Fig 2: Percentage of household not having access to basic sanitation**

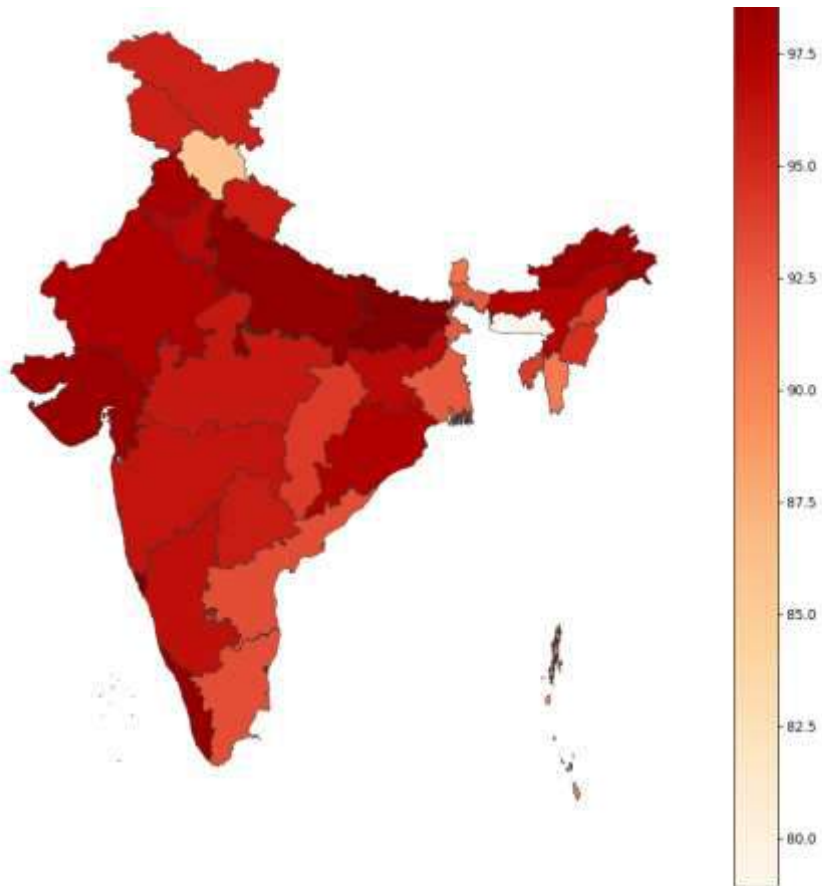


**Fig 3: Percentage of household not having access to basic hygiene**



Source: Author calculation from NSS

**Figure 4: Households not having access to combined WASH facilities**



Source: Author construction in Python



### 3. HOUSEHOLDS' SOCIO-ECONOMIC CHARACTERISTICS AND WASH STATUS

Table 1 shows the relationship between socioeconomic characteristics and the accessibility of individual and combined WASH facilities. As can be seen, having a higher number of working members in the household is positively associated with access to basic water facilities. The likelihood of having basic sanitation increases with household income level. In addition, the education level of the household head and belonging to the so-called upper caste increase the

likelihood of having basic sanitation facilities. Education of the household head, overall education level of the households, increase in income, belonging to the so-called upper caste, and living in urban areas all increases the odds of having accessibility to basic hygiene. The likelihood of having combined WASH facilities increases as the household head's education level rises. It is also worth noting that male-headed households are less likely than female-headed households to have individual and combined WASH facilities.

**Table 1: Logistic Regression result of socio-economic characteristic and household's access to basic water, sanitation and hygiene facilities.**

	Dependent Variables			
	Access to basic water	Access to basic sanitation	Access to basic hygiene	Access to combined WASH
	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Gender of household head	0.64	0.42	0.61	0.38
Education level of household head	0.97	1.04	1.04	1.01
Number of working members	1.09	0.93	0.88	0.91
Highest level of education of household	0.34	2.07	2.67	0.46
Income (MPCE)	1	1	1	1
Residency	0.69	0.85	1.31	0.26
Caste	0.95	1.02	1.08	0.95

Source: Author calculation in STATA

### 4. CONCLUSION

According to the findings, there are significant interstate disparities in access to basic WASH facilities. Overall, the state of Bihar has the lowest coverage of combined WASH facilities. According to the study, households headed by females and with higher education attainment of the household head have a higher likelihood of having access to combined WASH facilities. Only access to basic hygiene facilities appears to be affected by caste, income, and place of residence. Access to basic sanitation facilities was also found to be influenced by caste. However, when it comes to combined WASH status, being of a higher caste, having a higher income, or even residing in urban areas did not increase the chances of having access to it.

This implies that focusing solely on disadvantaged households, i.e., those from rural areas, of the so-called lower caste, with low income and education, will not result in an increase in access to WASH facilities. With the Covid-19 pandemic emphasising the importance of WASH facilities, a policy intervention spanning socioeconomic backgrounds is critical if India is to improve its people's health, well-being, and development.

#### Notes:

- ❖ For this study the following codes have been used:
  - i) 0-Female-headed households; 1- Male-headed households
  - ii) 1-Rural; 2-Urban
  - iii) Social group: 1-ST; 2-SC; 3-OBC;9-Others

- iv) 0- Not having access to basic water; 1-otherwise
- v) 0- Not having access to basic sanitation; 1-otherwise
- vi) 0- Not having access to basic hygiene; 1-otherwise
- vii) 0- Not having access to combined WASH; 1-otherwise

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## WOMEN AND THEIR ROLES IN DIASPORA: A STUDY

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### ABSTRACT

The discourse of diaspora has gained unprecedented prominence and proliferation in the contemporary literary, cultural, political and sociological disciplines. Based on the diaspora discourse, diasporic literature has emerged as a seminal part in the corpus of world literature. The studies of diaspora now encompass multifarious disciplines like sociology, economy, geography, political science, cultural study and film study. It has also been recognized as a distinct field of academic interest in the domain of literature like post-colonial and Third World Literature.

It is generally acknowledged that the term 'diaspora' is originated from the Greek words: *speiro*= to sow, and *dia*= over. Hence, etymologically, it denotes dispersion, scattering and dissemination of people across the countries. In Hebrew, diaspora was termed as *Golah* or *Galut* meaning "Exile". Earlier, the term 'diaspora', as it is widely known, was particularized in the history of the Jews exiles, as mentioned in the *Bible*. It is however unanimously conceded by scholars that the Jews diaspora is at the core of the diasporic conceptualization.

Diaspora study has been an almost worldwide movement and has featured prominently in a usually wide range of academic disciplines. It would be worthwhile, therefore, to bring in some definitions of diaspora in order to have a coherent meaning. So in order to define and theorize conceptualization of terminology of 'diaspora', this introductory part focuses on some prominent critical standpoints provided by a constellation of noted theorists and critics like William Safran, Robin Cohen, Benedict Anderson, Avtar Brah, Stuart Hall, Paul Gilroy, Homi K Bhabha and Iain Chambers. William Safran in his article "Diasporas in Modern societies: Myths of Homeland and Return" (1991) perceives diaspora as "different categories of people – "expatriates, expellees, political refugees, alien residents, immigrants and ethnic and racial minorities tout court" scattered across different countries and corporeal territory (83).

Following the aforementioned definitions conceptualized by the aforesaid thinkers, diaspora can critically be defined as a

seamless network of socio-cultural-political and psychical manifestations spurred by a circuitous movement which accompanies the immigrants, expatriates, refugees and exiles with their sense of solitude along with their urge for return to the native land, temporarily connected with each other by their collective memory and their reinvention and reproduction of the cultural identities which seems to be an ever-evolving process.

Iain Chambers perceives diaspora in terms of mutability and uncertain departure from the homeland and arrival in the homeland simultaneously. He observes in his book *Migrancy, Culture and Identity* (1994) that "Diasporas are encapsulated within the unfixed language, histories and identities. In diasporic condition, a stranger is burdened by the new challenged identity, dispersed 'historical inheritance' and the heterogeneous present" (4-7). He adds additional meaning to the word diaspora by adding the concept of 'here', 'there', 'inside and outside' when he states:

To come from elsewhere, from 'there' and not 'here', and hence to be simultaneously 'inside' and 'outside' the situation at hand, is to live at the intersections of histories and memories, experiencing both their preliminary dispersal and their subsequent translation into new, more extensive, arrangements along emerging routes.(6)

James Clifford, an anthropologist, labels 'diasporic consciousnesses' an awareness that has arisen among the contemporary transnational communities. Dual or paradoxical in nature diaspora is allied with the negative and positive experiences like discrimination and exclusion, and identification with historical heritage which significantly marks the particularity of diaspora. Nevertheless, diasporic consciousness, as he poses, is a centre where elements of loss, exclusion, marginality and exile are juxtaposed with 'discrepant cosmopolitanism' and 'stubborn vision of renewal'. Hence, he figures out this consciousness as a tool for loss and hope. In addition to this, he enunciates diaspora as a transnational network which blurs the dichotomy between 'minority communities' and 'majority societies. Another scholar Khachig



Tololyan has observed 'diaspora' as a larger realm of immigrants, expatriates, refugees, guest-workers, exile community and ethnic community.

## UNDERSTANDING DIASPORA THROUGH THE STANDPOINT OF CREATIVE WRITERS

Apart from the scrutiny made by the aforementioned critics and theorists to theorize the concept of diaspora, a host of diasporic creative writers have argued over diaspora or diasporic consciousness through creative lens. The noted diasporic writer V. S. Naipaul's *A House for Mr. Biswas* (1961) captures the old Indian diaspora where India is constructed in the minds of diaspora through forms (transference/transformation) of spatial mobility. Bharati Mukherjee has located diasporic identities, as 'illicit identities' as images of homeland, is recreated through electronic mediums like cassettes. Indian-British diaspora writer Salman Rushdie's magnum opus *Midnight's Children* (1981) has mapped out how the notion of diaspora is intertwined with cultural hybridity, impure identity and fragmentation of identities along with the history of nation-states.

In *The Shadow Lines* (1988), Amitav Ghosh has consolidated the fragile concept of national territory, fluid identity, memory, erasure of border lines, proximity of faraway countries through imagination, etc. Along with these, issues of partition and communal violence with significance of religious and cultural identity, blurring of the real and imaginary home and certainly the narrator's voyage of quest for the root have also been highlighted by him. The critic Brinda Bose has observed Amitav Ghosh's *The Shadow Lines* (1988) in her research paper entitled "Footnoting History: The Diasporic Imagination of Amitav Ghosh" (2002) from critical angle: "In Ghosh's fiction, the diasporic entity continuously negotiates between two lands, separated by both time and space – history and geography – and attempts to redefine the present through a nuanced understanding of the past" (239). Through a critical lens the noted diasporic writer Bharati Mukherjee has made an attempt to locate the idea of diaspora as an exercise of gain rather than loss and displacement accompanied by termination of indigenous culture.

## GENESIS OF THE OLD INDIAN DIASPORA

After Cohen's categorization of several types of diasporas, the present study unfolds the tracing back to the genesis and development of Old Indian Diaspora, presumed as Indentured Labour Diaspora. After the abolition of slavery system in 1834, laborers from poverty stricken countries like India were lured by the middlemen working under the influence by the British government. Those illiterate and downtrodden migrants were transported to Fiji, Malaysia to be coercively employed in tea, rubber or sugarcane plantations. They were called 'indentured labourers' as they signed bond for five years. This however is termed as a 'new form of slavery'.

The idea of the 'girmit' is also embedded in the Indian indentured diasporas as they shared the same ship during their voyage. Mahatma Gandhi considered himself as 'Pehla Girmitiyas' (first Girmitia). The indentured Indians carried the great Indian epics namely the *Ramayana* and the *Mahabharata* and the *Gita* had a great influence on the psyche of those poor indentured Indians.

Indian immigrants were very often labeled as 'coolies' by the British, to categorize Indians within a detestable creature. The derivation of the term 'coolie' from Gujrati 'kuli' encompasses the kuli tribes of thieves, plunderers and degenerated people which also characterized indentured labourers (Anand Mulloo, 2007:174). Even poor women were also victims of such colonial dispersion. Noted social and political reformers like Mohandas Karamchand Gandhi, Dr. S. Ramgoolam and others revolted against 'Coolitude' to retrieve dignity and identity of poor Indian immigrants. In 1930, the abusive term 'coolie' was banned among the poor Indian workers.

## WOMEN'S ROLE IN CONSTRUCTING 'GLOBAL INDIANNESS'

In the formation of Indian diaspora, Indian immigrant women's contribution to the 'global Indianness' indicates women's proneness in holding nationalistic values beyond physical territory. Smitha Radhakrishnan views 'global Indianness' as a production of "the bodied and representations of iconised global Indian women" (Radhakrishnan, 2008:11) Since the 1990s, the ubiquitousness of globalization policy has permeated most of the countries by connecting network among the countries for facilitation. The involvement of Indian women in the construction of global Indianness ensures their superior position in public sphere. In the last two decades, increasing ratio of women has engaged themselves in the IT industry which triggers them to be promoted in the USA. Indian immigrant women, in spite of their residing in USA, anchor to the natal traditional values. Scholars like Sathi Dasgupta and Aparna Sircar in their research article "Work Roles, Gender and Asian Indian Immigrant Women in the United States" (2000), have mentioned the 'behavioral duality' of the Asian Indian immigrant women in both the realms of private/domestic.

## EXPERIENCES OF THE INDIAN IMMIGRANT WOMEN

Women play an instrumental role in domestic as well as public spheres in foreign countries. Scholars like Aparna Rayaprol and Anannya Bhattacharjee considers woman as a significant representative of the pure 'nation'. Indian immigrant women in the foreign countries like America perform active role to sustain the tradition of homeland instead of relinquishing the heritage. Aparna Rayaprol has cited an instance of Sri Venkateswara temple in Pittsburgh which emerges as an emblematic of women's active involvement and empowerment in the public



arena beyond domestic sphere. Indian immigrant women's involvements with SV temple of Pittsburgh along with the committee Mahila Sangham (Women's group) exemplify participations of immigrant women (Rayaprol 1997).

With expansion of the Western feminist movement in the 1970s, the famous slogan 'the personal is political' dilutes public/private dichotomy. In the alien countries, the immigrants form diaspora community to construct cultural identities or the ethnic identities. Scholar like Keya Ganguly's analytical view of the Indian immigrants in New Jersey, has unearthed the dichotomy between private and public realms. From her stand point, Indian immigrant women usually encounter alienation and isolation outside the domestic sphere. She not only valorizes the dichotomy, but favours constriction of immigrant women in domestic domain. Nevertheless, Ganguly has examined over women's feeling at ease in domestic realm rather than the outer world which creates 'acute alienation' for them.

The different studies of the Indian immigrants in the foreign country have illuminated on the different situations as experienced by the immigrant women. Rayaprol on the one hand, has exposed empowerment of the immigrant Indian women in the USA and, on the other, highlights the marginalization of men's authoritative power over immigrant Indian women in the developed country like Canada.

The South Asian immigrant women act as conduit to carry and retain the cultural and traditional baggage of the ancestral land. Necessarily, immigrant women are considered to be the transmitters of homeland culture among the posterior generation. Dwelling in diasporic circle, Indian immigrant women usually preserve the ethnic cuisine, language, religion and cultural festival through the invocation of nostalgia in this unknown atmosphere. Hence, their endeavor to acculturate with the adopted country clashes with their reproduction of the past culture which turns into 'deculturation' replacing acculturation.

## WOMEN AND THE DIASPORA DOMAIN

In the context of the private and public domains, the immigrant Indian women seem to occupy the acclaimed position for the activity of the public and domestic spheres as well. Like other academicians, Yasmin Hussain has observed immigrant South Asian women's laudable participation in social, cultural and economic arenas. She perceives the immigrant Indian women as conducive for sustaining individualism in the western culture as well as allegiances to the ancestral culture (Hussain 2005). Their involvement in the political and monetary organizations in the public sphere is hardly visible even in the foreign country as these organizations are controlled by masculine power. This discrimination critiques Rayaprol's positive observation of immigrant women's equal participation in public realm. Academicians like Helen Ralston remarks that the empowerment of the immigrant Indian women in the USA is hardly noticeable in Canada where most of the organizations in the public sphere are controlled by immigrant men instead of the immigrant women.

The immigrant Indian women, who are doubly burdened by the white culture and masculine folks in general, are generally attached with both the spheres, public and private in the developed countries like the USA. Their engagement to perform for both these spheres has made the immigrant women to be more responsible and laborious. While the involvement of the immigrant men with only outer sphere or public sphere makes their work easy. Thus the immigrant Indian women are doubly marginalized by the white America. They are oppressed, on one hand, by racism and on the other by the rules and norms of the patriarchal society as pointed out by some academicians. Eminent critic Donna Gabaccia has touched upon the immigrant women as 'marginal figures'. According to her, immigrant women are studied within the women's studies unlike men. Hence, Gabaccia's opinion about women's marginality extends further analyzation of the immigrant women: "... not greater visibility but great marginality" (Gabaccia, 1991: 62). The eclipse of the immigrant women along with the racial minorities' history has been explored in the essay of Gabaccia.

## THE RISE OF WOMEN DIASPORIC WRITERS

Since 1950 the literary penchant of the male Indian diasporic writers have proliferated and enriched diasporic literature. In the 1960 onwards immigrant creative women writers have also contributed in the realm of diasporic literature. In its inception, dominance of the male writers has overshadowed female diasporic writers. Later on, it reaches to its pinnacle with the prolific writings of a host of female writers. In the history of diaspora literature, V.S. Naipaul as a writer of old Indian diaspora has dealt with the issues of immigration marked by slavery, rootlessness and preservation of homeland culture in the adopted land. In the arena of the South Asian diasporic literature, other eminent male writers such as Salman Rushdie, Amitav Ghosh, Rohinton Mistry, Agha Shahid Ali, M. G Vassanji, Amit Choudhury, Upamanyu Chatterjee, Hanif Kureishi, Michael Ondaatje and G.V Desani handle with issues of mobilization and transplantation of immigrants, their sense of disjuncture from native land, identity crisis, multiple or hybrid identities, fragmented and fissured identity, cultural tension, lack of assimilation or integrating with alien culture, lack of belongingness, reinvention of homeland through tropes of nostalgia and memory and many other immigration and expatriation aligned issues.

Apart from the contribution of male writers to the domain of diasporic literature, advent of the South Asian women diasporic writers since 1960s has embellished this specific trend to some extent and, later on 1990 onwards, female diasporic literature has reached to its pinnacle. Moreover, grandeur of their works in this field has stretched even to this twenty first century. The handling of diasporic issues in diasporic situation by the male Indian diasporic writers though thematically harmonizes with Indian women diasporic writers, but women writers deviate from the masculine writers in sense of presentation of women's experiences. The diasporic men writers



have presented the issues of the migration and dislocation or one's rupture from the indigenous land from masculine point of view. Hence, a gap in their way of presentation of theme, issues and technique is conspicuously observed in unearthing the diasporic women's outer experiences and psychological regions exposed by male diasporic writers.

Generally the works of male diasporic writers hardly project women in accordance with their experiences and positions. The effort by diasporic men writers

Seems to be insufficient to excavate the inner or psychological voyage of immigrant women along with their outer voyage. Hence, the diasporic women writers emerge to write down the experiences of women through female perception and perspectives. The women writers depict the characters and their experiences in foreign countries in such a way so that immigrant women feel identified with the women writers who articulate for them. Apart from this, several prestigious awards have pushed the immigrant creative women talents in the realm of writing creativity in the USA. A constellation of such luminary diasporic women writers namely Bharati Mukherjee, Meena Alexander, Chitra Banarjee Divakaruni, Uma Parameswaran, Meera Syal, Sujata Massey, Jhumpa Lahiri, Kiran Desai, Anjana Apachna, Indira Ganesan, Shani Mootoo, Farhana Sheikh, and several others have possessed their places centred on diasporic literature. Their endeavour aims to explore the women's role in resuscitation of their ethnic culture at the junction of homeland and host land cultures. The observation soaks their real or sometimes fictitious experiences in the foreign land, diasporic women writers portray the female characters who under the oppressive hegemony of patriarchy and white culture embark on the journey of articulation.

Though the diaspora women writers emerge in the mid-1960s still they gained prominence in the 1980s onwards. The advent of female diasporic writers in the developed countries like the USA, Canada and Britain can be classified in tripartite waves.

In the first wave, in the 1960 and 1970s, the upper class and elite class women have immigrated to the overseas country like America accepting educational fellowships and different kinds of awards. The Immigration Act of 1965 in the USA which is known as 'New Immigration' envisages the idea that liberal legislative policies introduced in America have made it easy for the immigrants to bridge the gap between the two countries (native India and America) in terms of cultural, educational, economical and political arenas. The pioneer writer of this phase is Ruth Praver Jhabvala, born in Germany of Polish-Jewish parents. Later she moved in India and stayed for twenty four years and later on she immigrated in America and got the right of citizenship there. Some of her notable novels are *To Whom She Will* (1955), *The Householder* (1960) *Heat and Dust* (1975) etc. *Heat and Dust* (1975) has brought her Booker Prize in 1975. Anita Desai was born in India of German father and Indian mother. Her works include *Peacock* (1963), *Voices of the City*

(1965) dealing with women's inner realm and their identities. Her *Journey to Ithaca* (1995) and *Fasting, Feasting* (1999) depicts the relation between East and West. Bharati Mukherjee is deemed as a most scintillating female Indian-American diasporic writer in realm of diasporic literature. But she herself remarks "I view myself as an American author in the tradition of other American authors whose ancestors arrived in Ellis Island" (1988:650). After her expatriation in Canada she moved to America and employed as a teacher in university of California. The setting of her novels and short story collection is in Canada, the USA and India. In *The Tiger's Daughter* (1972), she highlights on themes of immigration, dislocation, exile, return, and quest for identity – primarily through the experiences of women characters. The stories *Wife* (1975), *Darkness* (1985), delineate recent immigrants to America and Canada and their confrontation with racism, discrimination and humiliation. In *Middleman and Other Stories* (1988) and *Jasmine* (1989), *Holder of the World* (1993) and *Leave It to Me* (1997), her characters are encapsulated within the commingling of the two different cultures. Her short story collection, *The Middleman and Other Stories* (1988), has embellished her with the U.S. National Book Critics Circle Award in 1988. *Desirable Daughters* (2002) and *The Tree Bride* (2004) are the novels centred on woman protagonist's root search in India after her deracination from the native land to San Francisco.

In the second wave, another fertile Indo-American writer in the corpus of diaspora field, Chitra Bannerjee Divakaruni, who transplanted in America for university from Calcutta. Her first collection of short stories, *Arranged Marriage*, won an American Book Award in 1996. *The Mistress of Spices*, *Sister of My Heart* (1999) and *The Vine of Desire* (2002), *The Unknown Errors of Our Lives* (2001) are some of her contributions on which her fame revolves. Anjana Appanchana's immigration in America has manipulated her to usher in the domain of creative writing in 1980s. Her first work *Incantations and Other Stories* (1991), and debut novel, *Listening Now* (1998), is also entirely based in India. Trained as a classical dancer of Madras, Padma Hejmadi has made her pace in literary realm of diaspora. Her achievement in creative writing centred on collection of stories in India in 1970s before moving to America, novel and autobiography. Her works include *Birthday Deathday* (1985) and her autobiography, *Room to Fly: A Transcultural Memoir* (1999), deals with the personal spaces of transformation that embedded in the storyline of times and places across Greece, Japan, the Bahamas and diverse parts of America and India. Acclaimed as a cosmopolitan poet, Meena Alexander has made an impeccable path in diasporic arena. Her fame spread on the basis of works that includes first volume of poetry, *The Bird's Bright Ring* (1975) and autobiography, *Fault Lines: A Memoir* (1993) which explores clashes of cultures, identity, race and languages.



Nevertheless, her poetry anthologies include *River Bridge* (1995) and *Illiterate Heart* (2002).

In the third wave a constellation of the veteran writers with their diverse genres like autobiography, 'chick lit' (for the women by the women of the women), etc (poetry, novel, short story, drama etc) has emerged in the USA moving far away from indigenous land (India). To enrich the realm of South Asian Canadian literature, Uma Parameswaran as a scintillating playwright has entered in this field of creative writing with her debut work *Sons Must Die* (1962), a play based on the Partition of 1947. Other plays consist of *Meera* (1971), *Sita's Promise* (1981), *Dear Deedi, My Sister* (1989) and *Rootless but Green are the Boulevard Trees* (1998). They were collected into *Sons Must Die and Other Plays* (1998) as a part of the South Asian Canadian Literature Series (SACLIT). Apart from her fertile contribution in the genre of play, Parameswaran's versatility revolves round the works including a volume of poetry, *Trishanku and Other Writings* (1987) and *What Was Always Hers* (1999), a collection of short stories that has bestowed on her Canadian Authors Association 2000 Jubilee Award for Best Short Stories. Anita Rau Badami, as modern diaspora writer of South Asian Diaspora has possessed literary applause in realm of literary writing in Canada. Among her contributions, her quadruple works include *Tamarind Mem* (1997), *The Hero's Walk* (2001), *Can You Hear the Nightbird Call?* (2006) and *Tell it to the Trees* (2011). Another lucent creative writer in the twenty first century, Kiran Desai, daughter of Anita Desai, author of her debut novel, *Hullabaloo in the Guava Orchard* (1998) has possessed Booker prize for her magnum opus *The Inheritance of Loss* (2006). Belonging to Indian parents in London, Jhumpa Lahiri's promising career has been commenced with her debut collection of stories, *Interpreter of Maladies* (1999) which has bestowed on her the 2000 Pulitzer Prize. In these stories, Lahiri reveals the dislocation of the Indians residing within an alien culture. Next, *The Namesake* (2003) captures Gogol's continuous journey to explore his identity between two cultures i.e., Indian/ American. The novel also highlights female protagonist's feeling of confinement within American culture. Her collection of short stories *Unaccustomed Earth* (2008) and the recent published novel *The Lowland* (2013) certainly secures her status in the diasporic literature. Apart from the aforementioned female writers in diasporic realm, other star-studded diasporic writers namely Padama Hejmadi, Shauna Singh Baldwin, Indira Ganesan, Bharti Kirchner Margaret, Sujata Massey, Tahira Naqvi, Kirin Narayan, Samina Ali, Amina Meer, Amulya Malladi are there too whose narratives are basically set in America, Canada and different South Asian parts like India, Bangladesh, and Pakistan.

### CYBER SPACE AND DIASPORIC WOMEN

Technological space emerges as a new device for women to be articulate in public space in their immigrant situation. The diasporic groups' online identity formation along with economic and cultural globalization processes are significant parameters

through CMC (Computer mediated Communication) for empowerment of Third World women in technological spaces.

The discussion of significance of computer-mediated communication in this globalized era has highlighted internet, an epitome of virtual space which acts as an instrument to formulate the individual and collective opinions. In this virtual space, virtual online community has emerged beyond geographical boundaries of space or sphere. Mitra has scrutinized over utility of the internet basis for resuscitation of mute voices of peripheralized women and it is the medium through which women obtain opportunity to excoriate stereotypical patriarchal practices prevailing within communities. In electro-media era, women so long have been mute to codes and values of injustice patriarchal authority, have now been capable to give vent hidden voices through participation in online discussion in the public space which bestow on them a sense of individual identities as well as their cultural elevation.

In recent era, acceleration of women in the domains of software jobs especially in the IT sector in the formation of their identities is the manifestation of their economic and cultural elevation. But, women especially the privileged diasporic women ventilate their voices through this communicative technique.

### CONCLUSION

To provide a probable definition of diaspora and its concerning issues, a brief and sketchy survey has been attempted here. Needless to say, diaspora's concerning areas include mobilization from one territory to another, deterritorialization, identity de/reconstruction, collision of cultures, nostalgia and remembrance, dream and longing etc. Unearthing of the past interlinked with present and future is focused to embrace the diasporic situation beyond the temporal and spatial territories. But these aforementioned issues are not sufficient to capture its vast range. Several views and opinions elucidated by the critics and academicians in the 'Introduction' have been challenged by the other critics and scholars. By highlighting all the observations that have been critically investigated by a host of critics and theorists namely William Safran, Robin Cohen, Benedict Anderson, Avtar Brah, Stuart Hall, Paul Gilroy, Homi K Bhabha and Iain Chambers in chapter one, it can be stated that diaspora works as a seamless network, a socio-political-cultural-psychological phenomenon, to capture the alienated condition of the immigrants, exiles and expatriates who may get solace from their reproduction of the homeland culture beyond time/space boundary.

Regarding the future of the Indian diasporic literature by the women writers, it can be stated that the presentation of the immigrant women characters in their literary works have made the readers feel identified with that of the characters. Recent arrival of many Indian women diasporic writers with their works in this field embodies their occupying a remarkable place against the male diasporic writers. Writers such as Jhumpa



Lahiri, Kiran Desai, Anita Rao Badami, Amulya Malladi etc have shown their potential in this concerning area in the present century.

This article focused on the to unravel the ‘motherhood’ issue through the voice of immigrant characters like Taralata, Ashima, and Ruma as portrayed in *Desirable Daughters*, *The Namesake* and *Unaccustomed Earth*. Writing emerges as a literary realm of reflecting the characters’ inward journey which can be identified with the diasporic women who constantly struggle to reconstruct their identities. Lahiris’s projection of mother Ashima and her solitude over raising her son in the foreign country harmonizes with the immigrant Taralata as portrayed by Bharati Mukherjee. These diasporic writers have shown their subtlety in the use of language to present such tender issues like ‘motherhood’. Hence, writing emerges as a medium of expression for the women diasporic writers to make them ventilate to the readers.

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# A STUDY ON CUSTOMER SATISFACTION TOWARDS ROYAL ENFIELD WITH SPECIAL REFERENCE TO PALANI TALUK

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## ABSTRACT

*In the present era, customer is the centre point of all the marketing activities and all the players in the market are trying to hold their place in the minds of the consumers. The satisfaction plays an essential role for the success of any business. Branding is around for centuries as a means to identify and differentiate the goods and services of one producer from those of another. It is considered to be the valuable assets of a business. The brands such as, Royal Enfield are the popular brands in the Two wheeler automobile industry. In this back drop the study has been undertaken to study the satisfaction level of the customers towards Royal Enfield two wheelers in Palani Taluk*

**KEYWORDS:** Customer Satisfaction, Brand (Royal Enfield )

## 1.1 INTRODUCTION

It is being hard to please the present day customers. The market conscious society turned smarter and more priced conscious and in turn more demanding and less forgiving. They checkout the competitors with similar or at times even better offers. So the challenge is not to produce for customers, any firm could do it. The real challenge is to produce delighted customers and more importantly loyal customers.

Customers are the king and without satisfying their needs none can exist in the corporate impression, awareness and consciousness about a company on its offerings. Customer perception is typically affected by advertising, reviews, public relation, social media, personal experience and other channels. By way of analyzing customer perception we can clearly understood how much a firm treats its customers, what is the quality of their products, is it capable to serve the dynamic needs of customers, The Study report deals with the analysis of customer perception conducted among customers of Royal Enfield who purchased different brands Royal Enfield.

## 1.2 STATEMENT OF THE PROBLEM

In this present scenario automobile industry has heavy competition in two wheeler industry. This study helps to know why customers are choosing Royal Enfield bike. The competitive market satisfaction level is very helpful to motivate business and encourage the market. As the competition from several 100cc two-wheelers is rising, it is very interesting to know whether the current customers of Royal Enfield Bullet are happy with the brand and their opinion about

various attributes of Royal Enfield Bullet and their satisfaction. The company can understand the loyalty of the customers from the present scenario of customer buying behavior and future expectations.

## 1.3 OBJECTIVE OF THE STUDY

The objectives of the study are as follows:

- To study the consumer perception towards the Royal Enfield bikes.
- To understand the attitude of the consumers towards the Royal Enfield bikes and also to understand the buyer behavior.
- To study the brand awareness, brand images and perception of consumers towards various brands.
- To study the preference of customers on different varieties of Royal Enfield bikes.
- To study consumers expectations in respect to Royal Enfield bikes.
- To study the brand loyalty of Royal Enfield customers.
- To give suitable conclusions and recommendations for findings.

## 1.4 SCOPE & IMPORTANCE

This study includes customer's responses and awareness towards the brand products and services of Royal Enfield. The results are limited by the sample size 75 and therefore the opinion of only selected customers will take into consideration. Mainly this study will



conducted in Dharapuram and the scope is limited. Customer satisfaction is very essential factor for the success of any company. Satisfied customers are the assets of the company. For satisfying customers the company gives attention to that entire factor which provides customer's satisfaction. So the appropriate knowledge about the customer satisfaction is essential.

The need of the study has been attained to identify the class of customers with regard to preference, the purchase pattern and to analyze the satisfaction level of several models available in the Royal Enfield bike. The study established a ground for further research in the related field on a large scale analysis.

**1.5 HYPOTHESIS**  $H_0$  : There does not exist a significant difference relationship between select variables and satisfaction level.

### 1.6 RESEARCH METHODOLOGY

The research will be carried out in various phases that constitute an approach of working from whole to part. It includes subsequent phases trying to go deeper into the user's psyche and develop a through understanding of what a user looks for while buying a bike. The study analysis of the data was done through simple statistical technique such as drawings of percentage for generalization. The first phase is completely internal where it is stormed over the most effective route of action. Considering that bullet users in Dharapuram The second phase in with some of the seasoned bikers who have been using Bullets for some time now and are generally known and respected amongst the bullets community. The third phase is with some respondents who will be interviewed with the help of questionnaire keeping in mind the time and cost constraints.

### 1.7 DATA COLLECTION

The task of data collection beings after a research problem has been defined and research design. While deciding about the method of data collection to be used for the study, the researcher should keep in mind two of data

- **Primary data**
- **Secondary data**

#### Primary Data

Primary data assumes a great importance in this type of studies. In this study primary data had been collected from structured questionnaires, observation methods, and interpretation with the executives of the company. In these ways data's are very important and plays a vital role.

The study is primarily based on Primary data. The data has been collected from 75 respondents.

#### Secondary Data

Secondary data had been gathered from many sources namely.

- Company website, news papers, magazines and journals.
- Company records and reports.
- Standard references and books
- purpose of using secondary data was to increase accuracy, interpretation conclusion and recommendations.

### Tools for Analysis

The tools used for analysis are,

- Rank analysis
- Chi-square
- t-test
- ANOVA

#### 1. Rank Analysis

Garrett ranking technique was used to rank the preference indicated by the respondents on different factors. As per this method, respondents have been asked to assign the rank for all factors and outcomes of such ranking have been converted into score value with the help of the following formula:

Percent Position =  $100(R_{ij}-0.5)/N_j$  Where.,

$R_{ij}$  = Rank given for the  $i$ th variable by  $j$ th respondents

$N_j$  = Number of variable ranked by  $j$ th respondents

With the help of Garrett's Table the per cent position estimated is converted in to scores. Then for each factor, the scores of each individual are added and then total value of scores and mean values of score is calculated. The factors having highest mean value I considered to be most important factor.

**Weighted Average** = Total Scores / Total Weight

#### 2. T- test

A t-test is a type of inferential statistic which is used to determine if there is a significant difference between the means of two groups which may be related in certain features.

#### 3. Anova

- Analysis of variance is a collection of statistical models and their associated estimation procedures (such as the "variation" among the between groups) used to analyse the differences among group means in a sample.
- A one way anova is used to test the difference between the means of two groups on a single variable.

#### 4. Chi-square test

Chi-square test is a statistical test commonly used for testing independence and goodness of fit. Testing independence determinants whether two or more observations across two populations are dependent on each other (that is, whether one variable helps to estimate the other). Testing for goodness of fit determines if an observed frequency distribution matches a theoretical frequency distribution. In both cases the equation to

$$X^2 = \frac{\sum (O-E)^2}{E}$$

Calculate the chi-square statistic is where O equals the observed frequency and E the expected frequency. The results of a chi-square test, along with the degrees of freedom are used with a previously calculated table of chi-square distribution to find p value. The p-value can then be determined the significant of the test.



### 1.8 LIMITATIONS OF THE STUDY

- The research was confined to Dharapuram city only; it represents the customer's perception towards Royal Enfield bikes.
- The second limitation was the lack of time due to which only 75 questionnaires were distributed. And also 75 questionnaires are very small in number.
- The study is a to Royal Enfield owners.
- The findings of the study solely depend on the response given by the customer. So it cannot be generalized as a whole.
- This study is based on sample the survey, which may not actually represent the total population

### REVIEW OF LITERATURE

- **Lisa R. Klein and Gary T. Ford (2003)** <sup>1</sup>. It has been stated by the authors that the customers can do a cost benefit analysis to choose a search strategy, i.e. what, when, how much and where to search, but the customers do not search much, which may be due to customers' perception that the search costs are quite high or that the value of the search is quite low. As a part of pre-purchase search for perfect automobile as per their requirement, the customers in this digital age take the help of internet, websites as well as social networking sites to do a comparative study of the different models of different brands available in the market. Hence their opinion is also influenced by the reviews of the people already possessing the motorcycles and using it.
  - **Anderson, Fornell and Mazvancheryl,( 2004 )** <sup>2</sup>. Regardless of the way that is over the top to produce satisfied and stable fast customers however that would show beneficial in a long continue running for a firm.
  - **Gustafson, Johnson and Roos,( 2005 )** <sup>3</sup>. Thusly a firm should focus on the improvement of organization value and indict suitable workable expense of a particular complete objective to fulfill their customers which would finally help the firm to grip its customers.
  - **Foale, Tony(2006)** <sup>4</sup>. Motorcycle Handling and Chassis Design. Tony Foale Designs. The book provides detailed information about the anatomy of motorcycles. It explains in a very easy and simple language how a motorcycle works. It also gives information about the development in the automobile technology. Pictures and diagrams are an integral part of the book. The book is a must for every researcher working in similar field
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### ANALYSIS AND INTERPRETATION INTRODUCTION

The term analysis refers to the computations of certain measures along with searching for patterns or relationship among the data groups. After collection of data, it has to processed and analyzed in accordance with the outline laid down for the development of the research plan.

### INTERPRETATION

Interpretation refers to task of drawing inferences from the collected facts after an analytical and or experimental study in fact; it is search for border meaning or research findings.

### ANALYSIS AND INTERPRETATION

Analysis and interpretation are closely related. Interpretation is not possible without analysis and without interpretation, analysis has no value. Hence the term analysis is widely used to refer both analysis and interpretation.

In Order To Study Customer Preference and Satisfaction towards "Royal Enfield" A Sample of 75 Respondents (Customer)

The collected information was classified and tabulated and the objectives were answered through the following statistical tool:

- Rank analysis
- T-test
- Anova
- Chi-square analysis

**TABLE- 4.1-RANK OF THE PRODUCT**

Attri butes	Respondents					Score	Rank
	I	II	III	IV	V		
Design	37 (185)	0 (0)	23 (69)	0 (0)	15 (15)	269	I
Mileage	7 (35)	15 (60)	30 (90)	8 (16)	15 (15)	216	III
Speed	15 (75)	30 (120)	0 (0)	15 (30)	15 (15)	210	IV
Options	8 (40)	23 (92)	22 (66)	15 (30)	7 (7)	235	II
Color	8 (40)	7 (28)	0 (0)	37 (74)	23 (23)	165	V

Sources:- primary data



### INTERPRETATION

The above table show clear that the respondents provided the first rank to design, second rank to options, third rank to mileage, fourth rank to speed, and fifth rank to color.

**TABLE- 4.2 RANK OF USER FRIENDLY**

S. No	Applications	Weight	5	4	3	2	1	Total
		Rank	1	2	3	4	5	
1	Breaking system		29	0	16	22	8	75
2	Head lamb		8	7	8	22	30	75
3	Handling		8	8	22	23	14	75
4	Pulling power		23	15	22	0	15	75
5	Safety		7	45	7	8	8	75
	<b>Total</b>		<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>75</b>	

Sources:- primary data

### INTERPRETATION

Weights have been assigned to the various features of product with maximum weight given to the first rank and the least weight given to the last rank. Finally for each applications total source are arrived at by multiplying the weight by the number of respondents.

From the above table the total scores and the weighted average for using feature of the product Breaking system has been arrived at as follows.

$$\begin{aligned} \text{Total scores} &= (5*29) + (4*0) + (3*16) + (2*22) + (1*8) \\ &= 145 + 0 + 48 + 44 + 8 = 245 \end{aligned}$$

$$\begin{aligned} \text{Weighted Average} &= \text{Total Scores} / \text{Total Weight} \\ &= 245 / 15 \\ &= 16.3 \end{aligned}$$

The same procedure has been followed for the remaining applications also.

- ✓ Weighted average rank for user friendly features is shows in the following table.

**TABLE 4.3 (1)WEIGHTED AVERAGE RANK**

S.No	Factors	Total scores	Weighted Average	Rank
1	Breaking system	245	16.3	III
2	Head lamb	166	11	V
3	Handling	198	13.2	IV
4	Pulling power	256	17	II
5	Safety	260	17.3	I

Sources:- primary data

### INTERPRETATION

From the above table 4.20, it is clear that the respondents provided the first rank to safety, second rank to pulling power, third rank to breaking system, fourth rank to handling, and fifth rank to head lamb.

### USER SATISFACTION LEVEL LEVEL OF SATISFACTION

Satisfaction index is computed to ascertain the level of satisfaction of the respondents on the services offered by Royal Enfield. Royal Enfield offers various service facilities its customer. The response is rated on a five point scale and answer to the question range from five to one.

Thus the maximum score is 105. The mean satisfaction is 75 and the standard deviation is 5. The score up to 70 is categorized as low, the score from 71 to 79 is categorized as medium and the score 80 and above is categorized as high.

**Level of Satisfaction of Royal Enfield**

Level of Awareness	Number of Respondents	Percentage of Respondents
Low	22	29
Medium	38	51
High	15	20
<b>Total</b>	<b>75</b>	<b>100</b>

Sources: Primary data

The table shows that 22 (29 percent) respondents have low level of satisfaction, 38 (51 percent) respondents have medium level of satisfaction and 15 (20 percent) respondents have high level of satisfaction of the Royal Enfield.



**Table selects personal variables and level of satisfaction (T-test)**

Area of residence	Rural	11	1.4545	2.816	0.066
	Semi urban	8	2.0000		
	Urban	56	1.9821		
	Total	75	1.9067		
Age	20 to 30	44	2.1818	18.202	0.000**
	30 to 40	15	1.0000		
	40 to 50	8	2.0000		
	Above 50	8	2.0000		
	Total	75	1.9087		
Family members	Below 2	7	2.1429	5.165	0.003**
	2 to 4	46	1.9783		
	4 to 5	15	2.0000		
	Above 5	7	1.0000		
	Total	75	1.9067		
Education qualification	10 <sup>th</sup>	8	2.0000	8.510	0.000**
	12 <sup>th</sup>	22	1.3182		
	Degree	33	1.2121		
	Diploma	6	1.8333		
	Illiterate	6	2.3333		
	Total	75	1.9067		
Occupation	Professional	14	2.0000	1.417	0.237
	Business	26	1.8462		
	Agriculture	5	1.4000		
	Student	25	2.0800		
	Others	5	1.6000		
	Total	75	1.9067		
Monthly income	10000 to 20000	50	1.7800	6.257	0.000**
	20000 to 30000	16	2.5000		
	30000 to 40000	6	1.5000		
	Above 40000	3	1.6667		
	Total	75	1.9067		

The above table reveals that among the personal variable select there exists a significant difference the select variable income, Education qualification, age, Family members, and level of satisfaction on Royal Enfield ( $P < 0.05$ ), where as there does not exist a significant difference between select variable namely Area of residence, Occupation, Monthly income, and Level of satisfaction on Royal Enfield ( $P > 0.05$ ).

**Factors Influencing Level of Awareness**

**Table selects personal variables and level of satisfaction (ANOVA)**

Variables		N	Mean	F	Sig
Gender	Male	68	1.9118	.066	0.846
	Female	7	1.8571		
Marital Status	Married	23	1.3478	.156	0.000**
	Un married	52	2.1536		
Type of family	Nuclear	30	1.5000	.432	0.000**
	Joint	45	2.1778		

Source :- primary data

\*\*significant

The above table reveals that there exist a significant difference between the select variables Marital status and Type of family and satisfaction on Royal Enfield that there does not exist significant different between the select variables Gender and satisfaction on Royal Enfield.

**Chi- Square Test**

Chi- square test is carried out to know whether there exists a significant association between select variables - Area of residence, Gender, Age, Marital status, Type of family, Members of family, Family income, Education qualification, Occupation – and the level of satisfaction.

**Ho: There does not significant association between the select personal variables and level of satisfaction.**

**Table selects personal variables and level of satisfaction (Chi-square)**



Variables		Level of Awareness			N=75	X <sup>2</sup>	'P' Value
		Low N=22	Medium N=38	High N=15			
Area of residence	Rural	7 (63.6)	3 (27.3)	1 (9.1)	11	8.850	0.065
	Urban	1 (12.5)	6 (75)	1 (12.5)	8		
	Semi-urban	14(25)	29(50.8)	13(23.2)	56		
Gender	Male	20(29.4)	34(50)	14(20.6)	68	.191	0.909
	Female	2(28.6)	4(57.1)	1(14.3)	7		
Age	Below 20	5(11.4)	26(59.1)	13(29.5)	44	51.542	0.000**
	20 to 30	15(100)	0(0)	0(0)	15		
	30 to 40	0(0)	8(100)	0(0)	8		
	Above 40	2(25)	4(50)	2(25)	8		
Marital status	Married	15(65.2)	8(34.8)	0(0)	23	22.849	0.000**
	Unmarried	7(13.5)	30(57.7)	15(28.8)	52		
Type of family	Joint	15(50)	15(50)	0(0)	30	17.285	0.000**
	Nuclear	7(15.6)	23(51.1)	15(33.3)	45		
Members of family	Below 2	1(14.3)	4(57.1)	2(28.6)	7	34.709	0.000**
	2 to 4	14(30.4)	19(41.3)	2(28.6)	46		
	4 to 5	0(0)	15(100)	0(0)	15		
	Above 5	7(100)	0(0)	0(0)	7		
Education qualification	10 <sup>th</sup>	0 (0)	8(100)	0 (0)	8	37.939	0.000**
	12 <sup>th</sup>	15(68.2)	7(31.8)	0 (0)	22		
	Degree	5(15.2)	16(48.5)	12(36.4)	33		
	Diploma	1(16.7)	2(33.3)	3(50)	6		
	Others	1(16.7)	2(33.3)	3(50)	6		
Occupation	Professional	0(0)	14(100)	0(0)	14	24.035	0.002**
	Business	11(42.3)	8(30.8)	7(26.9)	26		
	Agriculture	3(60)	2(40)	0 (0)	5		
	Student	6(24)	11(44)	8(32)	25		
	Others	2(40)	3(60)	0 (0)	5		
Monthly income	10000-20000	17(34)	27(54)	6(12)	50	19.262	0.004**
	20000– 30000	0 (0)	8(50)	8(50)	16		
	30000– 40000	3(50)	3(50)	0 (0)	6		
	Above 40000	2(66.7)	0 (0)	1(33.3)	3		

Source :- primary data

\*\*significant



The above table reveals that among the personal variables select there exists a significant association between the select personal variable namely Monthly income, Occupation, Education qualification, Members of family, Type of family, Marital status, Age and the Level of satisfaction on Royal Enfield ( $P < 0.05$ ), whereas there do not there exists a significant association between the select personal variable namely Area of residence, Gender and the Level of satisfaction Royal Enfield ( $P > 0.05$ ).

## FINDINGS AND SUGGESTION

### FINDINGS

The present study is an empirical study, both primary and secondary data are collected for the study. A well-structured questionnaire was prepared and presented for the collection of data from the respondents. The present study has been undertaken in Dharapuram town. As regards the selection of respondents, convenient sampling technique has been adopted.

In accordance with the objectives framed, the data collected were analyzed with the help of statistical tools. The percentage analysis was carried out for the socio-economic profile of the respondents, simple percentage and chi-squared were worked out to know the level of satisfaction of the sample respondents. Weighted average ranks were used to test the motivating factors.

The sample picked from the population of users of two wheelers of Royal Enfield has thrown a new look into perception of consumers.

The findings are as follows:

- Majority 50 percent of the respondents were in the age group of up to 20 to 30 years
- Majority 89 percent of the respondents were male.
- Majority 69 percent of the respondents were unmarried.
- Majority 44 percentages of the respondents had Degree holders.
- Majority 35 percent of the respondents were doing business
- Majority 67 percent of the respondents are drawing a monthly salary of Rs.10000 to Rs 20000.
- More than half percentage of people will be living nuclear family.
- Major 71 percentages of the respondents was have 2 to 4 members in the family.
- More than 75 percentage of people living semi-urban
- The 40 percentage of respondents awareness form the users.
- More than half percentage people using Classic model.
- More than 57 percentage of people for using reason like own.
- Above half percentage of payment made by cash
- Majority 60 percentage of the respondent will be using the 2-3 years.
- The majority of 83 percentage of the respondent brought the vehicle Newly.
- The majority of people say cost of spares is high.
- The majority of vehicles 30 – 40 mileage.
- The above 40 percentage of the respondent service the vehicle at showroom.

### SUGGESTIONS

- The vehicle control is one the difficult.
- The vehicle mileage also not standard so improve the mileage.
- This vehicle engine sound and wolves sound also over so controlled the sound also.
- The Royal Enfield bike spares cost high.
- The vehicle takes more periods for service.
- The vehicle vibration is also the one problem of the owner person's
- The vehicle cost also high range.
- A considerable number of respondents opined that there is a need to improve the technology of Royal Enfield bikes
- The complaints received from the customer should be dealt quickly
- It should focus on satisfying the needs for respect, power, safety and comfort.
- Royal Enfield should concentrate on building around the iconic status it already enjoys if it plans to attract customers migrating to other manufacturers.
- Company should focus on younger generation as it can increase sales and market.

### CONCLUSION

From the research I came to know about the important conclusion regarding the customer satisfaction of Royal Enfield. From this survey it is found that the satisfaction level of customers in various categories like different age group, gender, income levels, and factors influencing them to buy Royal Enfield and satisfaction level on various factors. Though there are many competitors for Royal Enfield people have higher level of satisfaction and willingness to buy the product and tend to increase the standard of living.

The study has helped Royal Enfield bullet dealers to understand whether the customers are satisfied or not. If not what are the main reason for dissatisfaction of customer towards the dealers and what are all the ways to improve the satisfaction level of customer towards dealer. We can come to conclude younger generation and middle age are more interested in Royal Enfield Bullet, the buying behavior is governed predominantly by the need for power and respect for the iconic Brand and users are mostly professional males, 20-35 years of age, including some students. Most of the customers are attracted to newly release classic 350/500, also customers are easily affording the price of Royal Enfield bike and customers are very loyal towards the brand Royal Enfield bullet. Royal Enfield should concentrate on its advertising campaign to reach the customer the millage of Royal Enfield Bullet Bikes is very economical and most of them prefer to buy there Bike Brand new from showroom with the spare parts available in market easily. Royal Enfield Bullet has an excellent satisfaction with in the customer for its sound, comfort, and safety.

The study has helped Royal Enfield dealers to understand whether the customers are satisfied or not. If not what are main reasons for dissatisfaction of customer towards the dealer and what are the ways of improving the satisfaction level of customer towards dealer.



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# UNMODIFIED BUT ACTIVE AND COMMON BORROWINGS IN DAILY LIFE

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## ANNOTATION

*In the article, it is spoken about active and common borrowings in daily life even if they haven't been codified yet. The main attention is paid to the peculiarities of the borrowings "blogger" and "on-line". The ideas put forward have been grounded with the help of the examples from mass media.*

**KEY WORDS:** borrowings, language, social life, blogger – blogger, online – onlayn.

It is becoming a vital necessity for our country to face the world, to establish mutually beneficial cooperation in the cultural, economic and political spheres with the advanced countries of the world, and to form a relationship of solidarity, even among our local people. Therefore, especially in the last decades, our language has borrowed hundreds of foreign words, such as "twitter", "blog", "blogger", "cluster", "hosting", "telegram", "instagram", "facebook", "fake", "follow", "follower", "challenge", "casting", "online", "offline", "lifehack", "flashmob", "message", "click", "hunting story", "tick-tok", "hot-dog", "hamburger", "wi-fi", "screening", that they have become a means of communication and expression of social life, not only in the press, radio and television, but also in the vernacular. This process was so rapid and intense that these words are actively used in the language of our people; everyday social life can not be expressed without these borrowings. There is not enough time to comment on the conditions of their adaptation to the norm of our language and codification. It is as if they have become a normal word in our language, but they are neither recorded in our dictionary nor in our encyclopedias. Norm or codification criteria have not been analyzed for these borrowings.

Therefore, the work of recording language units in our dictionaries and encyclopedias should not lag behind the development of literary language (the level of oral communication). Otherwise, there is a mismatch between the language norm and the codification. As a result, codification, instead of showing the expressive power of literary language, makes it weak, and begins to fail to find the necessary information when needed<sup>1</sup>. This is especially evident in the spelling and lexical norms of the language. In this sense, first of all, we will focus on the introduction of the concept of "blog" into our language and the analysis of the meaning in our language. The concept of "blog" is based on the English

combination "web log" – "web diary", because the term first took the form "web log", then "weblog" and as a component of the common word "web" (computer networks) seemed excessively noticeable and shortened. Thus, a new term "blog" was created within the terms of the Internet. In this sense, the term is a form of a website, to put it simply, a blog is an online diary. The diary, on the other hand, is chronological in nature and often contains news or commentary on a particular topic. The increase in records, the increase in the number of diaries, also creates the impression of an internet magazine in our observation of this word. People's thoughts on a blog, their attitude to an event or incident, and the regular exchange of ideas with other stakeholders have greatly expanded the concept of a blog. Information provided through text, images, or multimedia means has also elevated it to the status of a website where regular messages are notified (added)<sup>2</sup>.

The term "blog" is a historically new word. It has not been 30 years since it was discovered and entered the languages of the world. According to the Washington Profile, the first blog post was published in 1992 by TIM BERENS-LI. Since 1996, the use of blogs has become widespread.

In August 1999, San Francisco-based PYRA LABS launched Blogger. This was the first free blog service. Blogger was later acquired by Google. In 2004, Apple sued the bloggers for spreading information about their yet-to-be-announced new product, but lost in court.

In 2006, a court ruled that bloggers also had the same rights as journalists. What sets blogs apart today is that adding and editing information is very simple.

The concept of "blog" has expanded to such an extent among the public, and its essence has grown as much as possible, that today we can name the following types among the public:

<sup>1</sup> Mamatov A.E. Hozirgi zamon ozbek adabiy tilida leksik va frazeologik norma muammolari. – Tashkent, 1991.

<sup>2</sup> Wahrig G. Großes Deutsches Wörterbuch, Berlin-München-Wien, 1966. Duden Das.



1. By type of authorship: *Personal blog* – run by one person (as a rule, the owner of the blog); *A symbolic blog* is run by an unknown person; *Collective or social blog* – run by a group of individuals based on information identified by the blog owner; *A community blog* is run by members of a particular organization;

2. According to the types of multimedia: *Text blogs* are based on texts; *Photo blog* is based on photos; *Music blog* is based on music; *Video blog* is based on video files;

3. According to the technical basis: *Stand alone blog* – separate hosting (service) and engine (repeat) blog; *Blog-platform* – a blog based on the power of the blog service; *Moblog* – a mobile web blog with content (content).

In the course of the research, we will focus on the analysis of spelling, pronunciation and meaning of the word “blogger”. This language unit is also a product of the English language and is derived from the word “blog” (blog + er). In our language, there is a form of this word based on the Latin alphabet as “blogger” and “blogger” – spelling options based on the Cyrillic alphabet. In some cases (in the press), there are both alternatives:

#### **blogger**

“2010 yil iyunda “Twitter” mikrobloglar tarmog’ida mashhur **blogger** Yevgeniy Grakni quyushqonga sig’maydigan behayo gaplar bilan haqoratlagan”.

Newspaper “Darakchi”, 23.12.2010.

#### **blogger**

**Blogger** sotuvdan tushgan pullarni hayriyaga yo’naltirmoqchi.

Telegram channel “Daryo.uz”, 23.12.2018.

Now, if we talk about the meaning of the word “blogger” in our language, it means “blogger” or “webmaster”. In this case, “blogger” means a man who runs blogs. The blog he runs can be compared to a small newspaper or magazine in terms of duration and completeness, except that it is the only reporter-blogger in the media state. He is both an author, an editor and a pageant at the same time. The blogger also does the design, programming, photo and video editing.

Today, bloggers can be divided into the following groups depending on the type of blog they run:

1. website blogger;
2. swallow blogger;
3. social network (facebook, vkontakt, etc.) blogger;
4. messenger bloggers (telegram, instagram);
5. radio blogger, etc.

Bloggers mainly work in the following areas:

\* expressing positive and negative opinions about the level of our material and spiritual life (encouragement, positive or critical views on the current political, economic, social situation);

\* provide useful advice for improving social life (cooking), craftsmanship, carpentry sewing, tips on solving a problem encountered in life);

\* scientific articles (musical instruments, computer literacy, mathematics, physics, foreign language learning, interesting practices and experiments in biology, chemistry);

\* expert opinions on a situation (global issues related to the requirements of the time and emerging) – climate change, air pollution, political, economic, social, legal situation), etc.

The difference between a blogger and a journalist is that a blogger expresses a personal or human opinion about an existing situation or problem and in many cases does not have accurate and reliable information. They are not part of the media.

Unlike a journalist, a blogger can run his or her blog openly or anonymously. The journalist assumes responsibility for all information provided. This is the main difference between a blogger and a journalist.

To become a blogger, there is no requirement to graduate from a university related to journalism, obtain a diploma, or follow a different standard, professional qualification. The fact that some bloggers, who do not understand the essence of their mission, run their blogs as they know them, have unsubstantiated opinions, rumors, lies and unequivocal use of rhetoric leads to an increase in the audience of bloggers, because people are naturally interested in such things.

Journalism, on the other hand, has a professional ethic that requires communication, language norms and word codification. In view of the above, blogging is suitable for ordinary (uneducated) people who want to keep pace with life and those who are interested in the pros and cons of social life.

It is noteworthy that the word “blogger” comes from English (there is no biological or grammatical genus in this language), so it does not clearly indicate the gender of “bloggers” in communication, or it is impossible to tell whether the speaker is a man or a woman. In this respect, English and Uzbek are the same. In German, the variants of the language unit “der Blogger” (male blogger) and “die Bloggerin” (female blogger) were considered self-explanatory from the day the assimilation into German. Linguists are now hesitant to use the suffixes “-ka” (bloggerka) or “-sha” (bloggersha) in Russian, which, like German, considers the constant expression of human gender in communication to be an absolute law of language. Such an attitude towards foreign words already exists in the Russian people. For example, the German mastery of the word “master” in Russian is almost never used in colloquial language. Because the people did not recognize these words, did not like them, did not codify them, for now they keep it outside the norm of language. Because the gender of the intended person is largely determined by the context. It is well known that in our national language there is no word denoting rod, except for the suffix “a” (rais- raisa, muallim-muallima), which comes from Arabic or Persian. In order to express gender, it is usually necessary to make a compound using the words “qiz”, “ayol” (rais qiz (girl ruler), muallim ayol (a woman teacher)). Such cases with the word “blogger” can be found in our press. Here is an example:

“Anjuman chog’ida Registon maydonida yahudiylar kongressining bayram dasturi bo’lib o’tgani va Butunjahon inflyunserlar kongressi davomida **blogger qizning** tarixiy hududda gimnastika kiyimida video tasvirga olgani, bu ikki holatga noroziliklar bildirilgani masalasi ko’tarildi”.

Telegram channel “Kun.uz”, 24.09.2019.

Which of the bloggers' speeches is nonsense, and which shows the ways to timely address the pressing issues of creating a happy present and future of our country, to reform the remnants of the dictatorial regime, which our intellectual



people feel and take into account. The leading representatives of the popular bloggers' movement, the devotees who have contributed to the prosperity of our country, will be recognized in time, and their speeches will be read with enthusiasm, their work will be respected, appreciated by the people, encouraged by the state.

Now let's talk about one such word "on line" and its rapid assimilation to our national language. This word is a product of the English language and entered our national language with the spelling "on line" and the pronunciation of "onlayn". In terms of meaning, it was first mastered in the sense of interconnection in networks with the meanings of "line" and "wire" in our language. In everyday life, long before the advent of the Internet, computers began to be used in the process of connecting switching telephone lines using modems. Consequently, in this way, users would be connected to electronic bulletin boards, and once connected (online), they would have the opportunity to read, reply to, and participate in general discussions together. At the time, the term "online" was also understood to mean "connected to the Internet". At first glance, this was the right idea, because it was impossible to communicate without the Internet. Because only when an internet connection was established would certain programs be able to run and line up with them, and access the databases located on their servers. In this sense, the term "online" would be misleading to say that it is an opportunity to interact and target collaboration with all programs through an Internet service.

It is noteworthy that the invaluable service of the Internet in solving the problems of time and space in human life has become an integral and "loyal friend" in sharing the lives and concerns of every citizen, a companion and partner throughout life turned the word "online" into an active language unit. In a relatively short period of time, it first settled in our speech, then in our literary language, adapted to the rules of spelling and pronunciation and expanded and changed its lexical meanings depending on the imagination, thinking and observation of our people. If we look at the historical penetration of "online" into our language and the gradual development of its pronunciation, spelling and semantic changes, it has not been long since its introduction into our national language. It first appeared in verbal communication towards the beginning of this century as a term related to wire connections and later to computer technology. The term "internet" was used in the press, and its recognition as a media outlet was widely discussed. An article in the newspaper "Xalq so'zi" on June 25, 2003, entitled "Internet Media or..." supports our view. At that time, the "site" meant the Internet, which meant concepts such as periodicity of information dissemination, unlimited users and popularity and the "site" became an open and free information platform for founders, members who want to publish an article. In the United States, the introduction of the Internet in the field of education has led to the worldwide popularity of the term "Internet". As a result, the lesson on the Internet became popular among our people, and the first experiments in this area began. The following information can be found on the pages of newspapers of the republic as a clear proof of this:

1. "Andijon viloyati "biznes-imkon" biznes inkubatori qoshida tashkil etilgan markaz AQSHning Oklaxoma universiteti professor-o'qituvchilarining "Internet" orqali dars o'tish to'g'risida shartnoma tuzdi".

Newspaper "Xalq so'zi", 26.05.

2. Rivojlangan, xususan AQSH va evropa davlatlarida internet saytlari bo'yicha maxsus qonuniy boshqaruvning yo'qligi yoki nazorat olib borilmasligi bu sahoga qiziquvchilar sonini oshirdi, imkoniyat ommalashtirildi, jumladan mamlakatimizda ham huquq internet markazlari ochila boshladi. "O'zbekiston ochiq jamiyat instituti Ko'mak jamg'armasi yordamida tashkil etilgan markazda soha o'qituvchi va olimlari hamda talabalar uchun Internetdagi huquqqa oid xabarlar, jahon parlamentlari faoliyati hamda qabul qilishayotgan qonunlar bilan tanishish imkoniyati yaratildi. "Obuna katalogi" ingliz va rus tillarida "Internetga" kiritildi.

Newspaper "Xalq so'zi", 14.11.2002.

Internet cafes and internet clubs have started to open in the country. First of all, they are the result of private business, where the possibility of various games, the possibility of establishing e-mail contacts with foreigners and the ease of obtaining certain information have led to the rapid spread of such initiatives to the general public. The reason for all these conveniences is understood as the "Internet", and various events, contests and competitions were held dedicated to it, for example:

"Internet festivalida tanlov quyidagi yo'nalishlar bo'yicha o'tkaziladi:

\*eng yaxshi ilmiy sayt,\*eng yaxshi veb dizayn,\*eng yaxshi provayderi,\*eng yaxshi internet kafe loyihasi".

Newspaper "Xalq so'zi", 14.02.2001.

2010 yillarga kelib matbuot sahifalarda "internet saboqlar" o'rniga "onlayn ta'lim" so'zi uchray boshladi. Masalan:

"Xorijda shunaqa universitetlar bor ekanki, talabalar uyda o'tirib o'qituvchilardan "on-layn" shaklda ta'lim olishar ekan"

Newspaper "Darakchi", 04.11.2010.

2016 yilga kelib esa test sinovlari o'tkazishning ham onlayn shakli tavsiya qilindi:

"IUT (Inha universiteti Toshkent filiali) O'zbekistonda birinchi marta kirish imtixonlarini onlayn tarzda namoyish etmoqda".

Telegram channel "Kun.uz", 29.07.2016.

Over the next 5 years, especially during the pandemic, the word online began to mean forms of remote interaction of all aspects of life reflected in social life via the Internet and created a variety of new compound words, phrases and sentence structures in our national language. Over the past two years, our people have sought ways to live materially and spiritually as far away as possible, strictly following the call of our government, as well as the challenge of our doctors (We work for you, you stay at home for us). gave. As a result of these efforts, our language has been enriched with new lexemes. These include hyphenated words such as: *online-auction*, *online-conference*, *online-simulator*, *online-competition*, *online-briefing*, *online-voice*, *online-ceremony* and word combinations like *online school*, *online tutor*, *online platform*, *online communication*, *online list*, *online course*,



online scholarship, online education, online test, online mode, online meeting, online order, online summit, online observation, online meeting, online project. Here is a vivid example of a case where lexemes are given as a hyphen and occur as a compound word without a hyphen:

**Onlayn-ovoz (Online-voice)**

*Assotsiatsiya a'zolari, hamkorlari va ekspertlari orasida onlayn-ovoz berish o'tkazildi.*

Telegram channel "Kun.uz", 9.05.2020.

**Onlayn kuzatish (Online-observation)**

*Sudlarga berilgan da'volarni ko'rib chiqish jarayonini onlayn kuzatish mumkin.*

Telegram channel "Kun.uz", 5.09.2020.

It can be seen from the examples that the same things and events in terms of meaning and essence are written under different spellings, once used as a compound word, once as a phrase. Semantic features such as the fact that word combinations show mutual interdependence and common meaning, and that compound words combine the meanings of their components to mean a third thing or event, or that each component retains the meaning it conveys, have been overlooked. In fact, it would be appropriate to leave the above-mentioned "online" component copulative conjunctions as their own, and to give free expressions made using "online" as compound words (written), since they represent a third thing or event taken into account when added. For example, if *online observation* means that course observation is remotely monitored, *online observation* refers to a new type of course analysis. Or if *an online summit* means that a large meeting will be held remotely, *an online summit* means a type of summit.

In some cases, we see in the press that journalists explain how "online" is a means of communication between people and in some cases, there are additional tautological explanations. For example:

*"Qarorda idoraviy bo'ysunuvi va tashkiliy-huquqiy shaklidan qat'i nazar barcha tashkilotlarning asosiy ish faoliyatiga ta'sir etmagan holda qonun hujjatlarida belgilangan tartibda xodimlarni mehnat ta'tiliga chiqarish, qolgan qismining mehnat faoliyatini maksimal darajada masofadan turib "onlayn" rejimda yoki masofaviy tarzda) tashkil etish choralari ko'rilishi ham belgilangan".*

Telegram channel "Kun.uz", 24.03.2020

Nowadays, in many cases, the meaning of "online" is understood as a familiar word and is used without any explanation or the use of a second descriptive word or component. For example:

1 *Aviachiptalarni onlayn, aeroportlarda va aviakomponiya kassalarida karantin talablariga qat'iy amal qilgan holda xarid qilish mumkin.*

Telegram channel "Kun.uz", 15.05.2020.

2. *Muftiy Usmonxon Alimovning ma'lum qilishicha, muborak Ramazon oyida O'zbekiston musulmonlari idorasi tizimida faoliyat yuritayotgan qorilarning xatmi Qur'onlari onlayn tarzda amalga oshirilishi yo'lga qo'yiladi.*

Telegram channel "Kun.uz", 14.04.2020.

The examples show that the word "online" has become commonplace for our people, young and old. There is no need to comment on the fact that it is possible to communicate face

to face (Zoom) or without seeing each other remotely via the Internet. Not only do expressions such as *online meeting*, *online lesson*, *online summit* mean face-to-face meeting of participants from both sides, but phrases such as *online listing*, *online mode*, *online test* do not necessarily require face-to-face communication. If the participant meets the online requirements, it will be enough for him to communicate, the desire and purpose can be understood through the text.

Interestingly, the notion of "online" not only quickly borrowed into our language, but it also caused the word antonym "offline" to enter our daily lives (especially in the language spoken by students) very quickly, which was completely contrary to its meaning in English. Dictionaries say that the word "offline" in English means "not on the line", "disconnected" and "not on the wire". Contrary to the meanings mentioned above in our education system, this word is becoming an active word in communication, conveying a message emphasizing the compulsory participation of the teacher and the student in the lesson, rather than the distance learning process.

Now that the word "online" has become relatively popular, it should be noted that it is easy to pronounce and spell, and the six-letter word is a short and succinct phrase like "remote internet communication" can be emphasized.

Borrowings are unfamiliar in communication, not yet fully visible to the reader in terms of form, there is a strangeness in the spelling (Cyrillic-Latin), it is relatively different from our own words; the reader is unaware of the correct pronunciation (accent, tone) in the original language.

The information (correct and portable) that is named, displayed, and intended to be conveyed through assimilation is not understood and is not properly perceived by the communication participants.

The reader is unable to conceive of the structure of an object or event, either concretely or abstractly, without fully imagining its content.

They are actively used in the language of our people, everyday social life has become a way that can not be expressed without these borrowings; they have lexically standardized the spoken language in oral and written speech. Although these assimilations have adapted to the norms of everyday communication in terms of spelling, pronunciation and meaning, they have not yet been codified in our dictionaries.

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# EVALUATION OF DISPENSING PRESCRIPTION ANTIBIOTICS AT THE COMMUNITY PHARMACY OUTLETS IN MOMBASA COUNTY

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## ABSTRACT

*The role of the pharmacist or pharmaceutical technologist is to scrutinize errors in the prescription made and make appropriate recommendations/interventions to the prescriber if any. In many countries, including Kenya, Nigeria and India, drug retailers prescribe and sell medicines over-the-counter. The WHO advocates that rational dispensing principles should be followed at all times to ensure that patients receive adequate information regarding the use of dispensed medicines, so as to achieve the desired benefits. The objective of the study was to undertake an evaluation dispensing prescription antibiotics at the community pharmacy outlets. A descriptive cross sectional study design was used by the study. A sample size of 196 was calculated using Fisher's formula. Stratified random sampling (nth of 10) was used to select community pharmacy outlets within Mombasa town. Simple random sampling was used to recruit the subjects into the study by assigning natural numbers to all prescriptions with an antibiotic during the study period. A well designed checklist developed to capture study variables was used to collect data from the prescriptions as well as three interviews were carried out among the patients and pharmacists. The collected data was edited and transcribed before entered into SPSS version 21 for analysis and interpreted using tables, pie charts and graphs. The study findings show that the patient (89.3%) and prescribers name and address (83.7%) were well captured followed by prescriber signature (75.3%), safe dosing (75.5%), prescription date (63.3%), cautionary information (62.2%) and stamp (38.5%). Bivariate analysis findings show that all prescription legality or validity parameters were statistically significant. The study recommends that the prescribers should always adhere to prescribing guidelines, embrace the legality of prescriptions on appropriate diagnosis, appropriate drug and appropriate patient in order to limit any likelihood of drug misuse or abuse. The pharmacists and pharmaceutical technologists should always not assume provided their patients with neat, clear and elaborate drug labels because it can reduce any likely mistakes and promote appropriate drug use*

## INTRODUCTION

Once prescribing is complete, the dispensing stage is when patients receive their medications. The dispensing procedure entails receiving and cross-checking the prescription for validity or legality, safety and appropriateness, review on the patients' dispensing history, Prepare and check products through product selection, label and assemble dispensed products, supply the prescription and counsel the patient (PPB, 2012).

Often, the patient will present a prescription from the prescriber instructing the pharmacist to issue the patient on what has been instructed. Dispensing is often carried out by a trained pharmacist or pharmaceutical technologist. In clinical practice, the separation of prescribing and dispensing activities is considered to be a safety mechanism to ensure an additional independent assessment of the proposed therapy before patient begins treatment (Gurbani *et al*; 2011).

The role of the pharmacist or pharmaceutical technologist is to scrutinize errors in the prescription made and make appropriate recommendations/interventions to the prescriber if any. The patient also receives instructions on the use of

medicines and this is like to enhance adherence if they follow those instructions (Chou *et al*; 2003).

In many countries, including Kenya, Nigeria and India, drug retailers prescribe and sell medicines over-the-counter. The more they sell the more income they generate, leading to overuse of medicines, particularly the more expensive medicines. Unrestricted availability of medicines such as antibiotics leads to overuse, inappropriate self-medication and non-adherence to dosing regimens (Kar *et al*; 2010).

The impact of irrational medicines use can vary widely. Firstly, when medicines are used inappropriately, the risk of adverse drug reactions (ADRs) is increased, especially in geriatric patients or in co-morbid individuals who may have compromised physiologic functions (Hamilton *et al*; 2003). The cost implications of ADRs can also be enormous (Pirmohamed, 2004)

The WHO advocates that rational dispensing principles should be followed at all times to ensure that patients receive adequate information regarding the use of dispensed medicines, so as to achieve the desired benefits (MMS and MPHS, 2010). For instance, if dispensing practices such as counting, packaging,



and labeling are poorly executed; they are likely to impact the patient's confidence in the dispensed products, and subsequently

### RESEARCH STUDY DESIGN

A descriptive cross sectional study design was used by the study. The design was chosen due to its ability to investigate a condition or a problem in a defined population at a specific point or period in time without attempt to draw any inferences for the prevalence. The fisher's et al formula was used to calculate the study sample size of 196. Stratified random sampling (nth of 10) was used to select community pharmacy outlets within Mombasa town. Simple random sampling was used to recruit the subjects into the study by assigning natural

compliance to therapy.

numbers to all prescriptions with an antibiotic during the study period. Then all prescriptions with an even number and patients being willing to participate in the study by signing a written informed consent were recruited. A well designed checklist developed to capture study variables was used to collect data from the prescriptions as well as three interviews were carried out among the patients and pharmacists. The collected data was edited and transcribed before entered into SPSS version 21 for analysis and interpreted using tables, pie charts and graphs. There assured confidentiality of collected subjects data at all stages

### RESULTS

**Table 1: Receiving and scrutinizing of prescriptions**

Variable	Category	Frequency	
Prescribers details	Satisfactory	164(83.7%)	
	Unsatisfactory	32(16.3%)	
Patient details	Satisfactory	175(89.3%)	
	Unsatisfactory	21(10.7%)	
Items dispensed	Clear	164(83.7%)	
	Unclear	32(16.3%)	
Legality	Date	Yes	124(63.3%)
		No	72(36.7%)
	Signature	Yes	148(75.5%)
		No	48(24.5%)
	Stamp	Yes	76(38.8%)
		No	120(61.2%)
Safety	Appropriate indication	Yes	58(29.6%)
		No	138(70.4%)
	Safe dosing	Yes	148(75.5%)
		No	48(24.5%)
	Contraindications	Yes	122(62.2%)
		No	74(37.8%)

**Table 2: Prescription review**

Variable	Category	Frequency
Patient dispensing history	New	168(85.7%)
	Changed treatment	28(14.3%)
Duplication	Yes	72(36.7%)
	No	124(63.3%)
Possible drug interaction	Yes	38(19.4%)
	No	158(80.6%)
Compliance issues	Yes	179(91.3%)
	No	20(8.7%)
Misuse or abuse	Yes	47(24%)
	No	149(76%)
Patient factors (allergy, age, pregnancy)	Yes	181(92.3%)
	No	25(7.7%)



**Product selection**

Appropriate drug	Yes	188(95.9%)
	No	8(4.1%)
Brand	Yes	162(82.7%)
	No	34(17.3%)
Strength	Yes	190(96.9%)
	No	6(3.1%)
Formulation	Yes	189(96.4%)
	No	7(3.6%)
Quantity	Yes	191(97.4%)
	No	5(2.6%)

**Table 3: Prepare, check, issue medicines and counseling**

Variable	Category	Frequency
<b>Labeling</b>		
Name of patient	Present	169(86.2%)
	Absent	27(13.8%)
Generic name dispensing	Yes	124(63.3%)
	No	72(36.7%)
Strength of drug	Present	134(68.4%)
	Absent	62(31.6%)
Dosage instructions	Available	185(94.4%)
	Un available	11(5.6%)
Duration of treatment	Provided	104(53.1%)
	Un provided	92(46.9%)
Date of dispensing	Available	38(19.4%)
	Un available	158(80.6%)
Name of dispensing institution	Indicated	49(25%)
	Not indicated	147(75%)
Counseling aids	Present	25(12.8%)
	Absent	171(87.2%)
<b>Counseling</b>		
Correct patient	Yes	175(89.3%)
	No	21(10.7%)
Correct medicines	Yes	184(93.9%)
	No	12(6.1%)
Documentations	Present	172(87.8%)
	Absent	24(12.2%)
Storage / discard instructions	Yes	104(53.1%)
	No	92(46.9%)
Patient instructions	Understood	98(50%)
	Not understood	98(50%)
Patient clarifications	Answered	105(53.6%)
	Un answered	91(46.4%)
Patient signature for supplied drugs	Present	25(12.8%)
	Absent	171(87.2%)

Level of patient's satisfaction

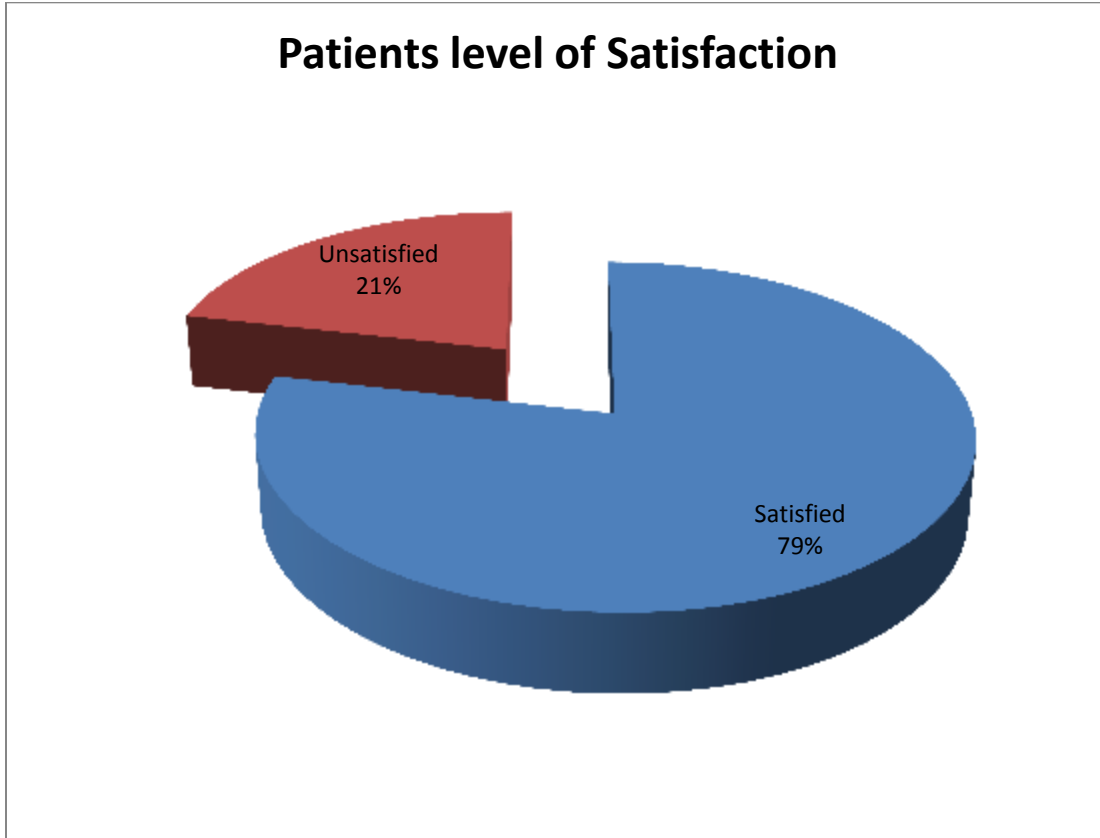


Figure 1: Patient's satisfaction level

Table 4: Bivariate analysis on receiving and scrutiny of the prescription

Variable	Category	Frequency	Patient's view on prescription dispensing		Df	Chi square	P value
			Satisfied (n=154)	Unsatisfied (n=42)			
Prescribers details	Satisfactory	164(83.7%)	152(98.7%)	12(28.6%)	1	118	0.000
	Unsatisfactory	32(16.3%)	2(1.3%)	30(71.4%)			
Patient details	Satisfactory	175(89.3%)	150(97.4%)	25(59.2%)	1	49.495	0.000
	Unsatisfactory	21(10.7%)	4(2.6%)	17(40.8%)			
Items dispensed	Clear	164(83.7%)	147(95.5%)	17(40.8%)	1	73	0.000
	Unclear	32(16.3%)	7(4.5%)	25(59.2%)			
<b>Legality</b>							
Date	Yes	124(63.3%)	123(79.9%)	1(2.4%)	1	85.262	0.000
	No	72(36.7%)	31(20.1%)	41(97.6%)			
Signature	Yes	148(75.5%)	146(94.8%)	2(4.8%)	1	144.69	0.000
	No	48(24.5%)	8(5.2%)	40(95.2%)			
Stamp	Yes	76(38.8%)	61(39.6%)	15(35.7%)	1	0.211	0.646
	No	120(61.2%)	93(60.4%)	27(64.3%)			
<b>Safety</b>							
Appropriate indication	Yes	58(29.6%)	49(31.8%)	9(21.4%)	1	1.71	0.191
	No	138(70.4%)	105(68.2%)	33(78.6%)			
Safe dosing	Yes	148(75.5%)	147(95.5%)	1(2.4%)	1	158.80	0.000
	No	48(24.5%)	7(4.5%)	41(97.6%)			
Contraindications	Yes	122(62.2%)	121(78.6%)	1(2.4%)	1	96.043	0.000
	No	74(37.8%)	33(21.4%)	41(97.6%)			



**Table 5: Bivariate analysis on Prescription review**

Variable	Category	Frequency	Patient's view on prescription dispensing		Df	Chi square	P value
			Satisfied (n=154)	Unsatisfied (n=42)			
<b>Patient dispensing history</b>							
Treatment	New	168(85.7%)	129(83.8%)	39(92.9%)	1	2.227	0.136
	Switched	28(14.3%)	25(16.2%)	3(7.1%)			
Duplication	Yes	72(36.7%)	32(20.8%)	40(95.2%)	1	78.724	0.000
	No	124(63.3%)	122(79.2%)	2(4.8%)			
Possible drug interaction	Yes	38(19.4%)	0(0%)	38(90.5%)	1	172.844	0.000
	No	158(80.6%)	154(100%)	4(9.5%)			
Compliance issues	Yes	179(91.3%)	153(99.4%)	26(54.8%)	1	35.754	0.000
	No	20(8.7%)	1(0.6%)	19(45.2%)			
Misuse or abuse	Yes	47(24%)	5(3.2%)	42(100%)	1	169.462	0.000
	No	149(76%)	149(96.8%)	0(0%)			
Patient factors	Yes	181(92.3%)	153(99.4%)	19(45.2%)	1	92.323	0.000
	No	25(7.7%)	1(0.6%)	24(54.8%)			
<b>Product selection</b>							
Appropriate drug	Yes	188(95.9%)	154(100%)	34(81%)	1	27.899	0.000
	No	8(4.1%)	0(0%)	8(19%)			
Brand	Yes	162(82.7%)	152(98.7%)	10(23.8%)	1	133.741	0.000
	No	34(17.3%)	2(1.3%)	32(76.2%)			
Strength	Yes	190(96.9%)	154(100%)	36(85.7%)	1	22.695	0.000
	No	6(3.1%)	0(0%)	6(14.3%)			
Formulation	Yes	189(96.4%)	152(98.7%)	37(88.1%)	1	10.779	0.001
	No	7(3.6%)	2(1.3%)	5(11.9%)			
Quantity	Yes	191(97.4%)	154(100%)	37(88.1%)	1	18.813	0.000
	No	5(2.6%)	0(0%)	5(11.9%)			

**Table 6: Bivariate analysis on Prepare, check, issue medicines and counseling**

Variable	Category	Frequency	Patient's view on prescription dispensing		Df	Chi square	P value
			Satisfied (n=154)	Unsatisfied (n=42)			
<b>Labeling</b>							
Name of patient	Present	169(86.2%)	152(98.7%)	17(40.5%)	1	94.188	0.000
	Absent	27(13.8%)	2(1.3%)	25(59.5%)			
Generic name	Yes	124(63.3%)	119(77.3%)	5(11.9%)	1	60.674	0.000
	No	72(36.7%)	35(22.7%)	37(88.1%)			
Strength of drug	Present	134(68.4%)	128(83.1%)	6(14.3%)	1	72.294	0.000
	Absent	62(31.6%)	26(16.9%)	36(85.7%)			
Dosage instructions	Available	185(94.4%)	154(100%)	31(73.8%)	1	42.732	0.000
	Un available	11(5.6%)	0(0%)	11(26.2%)			
Duration of treatment	Provided	104(53.1%)	92(40.3%)	12(28.6%)	1	12.872	0.000
	Un provided	92(46.9%)	62(59.7%)	30(71.4%)			
Date of dispensing	Available	38(19.4%)	35(22.7%)	3(7.2%)	1	5.128	0.024
	Un available	158(80.6%)	119(77.3%)	39(92.9%)			
Name of dispensing institution	Indicated	49(25%)	49(31.8%)	0(0%)	1	17.818	0.000
	Not indicated	147(75%)	105(68.2%)	42(100%)			
Counseling aids	Present	25(12.8%)	25(16.2%)	0(0%)	1	7.815	0.005
	Absent	171(87.2%)	129(83.8%)	42(100%)			
<b>Counseling</b>							
Correct patient	Yes	175(89.3%)	154(100%)	21(50%)	1	86.24	0.000
	No	21(10.7%)	0(0%)	21(50%)			



Correct medicines	Yes	184(93.9%)	153(99.4%)	31(73.8%)	1	37.455	0.000
	No	12(6.1%)	1(0.6%)	11(26.2%)			
Documentations	Present	172(87.8%)	150(97.4%)	22(52.4%)	1	62.249	0.000
	Absent	24(12.2%)	4(2.6%)	20(47.6%)			
Storage / discard instructions	Yes	104(53.1%)	102(66.3%)	2(4.8%)	1	50.068	0.000
	No	92(46.9%)	52(33.7%)	40(95.2%)			
Patient instructions	Understood	98(50%)	90(58.4%)	8(19%)	1	20.485	0.000
	Not understood	98(50%)	64(41.6%)	34(81%)			
Patient clarifications	Answered	105(53.6%)	88(57.1%)	17(40.5%)	1	3.685	0.055
	Un answered	91(46.4%)	66(42.9%)	25(59.5%)			
Patient signature for supplied drugs	Present	25(12.8%)	12(7.8%)	13(31%)	1	15.906	0.000
	Absent	171(87.2%)	142(92.2%)	29(69%)			

**Table 7: Multivariate logistic regression on rationale dispensing of antibiotics**

Variable	Category	Patients views on dispensed antibiotics		AOR (CI 95%)		P value
		Satisfied (n=154)	Unsatisfied (n=42)			
Prescribers details	Satisfactory	164(83.7%)	152(98.7%)	0.067	(0.016,	0.000
	Unsatisfactory	32(16.3%)	2(1.3%)	0.286)		
Patient details	Satisfactory	175(89.3%)	150(97.4%)	0.222	(0.075,	0.000
	Unsatisfactory	21(10.7%)	4(2.6%)	0.662)		
Items dispensed	Clear	164(83.7%)	147(95.5%)	0.244	(0.105,	0.000
	Unclear	32(16.3%)	7(4.5%)	0.570)		
<b>Legality</b>						
Date	Yes	124(63.3%)	123(79.9%)	0.434	(0.266,	0.000
	No	72(36.7%)	31(20.1%)	0.708)		
Signature	Yes	148(75.5%)	146(94.8%)	0.169	(0.077,	0.000
	No	48(24.5%)	8(5.2%)	0.370)		
Safe dosing	Yes	148(75.5%)	147(95.5%)	0.147	(0.064,	0.000
	No	48(24.5%)	7(4.5%)	0.335)		
Contraindications	Yes	122(62.2%)	121(78.6%)	0.450	(0.278,	0.000
	No	74(37.8%)	33(21.4%)	0.728)		
Duplication	Yes	72(36.7%)	32(20.8%)	2.214	(1.362,	0.000
	No	124(63.3%)	122(79.2%)	3.598)		
Possible drug interaction	Yes	38(19.4%)	0(0%)	1.975	(1.77,	0.000
	No	158(80.6%)	154(100%)	2.203)		
Compliance issues	Yes	179(91.3%)	153(99.4%)	0.058	(0.008,	0.000
	No	20(8.7%)	1(0.6%)	4.41)		
Misuse or abuse	Yes	47(24%)	5(3.2%)	9.4	(3.637,	0.000
	No	149(76%)	149(96.8%)	24.294)		
Patient factors	Yes	181(92.3%)	153(99.4%)	0.047	(0.006,	0.000
	No	25(7.7%)	1(0.6%)	0.353)		
Appropriate drug	Yes	188(95.9%)	154(100%)	0.55	(0.499,	0.000
	No	8(4.1%)	0(0%)	0.605)		
Brand	Yes	162(82.7%)	152(98.7%)	0.063	(0.015,	0.000
	No	34(17.3%)	2(1.3%)	0.265)		
Strength	Yes	190(96.9%)	154(100%)	0.552	(0.502,	0.000
	No	6(3.1%)	0(0%)	0.607)		
Formulation	Yes	189(96.4%)	152(98.7%)	0.355	(0.073,	0.001
	No	7(3.6%)	2(1.3%)	1.735)		
Quantity	Yes	191(97.4%)	154(100%)	0.554	(0.504,	0.000
	No	5(2.6%)	0(0%)	0.609)		



**Table 7: Multivariate logistic regression on rationale dispensing of antibiotics**

Variable	Category	Patients views on dispensed antibiotics		AOR (CI 95%)	P - value
		Satisfied (n=154)	Unsatisfied (n=42)		
Name of patient	Present	169(86.2%)	152(98.7%)	0.82 (0.019, 0.352)	0.000
	Absent	27(13.8%)	2(1.3%)		
Generic name	Yes	124(63.3%)	119(77.3%)	0.507 (0.315, 0.815)	0.000
	No	72(36.7%)	35(22.7%)		
Strength of drug	Present	134(68.4%)	128(83.1%)	0.439 (0.262, 0.737)	0.000
	Absent	62(31.6%)	26(16.9%)		
Dosage instructions	Available	185(94.4%)	154(100%)	0.546 (0.495, 0.601)	0.000
	Un available	11(5.6%)	0(0%)		
Duration of treatment	Provided	104(53.1%)	92(40.3%)	0.762 (0.497, 1.168)	0.000
	Un provided	92(46.9%)	62(59.7%)		
Date of dispensing	Available	38(19.4%)	35(22.7%)	0.818 (0.488, 1.372)	0.024
	Un available	158(80.6%)	119(77.3%)		
Name of dispensing institution	Indicated	49(25%)	49(31.8%)	0.714 (0.447, 1.141)	0.000
	Not indicated	147(75%)	105(68.2%)		
Counseling aids	Present	25(12.8%)	25(16.2%)	0.754 (0.414, 1.374)	0.005
	Absent	171(87.2%)	129(83.8%)		
<b>Counseling</b>					
Correct patient	Yes	175(89.3%)	154(100%)	0.532 (0.481, 0.589)	0.000
	No	21(10.7%)	0(0%)		
Correct medicines	Yes	184(93.9%)	153(99.4%)	0.1 (0.013, 0.774)	0.000
	No	12(6.1%)	1(0.6%)		
Documentations	Present	172(87.8%)	150(97.4%)	0.191 (0.065, 0.563)	0.000
	Absent	24(12.2%)	4(2.6%)		
Storage / discard instructions	Yes	104(53.1%)	102(66.3%)	0.576 (0.373, 0.891)	0.000
	No	92(46.9%)	52(33.7%)		
Patient instructions	Understood	98(50%)	90(58.4%)	0.711 (0.465, 1.088)	0.000
	Not understood	98(50%)	64(41.6%)		
Patient signature for supplied drugs	Present	25(12.8%)	12(7.8%)	1.73 (0.839, 3.566)	0.000
	Absent	171(87.2%)	142(92.2%)		

## DISCUSSION

Before filing a prescription, it is important to undertake a good scrutiny for possibility of any errors. The study findings show that the patient (89.3%) and prescribers name and address (83.7%) were well captured followed by prescriber signature (75.3%), safe dosing (75.5%), prescription date (63.3%), cautionary information (62.2%) and stamp (38.5%). The patient condition or disease (29.6%) being managed was the rarely documented in most prescriptions dispensed. Bivariate analysis findings show that all prescription legality or validity parameters were statistically significant except prescription stamp and condition or disease being managed. Similar findings were recorded by Etsengent and Anbessa (2013) with 67.3% unclear prescriptions.

On prescription review, the pharmacists or pharmaceutical technologists found out about 36.7% duplication in prescription writing, 19.4% possible drug interactions, 24% suspected cases of antibiotic misuse or abuse and 92.3% of all the prescriptions has taken into consideration the patient factors (age, allergy and pregnancy). However, on the negative side,

about 82.7% of the prescribed drugs were written using the brand names. All the variables in prescription review were statistically significant except treatment (p=0.136). Contrary, Etsengent and Anbessa (2013) study recorded 17.4% drugs prescribed using brand names though this study was carried out in a hospital environment.

WHO advocates that rationale dispensing principles should be followed all times to ensure that the patient receives adequate information regarding use of dispensed medicines in order to achieve desired benefits (WHO, 2016). All dispensed drugs were labeled but the information in varied. About 63.3% of drug names were written using generic, with 68.4% showing clear strength of the drug, 53.1% showing the duration of treatment, 25% showing the dispensing facility name and address, 12.8% could display counseling aids, 53.1% show the storage temperature and drug discarding method. Study by Tadele and Genet (2018) findings show about 66.6% of dispensed antibiotics had been clearly labeled and Etsengent and Anbessa (2013) show about 60.9% dispensed antibiotic were



having wrong label information. According to Tadele and Genet (2018), the drug labels content had patient name 33.2%, precautions 6.6%, storage environment 26.6% and duration of treatment 80%.

About 50% of patients who had received antibiotics could clearly recall all the information they had been given during dispensing and 79% were satisfied with dispensing services they had gotten. Similar findings were recorded by Nyiligira (2009) findings on patient satisfaction with dispensing service given. Multivariate logistic regression findings show drug misuse or abuse (AOR 9.4; CI 3.637, 24.294)

## CONCLUSIONS

A number of prescriptions were reported to missing prescription date, stamp, indication of the managed disease as well as cautionary information making them have errors or omissions

There are several prescriptions with duplication of the prescribed drugs suggesting a prescription pattern by the prescribers to market specific products which is an indicator of antibiotic misuse or abuse

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Majority of persons were satisfied with dispensing techniques (scrutiny, prescription review, filing of the prescription, issue and counseling provided to them) which is a good gesture from the pharmacists and pharmaceutical technologists.

## Recommendations

The study recommends on the following;

1. The prescribers should always adhere to prescribing guidelines in order to enhance validity and legality of their prescriptions. This can be empowered by having joined continuous medical education
2. The prescribers should always stick to prescription guidelines on appropriate diagnosis, appropriate drug and appropriate patient in order to limit any likelihood of drug misuse or abuse
3. The pharmacists and pharmaceutical technologists should always not assume provided their patients with neat, clear and elaborate drug labels because it can reduce any likely mistakes and promote appropriate drug use

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# INTELLECTUAL PROPERTY RIGHTS: THE PATENT ACT 1970

Vanshika Shukla

## ABSTRACT

*Thus, Intellectual property is any music, literary work, art, invention, symbol, name, picture, design, copyright, trademark, patent etc. created by any person or organization. ... In this way, due to the right to intellectual property, it is protected and people are excited and eager to discover and innovate. The purpose of the paper is to throw light on the right of intellectual property and to provide necessary information on this subject. However, in this first we will try to define the right to intellectual property and we will also try to understand the Intellectual Property and Intellectual Property Rights in today's present society as well as mainly focus on the patent act 1970.*

**KEYWORDS:** *Meaning & Category of Intellectual property rights, The Patent Act 1970, History of Patent, Challenges, Violation & Impact of Patents.*

## INTRODUCTION

Though, since time immemorial, human beings have a tendency to discover something new by their understanding nature and learning from it. In ancient times, where primitive man used to live by using the basic facilities of nature, in today's present era man has acquired all kinds of facilities for the society through various inventions. All these inventions and achievements are the result of individual efforts of an individual or collective effort of an identified group of persons. A person, who creates a new invention or idea after his intensive efforts, in fact, the original credit for that invention or idea should be given to him. But at present, many such examples have come to the fore. The Right to Intellectual Property basically seeks to control such irregularities and to provide its rights to the able-bodied person.

Intellectual property rights are the product of the mind and the most important of these are patents. A patentee may have a court stop the manufacture of a method or product infringing the patent. Many people say that patents advance technology, but many people also say that patents are hindering the progress of technology in this era. That is why it is important that we understand patents and see that they do not hinder the progress of our country.

## INTELLECTUAL PROPERTY RIGHTS

Hence, Intellectual property rights are the rights provided to individuals in the context of their intellectual creation. In fact, it is understood that if a person creates any kind of intellectual creation (such as the creation of a literary work, research, invention etc.), then first of all that person should have an exclusive right on it. Since this right is given only for intellectual creation, hence it is called as Intellectual Property Right. Intellectual property means intellectual creation that is

ethically and commercially valuable.<sup>1</sup> Grant of Intellectual Property Rights should not be taken to mean that only and only the creator of such intellectual creation will have the right forever. It is necessary to mention here that Intellectual Property Rights are given for a certain period of time and in view of a specified geographical area.<sup>2</sup> The basic purpose of granting Intellectual Property Rights is to encourage human intellectual creativity. Due to the wide scope of Intellectual Property Rights, it was considered necessary that the relevant rights and related rules etc. should be arranged for the particular area.<sup>3</sup>

## MEANING OF INTELLECTUAL PROPERTY RIGHTS

According to Jeremy Phillips, Intellectual property in the general sense refers to things that arise from the use of intelligence by a person. In a broad sense, intellectual property includes ideas, concepts, practical knowledge and other creative ideas on the one hand. On the other hand, there is also a combination of literary, dramatic, musical, artistic or such mechanical expressions, which give shape to such ideas, concepts etc.<sup>4</sup>

According to Salmond, "Those non-material goods are intellectual property which is recognized by law as a non-material product of human proficiency and labour."

<sup>1</sup> What is Intellectual Property? (wipo.int)

<sup>2</sup> Intellectual Property Definition (investopedia.com)

<sup>3</sup> Intellectual property rights in India (publishing.service.gov.uk)

<sup>4</sup> Intellectual Property Rights - an overview | ScienceDirect Topics



According to Black Stone, “Intellectual property, like other tangible assets, which is intangible in nature, is recognized by state law within the general definition of property.”<sup>5</sup>

“When a person by his discretionary capacities produces an original work, he wishes to have the right to dispose of the original work, and any attempt, other than the arrangement made by him, appears to be an infringement of his rights.”

In this way, intellectual property is such things, which are immaterial and intangible, which the law considers to be the subject matter of rights. It is the product of the intellectual labor of the individual. For example, the invention of the author’s works and inventions is intellectual property.<sup>6</sup>

## CATEGORY OF INTELLECTUAL PROPERTY RIGHTS

In general, intellectual property rights include industrial property and copyrights. But apart from this, there are many such rights which have been included in this in principle. Rights related to the following points are included in the right of intellectual property-<sup>7</sup>

1. Literary, artistic and scientific work
2. An artist’s performance
3. Inventions made in different endeavor areas of man
4. Scientific Discovery
5. Industrial Design
6. Trade mark or trade mark and service mark etc.<sup>8</sup>

Intellectual property rights can be divided into the following categories on the basis of points related to intellectual property rights-

- a. All rights to intellectual property that provide information to a consumer. It includes patent, industrial design, copyright, right of plant breeder, layout or design of integrated circuit etc.
- b. All rights to intellectual property that provide information to a consumer. It includes trade -marks and geographical indications.<sup>9</sup>

## THE PATENT ACT 1970

A patent or patent is a contract between an inventor and a state, in which the inventor or applicant gets a monopoly by the state for a certain period of time in return for furnishing complete details related to his invention. The main purpose of determining this arrangement of patents or patents is to encourage public use of various information related to different

<sup>5</sup> WTO | intellectual property (TRIPS) - what are intellectual property rights?

<sup>6</sup> Intellectual Property Rights: Definition and Examples - St Francis School of Law (stfrancislaw.com)

<sup>7</sup> MLIS Paper-I Unit-22.pdf (nou.ac.in)

<sup>8</sup> ibid

<sup>9</sup> WTO | intellectual property (TRIPS) - what are intellectual property rights?

types of new inventions for different technical, economic and development purposes and to try to eliminate secrecy.<sup>10</sup>

## PATENT OR PATENT TERM

Generally, the time limit for a patent granted by the state is 20 years. But this right continues for 20 years only when the maintenance fee related to the said patent is deposited by the applicant on time at the end of every year.

## TRANSFER OF PATENT

Once a person has received a patent by the state, he has the sole right to use it according to himself or sell the research to another person for a certain period of time.

## PATENT SYSTEM IN INDIA

The exertion of controlling the patent system in India, be accountable the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India, working under the ‘Controller General of Patents, Design, Trademarks and Geographical Indications’ Department of Industrial Policy, In which the head office is located in Kolkata and other offices are located in Delhi, Mumbai and Chennai. Apart from these, the ‘Patent Information System’ (PIS) there is a database of various patents of the country located at Nagpur.<sup>11</sup>

## SECTION-3(D)

Under Section 3(D) of the Indian Patent Act, there is a provision not to grant patents for pharmaceutical substances and chemical formulations already in use. Thus, most of the patent applications rejected by the Indian Patent Office (IPO) were based on the grounds that they were merely variants of the formulations in use as well as their therapeutic value no increase was found. However, as a direct benefit of this section, it is being said by the experts that by questioning the applications in Section-3(d) to I Patent Office itself, the long and complicated court process can be avoided and a transparent patent system can be ensured.<sup>12</sup> On the other hand, it is also raising concerns that Section-3(d) may negatively affect the interests of pharmaceutical companies, thereby affecting their investment in research and development (R&D) in the country.<sup>13</sup>

## HISTORY OF PATENT LAW IN INDIA

The first phase of patents in India was Act VI of 1856. However, the history of patent law in India dates back to 1911 when the Indian Patent and Design Act, 1911 was enacted. The present Patents Act, 1970 came into force in 1972. This Act amended and consolidated all existing laws relating to patents in India. The Patents Act, 1970 was further amended by the Patents (Amendment) Act, 2005, which extended product patents to all

<sup>10</sup> MLIS Paper-I Unit-22.pdf (nou.ac.in)

<sup>11</sup> Intellectual property rights in India (publishing.service.gov.uk)

<sup>12</sup> https://rb.gy/6uc40a

<sup>13</sup> ibid



areas of technology, including food, drugs, chemicals and microorganisms. Provisions relating to pre-grant and post-grant protests are also presented.<sup>14</sup>

Again, the Patents Act, 1970 was amended by the Patents (Amendment) Act, 2005 with regard to the extension of product patents to all areas of technology including food, pharmaceutical, chemical and micro-organisms. The Patents (Amendment) Act, 2005 repealed the provisions relating to Exclusive Marketing Rights (Exclusive Market Rights/EMR) and introduced a provision for grant of compulsory licenses. Provisions related to pre-grant and anti-grant protests have also been introduced.<sup>15</sup>

### CHALLENGES IN PATENT

In most jurisdictions, there are ways for third parties to challenge the validity of a patent granted or issued at the National Patent Office; these are called opposition proceedings. It is also possible to challenge the validity of a patent in court. In any case, the challenging side seeks to prove that the patent should never have been granted. There are several grounds for challenges: the claimed content is not patentable content; The subject matter claimed was not in fact new, or obvious to a person proficient in the art, at the time of filing the application; or that any fraud was committed in the course of the prosecution in respect of the list of inventors, representations as to when the discovery was made, etc. For any of these reasons a patent may be held invalid in whole or in part.<sup>16</sup>

### VIOLATION IN PATENT

Patent infringement occurs when a third party, without the authorization of the recipient of the patent, creates, uses, or sells a patented invention. Patents, however, are enforced on a national basis. For example, manufacturing an item in China that would infringe a US patent would not be infringing under US patent law, unless that item was imported into the US.

Infringement includes a literal infringement of a patent, which means they are performing a prohibited act that is protected by a patent. There is also the principle of equivalence. This principle avoids making a product that is basically, by all rights, the same product that is protected with only certain modifications.<sup>17</sup> Some countries, like the United States, have liability for the other two forms of infringement. One is a contributory infringement, participating in the infringement of

another.<sup>18</sup> This can be a company helping another company to make a patented product or selling a patented product made by another company. There is also inducement to infringe, which occurs when one party induces or aids another party to infringe a patent. An example of this would be a company paying another party to produce a patented product in order to reduce the market share of its competitors.<sup>19</sup> This is important when it comes to gray market goods, which is when a patent owner sells a product in country A in which they have a patent for the product, without the permission of the other party owner, country B Buys and sells in., in which the owner also holds the patent for the product. Country B being the law with either national or regional exhaustion, the owner may still be able to enforce his patent rights; however, if Country B has a policy of international exhaustion, the patent owner would have no legal basis to enforce the patent in Country B because it was already sold in a different country.<sup>20</sup>

### ENFORCEMENT OF THE PATENT

Patents can generally only be enforced through civil lawsuits (for example, for US patents, by an action for patent infringement in a United States federal district court), although in some countries (such as France and Austria) there are criminal penalties for blatant violations.<sup>21</sup> Typically, the patent owner seeks monetary compensation (indemnity) for past infringement, and seeks an injunction that prevents the defendant from engaging in future acts of infringement, or seeks either damages or an injunction.<sup>22</sup> To prove infringement, the patent owner must establish that the accused infringer satisfies all the requirements of at least one claim to the patent. In many jurisdictions the scope of a patent may not be limited to what is stated literally in claims, for example because of the principle of equivalence.<sup>23</sup> An accused infringer has the right to challenge the validity of the patent which is allegedly being infringed in a

<sup>18</sup> The principle of equivalence". LII / Institute of Legal Information. Retrieved 2020-12-16.

<sup>19</sup> "Contributory Violation". LII / Legal Information Institute. Retrieved on 2020-12-16.

<sup>20</sup> Temptation to infringe". LII / Legal Information Institute. Retrieved 2020-12-16.

<sup>21</sup> DLA Piper Rudnik Gray Carey (2005). "Patent Litigation Across Europe". cecollect.com. Archived from the original on 2007-10-06.

<sup>22</sup> "Name of the Assignee (Company)". Help page. US Patent and Trademark Office (USPTO). Archived from the original on 14.08.2007. retrieved 2007-07-25 . See Section 39 of the UK Patent Act Archived 2009-02-25 on the Wayback Machine as an example. Laws across Europe vary from country to country but are generally consistent. In the Australian context, see *University of Western Australia v Gray* [2008] FCA 498 AUSTLII

<sup>23</sup> Sonemaker, Tyler. "No, an artificial intelligence cannot legally invent something - only 'natural persons' can, says the US Patent Office". business Insider . Retrieved 26 August 2020.

<sup>14</sup><https://ipindia.gov.in/history-of-indian-patent-system.htm#:~:text=Brief%20about%20Indian%20Patent%20System,disclose%20secret%20of%20their%20inventions.>

<sup>15</sup> <https://www.mondaq.com/india/patent/125766/patents-law-in-india-everything-you-must-know>

<sup>16</sup> Silverman, Arnold B. (1990). "Evaluating the Validity of a United States Patent"

<sup>17</sup> Mallor, Jane (5 January 2012). *Business Law: The Ethical, Global and E-Commerce Environment* (15th ed.). McGraw-Hill/Irwin. p 266. ISBN 978-0-07-352498-6.



counterclaim. A patent can be found to be invalid on the grounds described in the relevant patent laws, which vary between countries. Often, the grounds are a subset of the requirements for patent qualification in the relevant country. While a violator is generally free to rely on any available grounds of invalidity (such as a prior publication, for example), some countries have restrictions in place to prevent questions of similar validity from being re-applied. An example is the UK Certificate of Validity of the Contest.<sup>24</sup> Patent licensing agreements are contracts in which the patent owner (licensor) agrees to grant the licensee the right to make, use, sell or import the claimed invention, usually in exchange for royalties or other compensation. It is common for companies engaged in complex technology areas to enter into multiple license agreements involving the production of a single product. In addition, it is equally common in such fields for competitors to license each other patents under cross-licensing agreements in order to share the benefits of using each other's patented inventions.

### IMPACT OF THE PATENT

A patent does not confer a right to make or use or sell an invention. Rather, a patent provides the right, from a legal standpoint, to exclude others from making, using, selling, selling, or importing a patented invention for the term of the patent, which is usually 20-year-old from the date of filing subject to payment of maintenance fee. However, from an economic and practical point of view, a patent is preferable and perhaps more accurately regarded as giving its owner "the right to try and assert the patent in court", since many given patents are not a single patent. Bars become invalid after the effort of their owner to claim them in court.<sup>25,26</sup> A patent is a limited property right granted by the government to inventors in exchange for an agreement to share the details of their inventions with the public. Like any other property right, it can be sold, licensed, mortgaged, assigned or transferred, given

away, or simply given up.<sup>27</sup> A patent, being an exclusionary right, does not entitle the patent owner to take advantage of the invention subject to the patent. For example, many inventions are an improvement to prior inventions that may still be covered by someone else's patent. If an inventor obtains a patent on an improvement to an existing invention that is still under patent, they may legally use the improved invention only if the patent holder of the original invention gives permission, which they refuse, can do.<sup>28</sup>

Some countries have "working provisions" that require the invention to be exploited in the jurisdiction it covers. Consequences of an invention not working vary from country to country, from revocation of patent rights to compulsory licenses granted by courts to a party wishing to exploit a patented invention. The patentee has the opportunity to revoke or challenge the license, but is usually required to provide evidence that the work of the invention has met the reasonable requirements of the public.<sup>29</sup>

### CONCLUSION

Finally, we say that any work of a person or a group of persons, which is useful to the society and is also economically important for the creator, is called Intellectual Property and any creator should be given to protect this property. Those rights are called Intellectual Property Rights. These rights are granted by a legal process within a country with certain time periods and conditions. Protection of intellectual property, granting someone an exclusive right to use sell or manufacture an invention for a specified period of time... Governments grant patents to inventors as a way to keep others from making or selling inventions for a period of time. It is to be known that in India, it is necessary to simultaneously address the challenges like lack of expenditure by the government and the needs of public health. For this, in the Indian patent system, the work of balancing between good and beneficial patents for public interest and corporate patents filed only for commercial interests is a remarkable initiative.

<sup>24</sup> Sonemaker, Tyler. "No, an artificial intelligence cannot legally invent something - only 'natural persons' can, says the US Patent Office". *business Insider*. Retrieved 26 August 2020.

<sup>25</sup> Article 28.2 TRIPS Archived on 22.06.2017 Wayback Machine : " Patent owners shall also have the right to allot or by succession, transfer, patent and contract to terminate the license."

<sup>26</sup> abc "is not a grant of the right to make or use or sell a patent. It does not imply, directly or indirectly, any such right. It merely gives the right to exclude others. The assumption that the right to make is a patent grants is clearly inconsistent with the established distinctions between general and specific patents, and with the well-known fact that a substantial proportion of a patent granted is in the area covered by a prior relatively general or original patent, are tributary to the first such patent, and may not be exercised unless under license." - *Harman Vs Youngstown Car Mfg. Co.*, 191 F. 579, 584-85, 112 CCA 185 (6th Circle. 1911)

<sup>27</sup> a b Article 33 of the Agreement on Trade Relating to Aspects of Intellectual Property Rights (TRIPS).

<sup>28</sup> *ibid*

<sup>29</sup> *ibid*



# ASSESS THE KNOWLEDGE ON HEALTH BENEFITS OF FLAX SEEDS TO MAINTAIN THE BLOOD GLUCOSE LEVEL AMONG TYPE II DIABETIC CLIENTS

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## ABSTRACT

### Background

Diabetes is a group of metabolic diseases characterized by the increased levels of glucose in the blood (hyperglycemia) resulting from defects in insulin secretion, insulin action, or both. India has the world's second largest number of individuals living with the diabetes. Type II diabetes is the extremely common problem in Indian population. Diabetic ketoacidosis is a serious condition that can lead to diabetic coma (passing out for a long time) or even death. Type I diabetes is present in children and adolescents, type II diabetes is thought to be affected to middle-aged group and therefore each type has various etiological factors and treatments. Flax seeds can be a beneficial and nutritious addition to the diet of people with diabetes. Flaxseed is a good source of dietary fiber and omega-3 fatty acids. The fiber in flaxseed is found primarily in the seed coat. For diabetes there is 10-60 grams of whole or ground flaxseed have been taken daily for up to 48 weeks.

### Objectives

- To assess the level of knowledge on Diabetes mellitus.
- To assess the knowledge on health benefits of flax seeds to maintain blood glucose among diabetic clients.
- To find the association between level of knowledge on flax seeds among diabetic clients with elected demographic variables.

### Methodology

A descriptive research design with convenience sampling technique was adopted to conduct a study among 30 type II diabetic clients. Data was gathered by using self-structured questionnaires. Confidentiality was maintained throughout the procedure. Collected data were analyzed by using descriptive and inferential statistics.

### Result

Among 30 type II diabetic clients the level of knowledge on general information, 3(10%) had inadequate knowledge, 18(60%) had moderate knowledge and 9(30%) had adequate knowledge. The results which shows that the demographic variables duration of illness had shown statistically significant association with level of knowledge on flax seeds among type II diabetes clients at  $p < 0.05$  level and the other demographic variables had not shown statistically significant association with level of knowledge on flax seeds among type II diabetic clients.

### Conclusion

These studies concluded that there is statistically significant association with the level of knowledge on health benefits of flax seeds.

**KEY WORDS:** Assess, Knowledge, flax seeds, Health benefits, Type II diabetic Clients.

## INTRODUCTION

### “Prevent diabetes, protect our future”-WHO

Diabetes is a silent disease and is now recognized as one of the fastest growing threat to public health in almost all countries of the World. It is also called the disease of prosperities. Prevention is better than cure and is less expensive<sup>[1]</sup>. The long-term complications associated with diabetes are well-known; researchers today have found that long-term damage, especially to the cardiovascular system, starts early in the prediabetes period<sup>[2]</sup>.

Around 150 Million people suffer from diabetes in the World out of which above 35 million are Indians the highest in any country. Every fifth person who suffers from diabetes in the world today is an Indian<sup>[3]</sup>.

By 2030 Indian will have 79.4 Million diabetic projects the WHO (World Health Organization) that's more than twice the current number over 35 million cases. No wonder India is the Diabetic Capital of the World<sup>[4]</sup>. Furthermore, studies have shown that diets rich in omega-3 fatty acids improve insulin sensitivity (IS) and glycemic control<sup>[5]</sup>. Effective and early



interventions including lifestyle modification and medication prevent or delay the onset of diabetes<sup>[6]</sup>.

Flaxseed is a well-known seed due to its excellent source of lignan and n-3 fatty acid. Its lignan, secoisolariciresinol diglucoside, is an active ingredient, with antioxidant effect<sup>[7]</sup>. Flaxseed as a functional food [8]. Could increase fiber content, antioxidants, and omega-3 and, thus, be an effective intervention in prediabetes<sup>[9]</sup>. Flaxseed is a promising alternative to reduce the risk of diseases associated with increased body weight [10]. Few studies have demonstrated the positive role of flaxseed supplementation in improving inflammation, glycemic status, and oxidative stress among diabetic clients<sup>[11]</sup>.

Flaxseed influences control blood glucose levels and inflammatory biomarkers in obese glucose intolerant people<sup>[12]</sup>. In addition flaxseed contains soluble viscous fibers that lower the glucose response to carbohydrate containing food by delaying gastric emptying and glucose absorption<sup>[13]</sup>. Flaxseed is considered one of the “nutraceuticals” as it is a type of food and at the same time, has health benefits. Hat (hypoglycemic assessment tool) is in terms of controlling and regulating blood sugar and serum lipid when it is added to diabetic clients food regimen. Secondary to that, it can decrease the risk of developing cardiovascular disease. Many studies still need to find out the ideal dose that should be used for maximum benefit<sup>[14]</sup>.

## MATERIALS AND METHODS

A descriptive research design was used to assess the impact the covid 19 lockdown lifestyle behavior changes among school age children. This study was conducted in Edyarpakkam village located at sunguvachathiram in Kancheepuram. The total sample size is 30 who all are met the inclusion criteria. Convenient sampling technique was used to collect the data from sample. The inclusion criteria clients with the age group of between 30 to 70 years. Those who are willing to participate in the study. Those who are available during the data collection. The clients who all are able to speak or read Tamil. Those who are not willing to participate in the study were excluded. Explained about the study and informed consent was obtained. Data was collected by self-structured questionnaires. Confidentiality was maintained throughout the study. Collected data were analyzed by using descriptive and inferential statistics. The project has been approved by the Ethics Committee of the Institution.

## RESULTS AND DISCUSSION

### SECTION 1: Description of sample characteristics

Majority of the type II diabetes clients out of 30 samples, 15(50%) were aged between 51 – 65 years, 18(60%) were male, 16(53%) were Hindu, 14(47%) were studied primary level, 13(43%) were daily wager, 12(40%) had type II Diabetes for 4 - 6 years.

## SECTION II: ASSESSMENT OF LEVEL OF KNOWLEDGE ON FLAX SEEDS AMONG TYPE II DIABETIC CLIENTS

**Table I: Frequency and percentage distribution of level of knowledge on flax seeds among type II diabetic clients.**

LEVEL OF KNOWLEDGE ON FLAX SEEDS	FREQUENCY	PERCENTAGE
Inadequate	3	10%
Moderately Adequate	18	60%
Adequate	9	30%

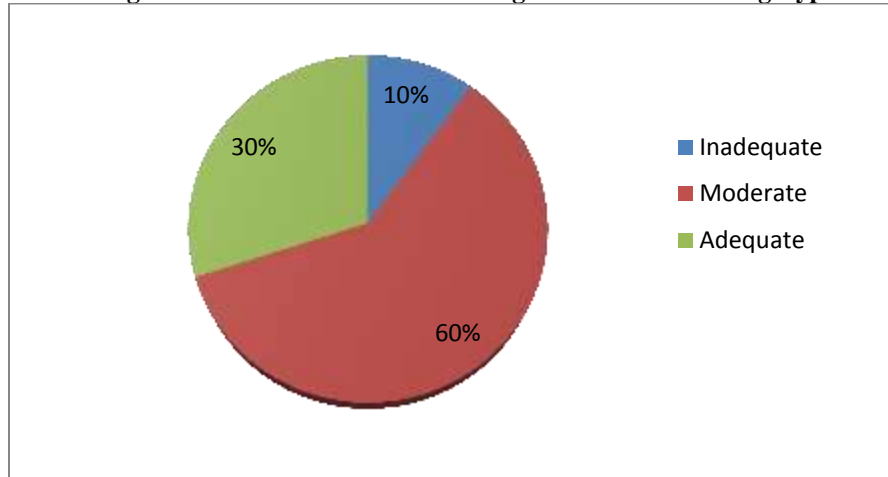
This data represented in the table 1 show that the level of knowledge on health benefits of flax seeds on Diabetic. Out of 30 samples 3(10%) have inadequate knowledge, 18(60%) have moderate knowledge and 9(30%) have adequate knowledge on level of knowledge on flax seeds among type II diabetic clients.

The present study was supported by **Thakur Goutam, Mitra Analava, pal kunal(2020)** conducted the study was the effects of ingestion of flaxseed gum on blood glucose and cholesterol, particularly low-density lipoprotein cholesterol, in type II diabetes were evaluated. Flaxseed gum was incorporated

in wheat flour chapattis. The blood biochemistry profiles monitored before starting the study and at monthly intervals showed fasting blood sugar in the experimental group decreased from 154+/-8 mg/dl to 136+/-7 mg/dl (P=0.03) while the total cholesterol reduced from 182+/-11 mg/dl to 163+/-9 mg/dl (P=0.03). Results showed a decrease in low-density lipoprotein cholesterol from 110+/-8 mg/dl to 92+/-9 mg/dl (P=0.02). The study demonstrated the efficacy of flax gum in the blood biochemistry profiles of type II diabetes.



Figure 1: Frequency and Percentage distribution of level of knowledge on flax seeds among Type II diabetic clients

**SECTION III: To determine the impact of level of knowledge on Health benefits of flax seeds among Type II diabetic clients**

To find out the significant mean difference between the level of knowledge on Health benefits of flax seeds among Type II diabetic clients

S. No.	Demographic Variables	Inadequate		Moderate		Adequate		Chi-Square Value
		No.	%	No.	%	No.	%	
1.	<b>AGE</b>							$\chi^2=2.446$ d.f=2 p = 0.294 *N.S
	a) 26-40 years	0	0	3	10	0	0	
	b) 41-50 years	1	3.3	6	20	3	10	
	c) 51-65 years	2	6.6	11	36.6	4	13.3	
2.	<b>GENDER</b>							$\chi^2=0.257$ d.f=2 p = 0.879 *N.S
	a) Male	2	6.6	12	36.6	5	16.6	
	b)Female	1	3.3	7	23.3	3	10	
3.	<b>RELIGION</b>							$\chi^2=2.909$ d.f=3 p = 0.406 *N.S
	a) Hindu	2	6.6	11	36.6	4	13.3	
	b) Christian	1	3.3	7	23.3	3	10	
	c) Muslim	0	0	2	6.6	0	0	
4.	<b>EDUCATIONAL STATUS</b>							$\chi^2=5.878$ d.f=4 p = 0.208 *N.S
	a) Primary	2	6.6	10	33.3	4	13.3	
	b) Secondary	1	3.3	7	23.3	3	10	
	c) Graduate	0	0	3	10	0	0	
5.	<b>OCCUPATION</b>							$\chi^2=6.553$ d.f=4 p = 0.161 *N.S
	a) Daily wager	1	3.3	9	30	4	13.3	
	b) Government employee	0	0	5	16.6	0	0	
	c) Private employee	1	3.3	7	23.3	3	10	



6.	DURATION OF ILLNESS							$\chi^2=10.474$ d.f=4 p = 0.033 S*
	a) <1 year	0	0	2	6.6	0	0	
	b) 1-3 years	1	3.3	6	20	3	10	
	c) 4-6 years	2	6.6	8	26.6	4	13.3	
	d) 7-9 years	0	0	4	13.3	0	0	

**TABLE II: The distribution of mean and standard deviation of level of knowledge on flax seeds among type II diabetes clients.**  
N= 30

LEVEL OF KNOWLEDGE ON FLAX SEEDS	MEAN	STANDARD DEVIATION
Inadequate	7.82	2.88
Moderately Adequate	10.70	1.91
Adequate	8.90	2.49

This study shows the mean and standard deviation of level of knowledge on flax seeds among type II diabetes clients. The mean score for inadequate knowledge is (7.82), moderate knowledge is (10.72) and adequate knowledge is (8.90) and standard deviation score for inadequate knowledge is (2.88), moderate knowledge is (1.91) and inadequate knowledge is (2.49).

The present study was supported by **Balawi, Ree Diri, Mohsen et,al.,** (2020) September, conducted a study was Lack of clients education and knowledge about these complications can worsen the quality of a clients life. Hence, more efforts are needed to improve client's education especially in rural areas. Aim. Our objective is to explore the association between demographic variables and the knowledge of self-care practices in type II diabetes. Methods. We used observational cross-sectional descriptive study using a validated self-administered questionnaire both Arabic and English languages as well. A descriptive correlation design analyzed the questionnaire completed by a convenience sample meeting the inclusion criteria. Results. A total of 100 clients met the inclusion criteria for the analysis out of 3251 clients who completed the questionnaire. The study population has low moderate knowledge in diabetes, moderate knowledge in self-care practices, and good knowledge about complications of nephropathy and cardiovascular disease.

#### SECTION IV: Association of level of knowledge with selected demographic variables

##### Table 3: Association of level of knowledge on Health benefits of flax seeds among type II Diabetes with their selected demographic variables.

##### S: Significant; N.S: Non significant

Above table reveals that, chi-square analysis was done to find out the association between the level of knowledge on flax seeds with their selected demographic variables. The findings suggested that the demographic variables duration of illness had shown statistically significant association with level of knowledge on flax seeds among type II diabetes clients at  $p < 0.05$  level and the other demographic variables had not shown

statistically significant association with level of knowledge on flax seeds among type II diabetic clients.

#### CONCLUSION

These studies concluded that there is statistically significant association with the level of knowledge on health benefits of flax seeds.

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#### AUTHORS CONTRIBUTION

All the authors actively participated in the work of study. All the authors read and approved the final manuscript.

#### CONFLICT OF INTEREST

The authors declare no conflict of interest.

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# QUALITY LIBRARY AND INFORMATION SERVICES DURING COVID PANDEMIC: A REVIEW

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## ABSTRACT

*The corona virus pandemic has been an unparalleled event- a deep humanitarian crisis- that has disrupted our lives, our livelihoods, and our economies in an extraordinary manner. The catastrophe has not only threatened human lives, it has also reduced the capability of the industries and businesses to cope with the devastating impact. This also includes the knowledge industry, which has been a direct casualty of the pandemic. In the case of GLAM (Galleries, Libraries, Archives, Museum), they are facing hard choices as they start from minimal restrictions to full closure. The libraries cannot afford to close their regular duties of providing right information to the users. However amidst the pandemic, the libraries can continue to provide relevant information and knowledge sources to the information seekers including teachers, students, and researchers through various resources on virtual platforms. Apart from these formal roles, libraries also have social roles to play- as a provider of information literacy skills-which includes sensitizing and disseminating information on precautions of the SARS COVID-19; sharing the government guidelines in the communities; and boosting the morale of people. In this article, focus has been made on the role of the libraries in providing the quality information services to the users during the pandemic situation and what is its impact on the libraries and its users.*

**KEYWORDS:** Covid-19, Quality Information Service, Library.

## INTRODUCTION

In the year 2020, the world underwent a tectonic shift in terms of global crisis. Countries went for a complete lockdown to reduce further spread of the corona virus. Inevitably, India too had to declare a nationwide lockdown. Covid-19 has impacted every aspect of socio-political and economic life of the people around the globe. Prior to the COVID-19 crisis, there were a few Universities, Colleges and Schools using online resources that presented an opportunity and inspired the Higher Education Institutions (HEIs) and students to embrace digital resources and online platform as a medium for transaction of knowledge. However, with the pandemic there came major upheavals and changes in the education sector. The academic landscape underwent a complete change. Libraries in the academic institutions play an important role in imparting knowledge to the students, to assist them with relevant resources and help to improve their academic front. Due to the closing of all educational activities in the institutions, they could not visit libraries or access the resources. As a result, students were facing difficulties while searching and retrieving information they required during the pandemic. The situation had now changed: it quickly went from physical to online delivery of information services.

## LITERATURE REVIEW

**Dadhe and Dubey (2020)** in "Library Services Provided during COVID-19 Pandemic: Content Analysis of Websites of Premier Technological Institutions of India", described how COVID-19 has challenged the education system. The study reveals about the various LIS services that

has provided during this pandemic situation. **Kaur Deol and Singh Brar (2021)** highlighted the role of libraries and the library staff played during the hectic period of COVID-19 in the article, "The Pandemic COVID-19 and Role of Academic Libraries". **Hasan (2020)** in the study "SOPs/Protocols for the Libraries in the New Normal", has described about the SOPs / Protocols which a library must follow for the safety of users which indicated despite all limitations, the libraries and the librarians must provide library services to the users in this pandemic situation. In "Library Services during COVID-19: An Attempt to Bridging the Learning Gaps", **Rai (2021)**, has discussed the barriers they have faced during the pandemic situation provided and what services has been provided by them during this situation.

## DISCUSSION

**Impact of Covid-19 on the Libraries:** As physical footfall to libraries is strictly not agreed, librarians are active in providing online information services to the public. As everything was sudden at the time of pandemic, libraries had to come up with several challenges. The books that had been earlier issued by the users could not be returned due to a sudden lockdown. There were books, periodicals and other items which were yet to be placed and catalogued appropriately. Due to an indefinite shut down, the regular maintenance and cleanliness of the library became impossible, which could damage the books, periodicals and other reading materials. Besides the above mentioned, there is a growing concern of the challenges in fulfilling the needs of information seekers during the pandemic situation. Till date, it has been a



huge challenge for the librarians and other library staff to maintain the relevance of libraries, especially in times of crisis.

**Role of the Library providing quality information services during pandemic:** In the current scenario, the usage of the library services has drastically changed. Earlier, users would come to the library to seek day-to-day information and since it is an open platform, every user can receive knowledge as per their convenience. However, in the pandemic situation, libraries have transitioned from offline to online services. Libraries are playing a critical role in providing the information to users. Maximum of the resources are provided by the libraries through online, in text, audio or video formats. According to some of the librarians, the portable nature of smart phones will eventually allow anyone to access the library from anywhere, anytime. With lockdown posing as a serious impediment to knowledge access, surveys were conducted to investigate and understand the challenges better. Respondents were asked to give information on a series of statements applicable in the lockdown period.

Some of the significant services and facilities provided by the libraries under study are discussed below:-

**Remote access to e-resources:** The main objective of any academic library is to understand how they can enhance and strengthen the teaching, learning and research process by installing seamless document/information delivery system. Across the country, libraries of higher education have been working to provide services and access to collections to the users who have been displaced due to COVID-19. While all the libraries under study have provision of remote access to subscribe e-resources, a lot of them have taken efforts in leveraging and expanding existing online services. Notably IITGKP, IITK, IITBBS, IITGN, IITJ, IITI, IITM and IITBHU have displayed step by step user guides on remote login to get access to the licensed resources.

**Free and Expanded Access:** In this unexpected outbreak and difficult situation, some of the publishers are providing expanded access to e-resources which includes e-books, e-journals, e-databases etc. for a limited period. Libraries have highlighted the links of these free and expanded resources on their portal to facilitate visibility of these options available for users. This has helped the users in availing virtual services and thereby, visiting library portals frequently. Almost all the libraries have facilitated access points to provide digital versions of the newspaper and magazines that can be read using any convenient handy digital devices.

**Open Access Resources:** There are also free scholarly resources available that have helped the users in retrieving information's. Example: National Digital Library of India (NDLI), Shodhganga, a repository of Electronic Thesis and Dissertation, Directory of Open Access Journal (DOAJ), and Free Online Books, Book Boon, Directory of Open Access Books (DOAB) to name a few.

**Resources related to COVID-19:** Access to licensed electronic resources is subject to the terms and conditions under which they are procured. As the scientific community across the globe is racing against time to develop a definite treatment for the disease, access to as much as and as quickly as possible published literature to accelerate the on-going research in need of the hour. Notably a lot of commercial publishers and vendors have taken a significant initiative and have provided open access to materials related to COVID-19. Others have facilitated access by making it easier to log in and access materials from outside of official networks.

**SOPs/Guidelines for the Libraries and users in the present scenario:** The pandemic has changed the way we function in public and social spaces. The scenario is unprecedented, risky, and requires social distancing, use of masks and adherence to protocols. In the beginning of 2020, COVID-19 led to the closure of library buildings. Libraries and Librarians are now offering reduced or alternative services until full services resume, though generally the focus is on online services and digital contents.

## CONCLUSION

COVID-19 has affected millions of people across the globe. The educational institutions are closed and there is no formal operation of teaching, learning and research going on. Under the circumstances along with the threat of physical disease, mental trauma and social disturbances, the academic libraries have been instrumental in providing, disseminating and exchanging knowledge sustainably. The libraries can provide relevant materials to teachers to prepare via online sources and recommend to them the open access as well-paid sources so that they can prepare their notes and can communicate to the students. Also, libraries have played a critical social role of bringing awareness of preventive COVID-19 measures, guidelines and protocols of the government, among our communities. Libraries have seamlessly delivered even during a challenging time and have evolved as a continuous learning factory. In conclusion, libraries have acted as enablers and have emerged as knowledge hubs, capable of rising to the occasion and playing an essential role in supporting the country despite the odds.

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# BEST PRACTICES TO ACHIEVING PEACE JUSTICE AND STRONG INSTITUTIONS (SDG 16)

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## ABSTRACT

*Low socio-economic development can support the conditions for social violence and conflict, but it is also a consequence of violence and conflict. Through Goal 16, the SDGs recognize the long reaching consequences of conflict and violence for development outcomes. Not only is violence a severe hindrance for development, it can reverse many years of development gains. A whole of society approach is required to proactively address on and offline misinformation networks, ensuring that government, civil society, private sector and vulnerable populations work together to inform policies and programming that balances freedom of expression with the need to curb mis/disinformation. Recognizing the centrality of Goal 16 as an enabler and accelerator for the 2030 Agenda, further efforts are required to strengthen national capacities for data collection, analysis and data prioritization. As with many other Sustainable Development Goals it is also urgent to address the lack of data disaggregated by sex, race, colour, age, language, religion, national, ethnic or social origin, disability, migration or other status.*

**KEYWORD:** *crime, peace, SDG16, conflict, sustainable development, COVID-19*

## INTRODUCTION

Both developed and developing countries face challenges in addressing corruption, crime and human rights violations for everyone which is threatening the foundation of peaceful societies (United Nations, 2020). Since conflict greatly affects economic development by reducing foreign direct investment and the broader macro-economic environment, whereby increasing poverty, reducing life expectancy and education outcomes (Daron & Robinson 2013), as well as indicators which are essential for longer term development like infant mortality and access to services, that is to say it has great impacts on the economy in the immediate term, potentially destroying entire industries, the impact of conflict is also long term, reducing future development opportunities (Ebrahimian, 2003).

Outbreak of COVID-19 and accompanying lockdowns, data and reports from frontline workers indicate that crime intensified, with access to life-saving services and support, as well as justice, reduced. Furthermore, the United Nations Secretary-General warned of the increased risk of violence against children due to lockdowns, and UNICEF has reported on the severe disruption to child protection and response services due to COVID-19. The COVID-19 crisis has also exposed underlying issues of exclusion, racism and xenophobia in many countries but national human rights institutions have played a proactive role in monitoring and advocacy particularly on rights of minorities. As COVID-19 exacerbates underlying bottlenecks to access to justice, these figures are projected to shift as

personal access to dispute resolution platforms continues to be limited as a result of the global crisis.

The SDGs build upon the foundation of the Millennium Development Goals (MDGs) and call for action by all countries at all stages of development to promote prosperity while protecting the planet. They bring an increased focus on the root causes of poverty and development while recognizing that an integrated approach is crucial for progress across the multiple goals. The SDGs reflect that conflict and instability are significant impediments for development.

Goal 16 is dedicated to the promotion of peaceful and inclusive societies for sustainable development, the provision of access to justice for all and building effective, accountable institutions at all levels. The Goal is the outcome of the international community's acknowledgement that peace is fundamental to development. By annually measuring the levels of peace in 163 countries and territories worldwide through the Global Peace Index, IEP has shown that peace is not an abstract concept but something that can be tracked and actioned. The recognition by the international community that peace can and should be measured for development outcomes is indeed a very positive transition (Stefan & Paul, 2002)

Corruption in all its forms hinders sustainable development, fosters inequality and undermines the rule of law in the region Danesh (2004). Tracking progress towards SDG16 is impeded by limitations in available quality data across different targets and indicators in SDG16. SDG16 includes 12 targets and 24 indicators, with many targets from other SDGs



linked to the aspiration of peace, justice, and strong institutions of the 24 indicators, six are Tier II, 17 are Tier I and one is under both Tier I and Tier II. In addition, there are some indicators that only recently have a globally endorsed methodology, including SDG 16.7.1b and c, on representation in public service and the judiciary, SDG 16.7.2 on influence in public decision making and SDG 16.6.2 on satisfaction with governance services.

### WHY TAKE ACTION?

People everywhere need to be free of fear from all forms of violence and feel safe as they go about their lives whatever their ethnicity, faith or sexual orientation Edward, (2012).

Conflict, insecurity, weak institutions and limited access to justice remain threats to sustainable development Daron, James & Robinson (2013). In 2019, the number of people fleeing war, persecution and conflict exceeded 79.5 million, the highest level ever recorded. One in four children continues to be deprived of legal identity through lack of birth registration, often limiting their ability to exercise rights in other areas. The COVID-19 pandemic threatens to amplify and exploit fragilities across the globe.

### WHAT WOULD BE THE COST OF NOT TAKING ACTION NOW?

Armed violence and insecurity have a destructive impact on a country's development, affecting economic growth and often resulting in long-standing grievances among communities (Civicus, 2020).

Violence affects children's health, development and well-being, and their ability to thrive. It causes trauma and weakens social inclusion.

Lack of access to justice means that conflicts remain unresolved and people cannot obtain protection and redress. Institutions that do not function according to legitimate laws are prone to arbitrariness and abuse of power, and less capable of delivering public services to everyone (Ebrahimian, 2003).

To exclude and to discriminate not only violates human rights, but also causes resentment and animosity, and could give rise to violence (Borer, Darby & McEvoy-Levy, 2007).

### WHAT CHANGES NEED TO HAPPEN TO ACHIEVE PEACE JUSTICE AND STRONG INSTITUTIONS? (PROMISING INNOVATIONS AND BEST PRACTICES)

Conflict, insecurity, weak institutions and limited access to justice remain threats to sustainable development (Danesh, 2004). SDG16 marks the intersection between sustaining peace and the 2030 Agenda. At the core of the 2030 Agenda lies a clear understanding that human rights, peace and security, and development are deeply interlinked and mutually reinforcing. Promising innovations and best practices in achieving sdg16 effectively includes:

Building awareness of the critical situation requires enhanced monitoring at country level, including collecting

disaggregated data. Related legislation must meet international human rights standards, and effective implementation of legislation on access to information is required.

Equal access to justice for all during and after the COVID 19 pandemic. Barriers to equal access to justice increased with the onset of the pandemic and led to the suspension of court hearings and further restricted access to legal assistance and legal aid services.

Innovations on e-justice or digital justice can increase access to justice in the region. However, particular attention must be paid to accessibility of digital technologies for all, including persons with disabilities, and to the technical, economic, and social constraints which exist. More broadly, international standards relating to human rights and rule of law, including space for traditional justice mechanisms, must be upheld by Member States.

Strengthen environmental rule of law and protect environmental defenders to build back better from COVID-19. Environmental rule of law must be strengthened through effective legal frameworks, strong institutions, access to information and justice in environmental matters, recognizing and addressing the digital divide, and a by providing safe enabling environment for environmental human rights defenders, including indigenous peoples, children, youth and local communities, in order to sustainably recover from COVID-19, in order to achieve the 2030 Sustainable Development Goals and meet globally agreed environmental commitments.

Address discrimination and stigma. Public communication and public support campaigns that promote non-violence and rejects xenophobia, racism and all forms of intolerance, play a key role in countering the alarming spike in intolerance and hate speech that has fueled longstanding challenges with discrimination and stigma including on the basis of sexual orientation, gender identity and expression (Lant, Michael & Matt, 2010).

Improve the collection and quality of data, particularly disaggregated data. Recognizing the centrality of Goal 16 as an enabler and accelerator for the 2030 Agenda, further efforts are required to strengthen national capacities for data collection, analysis and data prioritization. As with many other Sustainable Development Goals it is also urgent to address the lack of data disaggregated by sex, race, colour, age, language, religion, national, ethnic or social origin, disability, migration or other status (Government of Kenya 2000).

Strengthen efforts towards providing a legal identity for all through universal civil registration and vital statistics. Accurate, complete and timely vital statistics from civil registration records are critical for the region in order to recover from the current crisis and monitor progress towards the 2030 Agenda for Sustainable Development (UNESCO2002).

### SUMMARY

Strengthen responsive, inclusive, participatory, and representative decision-making at all levels.

Further efforts to promote the full, equal and meaningful participation of all, especially women, children and youth,



persons with disabilities, marginalized communities, and those left behind, in decision-making at all levels and in all fields of sustainable development. This includes commitments to achieving diversity, gender parity and equitable representation in decision-making bodies in support of Goal 16, as well as Goal 5, Goal 10, core international human rights instruments and the Women, Peace & Security and Youth, Peace & Security agendas, through promotion of social innovation and digital platforms, and comprehensive understanding of cultural contexts.

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# HISTOPATHOLOGICAL AND HEMATOLOGICAL EFFECT OF DIMETHOATE ON THE LIVER AND KIDNEY OF ALBINO MICE

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## ABSTRACT

*Dimethoate is the widely used organophosphorous pesticide in agriculture land for controlling pests of variety of crops like citrus, cotton, tea, tobacco, fruits, olives, potatoes and vegetables. The aim of present work was to study toxic effect of pesticide dimethoate on some blood constituents and some organs of Swiss albino mice. In present investigation animals were treated with 1/10<sup>th</sup> of LD<sub>50</sub> of dimethoate (DM) via oral gavage. The DM was administered to the animals at a dose 15mg/kg b.w. for 20 consecutive days. After completion of the dose, following hematological parameters were studied; Hemoglobin (Hb), Red Blood Cells (RBCs), White Blood Cells (WBCs), Packed Cell Volume (PCV) and after that animals were scarified by cervical dislocation; liver and kidney dissected out and fixed for histopathological investigations. The sections were examined under light microscope. Histopathological changes observed in the liver were vacuolation, hepatic pycnosis, blood congestion, hemorrhage, nuclear death, enlargement of portal vein and high lymphatic infiltration throughout the central vein. The kidney showed some changes in cellular lining of the Bowman capsule, glomerular degeneration, hemorrhage, compress blood vessels, tubular degeneration, glomerular shrinkage, cell rupture and hydropic changes.*

**KEYWORDS-** Dimethoate, Histopathological, Hematological, pycnosis, lymphatic infiltration.

## 1. INTRODUCTION

The pesticides are one of the most potentially harmful chemicals liberated in the environment in an unplanned manner. There are so many types of pollutants that affect our life both directly and indirectly. Pesticides are biologically active chemical and it may spread from food chain to lead widespread contamination in the environment (El-Sebae, 1993; Zaahkouk et al., 2000). The misused of pesticide may be harmful to humans, animals and environment. Dimethoate is an insecticide widely used in agricultural land (Sharma et al. 2005). Dimethoate (IUPAC name O,O-diethyl S-methyl carbamoyl methyl phosphorodithioate) is a broad use systemic organophosphate insecticide in agriculture against a wide range of insects like mites and fungal diseases of fruits, vegetables, and field crops as both systemic and contact pesticide; as well as indoor to control houseflies [Rome, 1999]. It is applied as spray in agriculture, horticulture and viticulture for control of insects on a variety of field, fruit and vegetable crops.

The use of dimethoate is very important in affecting many diseases in plants and animals as well as human [M. Al-Haj et al., 2005]. Toxicity of systemic pesticides dimethoate

results in deleterious effects on many organs and systems in human and other mammals particularly the reproductive system, immune system, nervous system, and sexual hormones, liver [J. Gomes et al. 1999], [F. Sayim 2007], Kidney [F.A. Khogali et al. 2005], pancreas, brain. The primary mechanism of action of Organophosphate pesticides (OP) is based on inhibition of both mammalian brain and plasma acetylcholinesterase (Ache) activity (De-bleecker et al., 1993).

Many studies have been carried out on the effect of dimethoate on reproductive and endocrine functions, it suggested that it could affect serum concentrations of reproductive and metabolic hormones. (Aprea, C et al., 1998). Some studies have shown that biochemical changes that might occur in the kidney of albino rat as a result of dimethoate intoxication. (R. Penchamma et al. 2014) and the effect of dimethoate on reproductive system and fertility of adult male rat which disrupted spermatogenesis and reduced the fertility (Ferdinand Ngoula et al., 2014)

The liver and Kidney are vital organ of vertebrates & same other animals. The liver is the primary organ involved in xenobiotic metabolism and is a major target organ for chemicals



and drugs. Hepatotoxicity is therefore an important endpoint in the evaluation of the effect of a particular xenobiotic. The kidney is one of the most target organ of experimental animals attacked by pesticides Sivapiriya *et al.*, 2006; Mansour and Mossa, 2010). Few studies have been made on the histopathological effects of dimethoate on some organs (Thangavel, 1994 and Persis, 2001). The present study aimed to investigate histopathological and hematological effects of the organophosphorous pesticide dimethoate that is extensively used in some agricultural areas in India on some organs of albino mice.

## 2. MATERIALS AND METHODS

### 2.1 Chemicals

All chemicals used for this experiment were obtained from sigma chemicals CO. USA, including Dimethoate.

### 2.2 Animals and experimental design

Healthy swiss albino mice *Mus musculus* Linn. were used for present investigation. The mice were obtained from Rajarambapu College of Pharmacy, Kasegaon, Tal -Walwa; Dist -Sangli 415 404 (1290/PO/Re/S/09/CPCSEA, 16<sup>th</sup> Mar. 2019) Adult mice 30 to 35 ± 2 gm/BW were used for present investigation throughout received Amrut mice feed (Pranav Agro Industries, Pvt. Ltd, Sangli) and water *ad libitum*. All animals were housed in plastic cages with daily observations. Animals were maintained under controlled laboratory conditions consisting of a 12h dark/light cycle, 24-25°C temperature and 35-60 % relative humidity.

Animals were divided into two groups (n = 6)

#### 1. Control group

The adult mice were given 0.5 ml of distilled water/ day/ animal for 20 days

#### 2. DM Toxicated group

The adult mice were given 15mg/kg bw/ day/ animal for 20 days by orally with oral gavage.

After completion of the treatment mice were taken in the batches dissected and liver and kidney were removed and fixed for histopathological studies using 10 % neutral formalaline for 24 hrs. After routine processing, paraffin –embedded (58-60°C) tissue samples were sectioned at 4-5µm thickness and stained with harries haematoxylin and eosin. Finally stained sections

were observed under light microscope and photographs were taken.

Blood samples were collected by retro-orbital eye method of mice for hematological investigations. The parameters studies were the hemoglobin, the hematocrit, RBCs, WBCs.

### 2.3 Statistical Analysis

The statistical analysis was performed using student s t -test

## 3. RESULTS

### 3.1 Histopathological study of Liver

Histopathological examination of the liver sections in the control mice showed a normal histological structure. The central vein located in the center of the lobule and it surrounded by hepatic cells. The distinct nuclei and hepatic sinusoids are also observed.

The sections from treated mice showed changes in structure when compared with control mice. (Fig.1-A&B). These changes include the liver congestion and Vasodilation, Lymphatic infiltration and cell pycnosis (Fig.1-D), dead nuclei (Fig.1-C), congestion, necrosis and hemorrhage (Fig.1-E), Parenchymal cells shows degerneation in nuclei and vacuolization and enlargement of hepatic sinusoids (Fig.1-F). Moreover, an increase in number of Kuffer cells was observed. These histopathological changes due to dimethoate exposure were observed in the Liver.

### 3.2 Histopathological study of Kidney

Histopathological examination of the Kidney sections in the control mice showed a normal histological structure, normal renal tubules, renal corpuscles, proximal convoluted tubules and distal convoluted tubules. Further, the Glomerulus, Bowman's capsule, urinary space, podocytes, medullary rays were noticed as shown in (Fig.2-A &B).

The treated Kidney section with dimethoate showed Glomerular, Bowman's capsule with swollen cells and hypoplasia, glomerular shrinkage, Vacuolization (Fig.2-E), Compressed blood vessels and hemorrhage (Fig.2-D), tubular degeneration and Tubular Widened Lumen (Fig.2-F) Cell rupture and swollen proximal convoluted tubule. (Fig.2-C). These histopathological changes due to dimethoate exposure were observed in the Kidney.

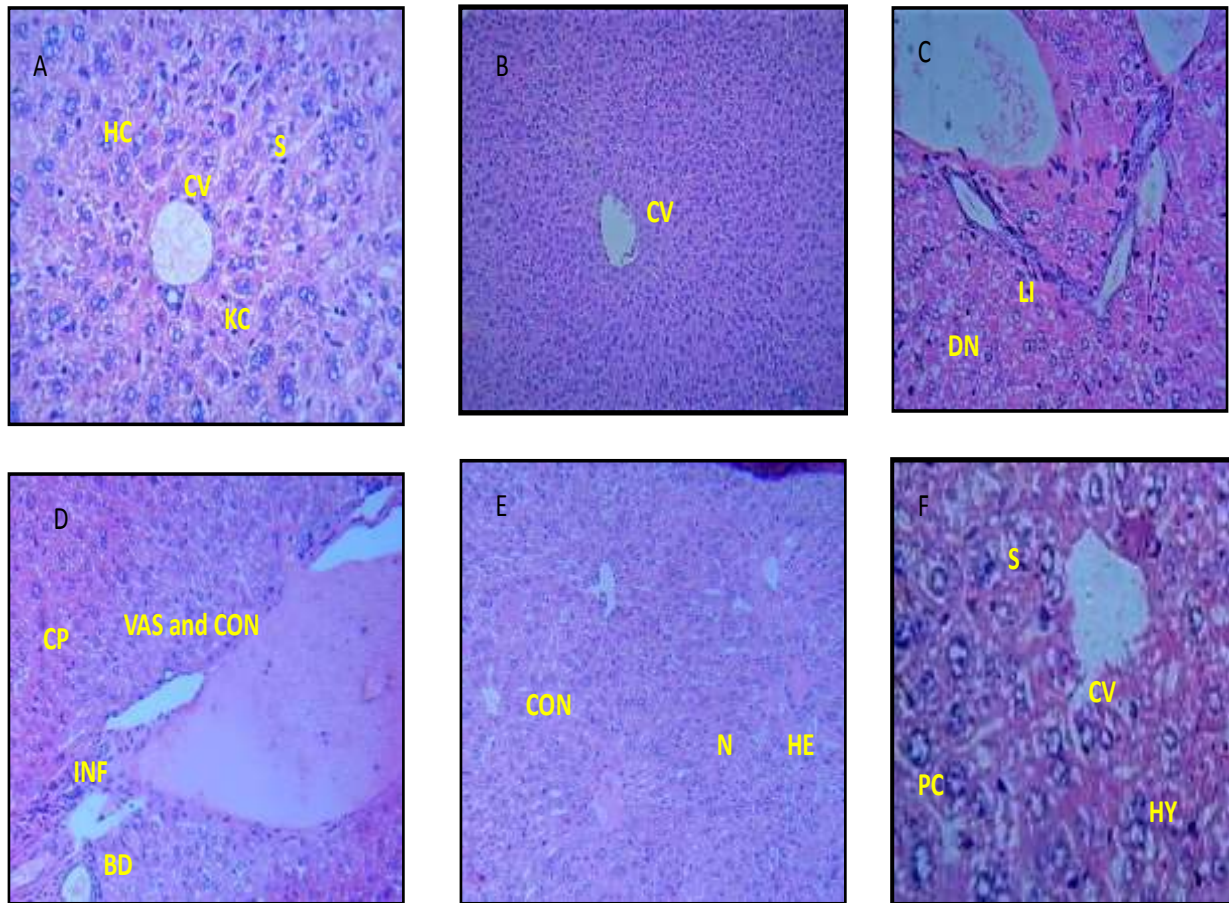


Figure 1: Photomicrograph Of The Liver Sections Of adult Mice Treated With 15 mg/Kg B.W Of Dimethoate ( H&E Stain X100 and X400). A&B] Control group C,D,E,F] DM Toxicated group -central vein(CV), hepatic cells (HC ),Sinusoids (S) , Kupffer Cells ( KC), liver congestion (CON) ,Infiltration (INF), Vasodilatation and Congestion (VAS and CON,hypertrophy (HY). Bile duct(BD),Necrosis(N),Parenchymal cells (PC), Dead nuclei (DN),Cell pycnosis(CP),Liver hemorrhage(HE)

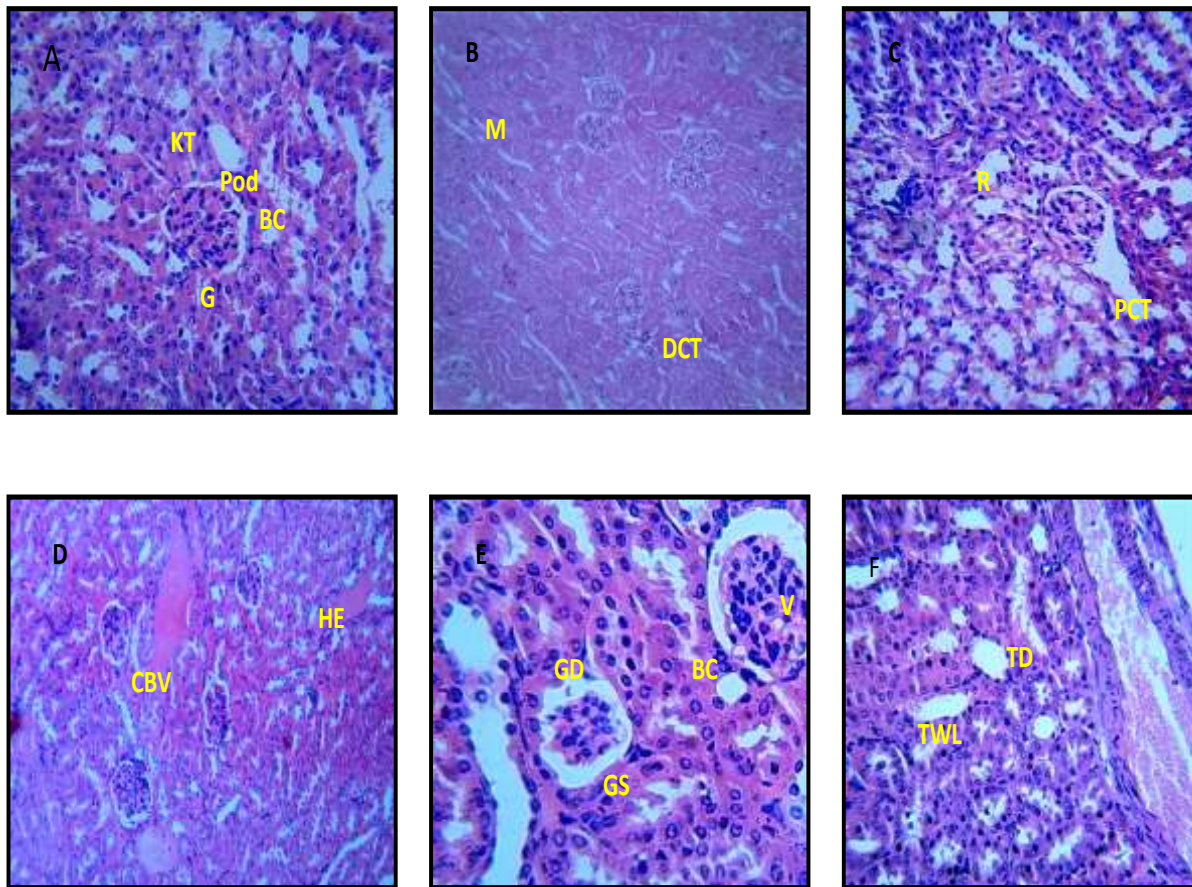


Figure 2: Photomicrograph Of The Kidney Sections Of adult Mice Treated With 15 mg/Kg B.W Of Dimethoate ( H&E Stain X100 and X400). A&B] Control group C,D,E,F] DM Toxicated group - Glomerular Degeneration(GD), Tubular Degeneration (TD) Hemorrhage(H) ,Compressed Blood Vessel (CBV),Glomerular Shrinkage(GS), Vacuolation in the glomerulus. Hypoplasia in cells of Bowman's capsule, Rupture(R), Tubular widened lumen (TWL),Normal kidney tubules(KT),Podocytes(POD),Medullary rays(M),Distal convoluted tubule (DCT), Proximal convoluted tubule (PCT)

### 3.3 Hematological Studies

After completion of the the dimethoate dose,the blood parameters investigated were hemoglobin content, hematocrit

(PCV) and blood cell count(RBCs & WBCs) .The obtained results were analyzed by using student t -test.

Parameters	Control (D/w)	Dimethoate (15mg/kg bw)
Hb (gm)	13.83 ±2.13	12.07 ±2.10*
PCV (%)	40.41 ± 3.11	37.82 ±4.71**
RBCs (Cumm)	8.41 ±0.30	8.81 ±1.18
WBCs(Cumm)	3.61 ± 0.31	4.54 ± 1.71

\*= significant, \*\*=highly significant

Table 1- Hematological values of control and dimethoate treated mice



Table showed that some hematological values of mice treated with dimethoate, When compared with control values, the hemoglobin content and packed cell volume values showed significant decrease in the treated group ( $P \leq 0.05$ ) and were highly significant. The red blood cell count in dimethoate treated mice showed no significant difference as compared to the controls ( $P \geq 0.05$ ). The white blood cell count showed varying changeable values but was not significant.

#### 4. DISCUSSION

From several years the excessive use of different pesticides on agriculture land and for household pest has led to drastic effect on many non-target species like man ((WHO/PCS, 1996; Chantelli-Forti et al., 1993; Chaudhuri et al., 1999). The present study was performed to investigate histopathological and hematological effect of commonly used organophosphorus pesticide, dimethoate on albino mice. The results showed mild to severe effects on the target organs and some notable results were found. The histology of liver sections showed more severely affected by pesticide dimethoate. The changes reported includes Congestion, lymphatic infiltration, nuclear death, cell rupture, hemorrhage, increase in Kuffer cell number, enlargement of hepatic sinusoids, degeneration of nuclei, parenchymatous cells showing vacuolation, nuclear death or pycnosis. The mammalian organ liver is most target organ of toxic impact regarding its function in biotransformation and in xenobiotic metabolism (Roganovic and Jordanova, 1998). Khogali et al. (2005), reported that Dimethoate-induced vacuolation, blood congestion, hepatic pycnosis, and high lymphatic infiltration around the central vein. These results are agreed with many authors; Sharma et al. (2005) reported that a exposure of technical grade dimethoate caused portal inflammation, focal hepatocyte necrosis and centrilobular congestion in the liver of rats. Sayim, 2007; Gokcimen et al., 2007; Elhalwagy et al., 2008 and Muthuviveganandave et al., 2011 showed that it may occur hemorrhage, inflammatory cell infiltration. Thangevel et al., 1994 investigated that toxic effect of an organophosphate pesticide dimecron and acarbamate fungicide cumin on the histopathology of liver showed that protrusion of nuclei and destruction of hepatocytes. Sivapiriya et al, 2006 reported that acute and sub-chronic exposure to Dimethoate alters the antioxidant status and the histology of the liver in the mice. Persis and Kalairasi, 2001 showed the evidences of liver damage like hypertrophy, disintegration of hepatocytes showing different sizes of nuclei, lymphocytic infiltration, hemorrhage and sinusoidal blood congestion. Cholinesterase is important enzyme in the body and it's activity has been traditionally monitored as a biomarker of organophosphate pesticide exposure. The rats when exposed to dimethoate, showed the significant decrease in liver cholinesterase activities and effect on esterases. Organophosphate pesticides are known as cholinesterase inhibitors (Ware, 1983; Ecobichon, 1991). Some Physicians noticed that cholinesterase readings helpful for detecting the

early effects of occupational organophosphate poisoning in human beings.

Present study demonstrated that exposure to organophosphate pesticide, dimethoate lead to changes in histopathology of hepatic tissue, it could be possible that prolonged exposure may lead to such disease like chronic liver failure or acute liver damage.

The kidneys are most important organ in the body as they remove waste products from the body and maintain homeostasis in the body. Kidneys are most sensitive to external factors which might be able to produced histopathological change and functional deficit also. The histopathological examination of kidney tissues in mice treated with dimethoate showed Tubular degeneration, glomerular degeneration, infiltration, hemorrhage, Infiltration, Tubular widened lumen, glomerular shrinkage, Vacuolation, swollen proximal convoluted tubule, swollen lining of Bowman's capsule, compressed blood vessel. These results are agreed with Khogali et al. (2005). Kerem et al., (2007) and Afshar et al., (2008) they reported tubular dilation, hemorrhage, hydropic degeneration and moderate congestion in the cortical male rats exposed to some organophosphate pesticides.

Also Al-Sharqi et al., (2012) reported large haemorrhagic areas, congested blood vessels, lobulated glomeruli, degenerative changes and infiltration in kidneys of mice treated with insecticide (actara). Present study demonstrated that exposure to organophosphate pesticide, dimethoate lead to changes in histopathology of Kidney, it could be lead to such disease like kidney failure or damage.

The blood is important body fluid in humans and it brings oxygen and nutrients to all part of the body via circulatory system. The results of this study showed that the hemoglobin and hematocrit values were decreased as compared to control. Bhatnagar (1980) and Ray (1992), reported that the effect of organophosphorus pesticides on the hemoglobin (Hb) of several workers. The pesticides leads to development of anemia due to interference of pesticide poisoning in hemoglobin synthesis (Betrosin 1995). Elias (2010) showed that dimethoate affect on the blood parameters, Hb and RBCs values significantly decreased and ESR value increased when compared with control Rabbits

#### CONCLUSION

The results of the current study clearly demonstrate that organophosphate dimethoate is capable of inducing dose dependent histopathological and hematological changes in liver and kidney of exposed mice. According to above these results, it is suggested that dimethoate exposure might cause hazardous effects to man and environment.

#### ACKNOWLEDGEMENT

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# STRANGULATED MECKEL'S DIVERTICULUM-A RARE PRESENTATION OF AN UMBILICAL LITTRE'S HERNIA

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## ABSTRACT

*Meckel's Diverticulum is the most commonly diagnosed congenital anomaly of the intestine and is a form of embryonic remnant with incomplete omphalomesenteric canal obliteration. Herniation of this leads to a Littre's hernia and in itself is a very rare phenomenon. Here we present a case of strangulated Meckel's diverticulum in an umbilical hernia manifesting as an acute abdomen with shock. The patient was taken up for exploratory laparotomy and the intestine was found to be viable which improved with oxygen and humidification. The defect was extended and the contents were reduced with primary closure of the defect. The postoperative period was uneventful and the patient was discharged after complete intestinal recovery.*

**KEYWORDS:** - Littre's hernia, Umbilical hernia, Strangulation, Resection and Anastomosis.

## INTRODUCTION

Meckel's diverticulum affects approximately 0.3-3% of the population with a male predominance of 2:1. It is a true diverticulum with full-thickness histology and is mainly located on the antimesenteric side of the ileum. It is usually located 30-90 cm from the ileocecal junction<sup>[1]</sup>. Majority of them remain asymptomatic and are usually detected incidentally during surgical procedures or radiological scans. They usually remain asymptomatic until they contain ectopic heterotopic tissues. This makes the diverticulum functional and warrants treatment. However, the protrusion of a Meckel's diverticulum through a ventral abdominal wall hernia is an exceptionally rare scenario. To the best of our knowledge, it has been reported only twice in the past. Our case would be the third case in the medical tapestry and would thus increase the awareness of clinicians for this rare entity.

## CASE PRESENTATION

An 85-year-old male, with no known cause of any medical comorbidities, presented with complaints of a slow progressive swelling in the umbilicus for 1 month. The swelling was associated with abdominal pain, vomiting, and obstipation for 2-3 days. The abdominal pain was moderate in intensity in the umbilical region, colicky in type and worsened on food intake. The patient had 7-8 bilious vomiting episodes per day with 200 ml in each episode, containing food particles, and was not blood-stained. The patient had a complete loss of appetite with obstipation for the same period of 2-3 days.

When examined, he was poorly built with mild pallor. The patient's vital signs were unstable with a pulse rate of 120 beats per minute. The patient had severe hypotension of 60/40 mm Hg and was started on inotropes. Initial blood gas examination revealed uncompensated metabolic acidosis with high anion gap lactic acidemia. The examination of the other systems was within normal limits. The abdominal examination was suggestive of a 3.2 cm umbilical defect with herniated irreducible small bowel with no cough impulse. Auscultation revealed no bowel sounds in the herniated content. Rectal examination showed collapsed rectum with no faecal staining. The patient had mild pallor with haemoglobin of 8.4 g/dl with normal liver and kidney function tests. The blood count showed a slight leucocytosis in 12340 cells with a differential count suggestive of a left shift. Abdominal x-ray was suggestive of dilated small bowel loops (Figure 1).

An ultra-sonogram of the abdomen suggested a 3.2 cm defect in the anterior abdominal wall. There was herniation of omentum and intestinal loops with intact vascularity and minimal cough impulse. The patient was admitted as a case of strangulated umbilical hernia. The patient was hemodynamically compromised with radiology showing no peristalsis and massive dilatation of the small bowel loops. Therefore an impending state of gangrene or perforation was anticipated and the patient was taken up for emergency exploratory laparotomy. Appropriate fluid stimulation and inotropic support were administered to the patient together with systemic antibiotics. Laparotomy revealed extensive



adhesions between the prolapsed contents and the edge of the defect in the abdominal wall. The herniated loops were released from each other. The constrictive ring at the site was dissected off the hernia sac and was extended 2 cm to a total of 5 cm. The viability of the strangulated content was confirmed after 10 minutes of 100% hyper oxygenation and warm salinization. Herniated loops were identified as ileal loops with an improving viable strangulated Meckel's diverticulum (Figure 2).

It was located on the anti-mesenteric side of the ileum at a distance of 45cm from the ileocecal junction. The contents were pushed back into the abdomen. Primary closure of the abdomen was performed with a plan to schedule a meshplasty as a second surgery after stabilization. Postoperatively, the patient was started on orals on the second day when he passed flatus and was slowly escalated to a normal diet by the 4th day. The patient improved symptomatically without any post-surgical complications and was discharged on postoperative day 8.

## DISCUSSION

Meckel's diverticulum is the most common intestinal abnormality that manifests in the innate period. It affects about 0.3-3% of the population<sup>[2]</sup>. Alexis Littre first reported it in 1700 as a case of a herniated Meckel diverticulum following which it received the term of Littre's hernia<sup>[2]</sup>. It is a full-thickness diverticulum involving all the layers of the abdomen and generally follows the rule of 2. It is usually seen on the anti-mesenteric side of the small intestine. It is usually located anatomically at 30-90 cm from the ileocecal junction. It has a male preponderance of 2: 1 and a length of approximately 2 inches or less<sup>[1]</sup>. These patients are usually asymptomatic until they achieve functional status with the presence of heterotopic ectopic intestinal mucosa, resulting in complications. Generally discovered during surgical procedures and radiological examinations, symptomatic cases constitute a reference minority of all cases. It usually masquerades in the form of acute abdomen<sup>[3]</sup>. It is predominantly seen in paediatric cases below the age of 2 years which amounts to a staggering proportion of 50%<sup>[4]</sup>.

Presentations may vary in the form of bleeding which is the most common in functional types. Intestinal obstruction is the second most common adult scenario. In addition, it might also go for acute diverticulitis, incarcerations, strangulations, and perforations with its predominance reported primarily for functional types<sup>[3]</sup>. Anatomical obstruction is usually caused by the omphalomesenteric bands, diverticulitis, intussusception, and volvulus in paediatric cases<sup>[4]</sup>. On the other side, rare cases of internal herniation and prolapse through an abdominal wall defect have been reported in adults<sup>[5]</sup>. It has been reported that Meckel's diverticulum is inguinal 50% of the times, femoral 20%, omphalic 20%, and others adding up to less than 10%

which includes the umbilical types<sup>[6]</sup>. Littre's hernia is itself is a rare entity and to become complicated in the form of incarceration or strangulation is even rarer.

Preoperative diagnosis is usually impossible as most of the cases are incidental detections. Nevertheless, ultrasound or computed tomography of the abdomen shows secondary changes<sup>[7]</sup>. In addition, nuclear scanning with a 99m pertechnetate scan can reveal a Meckel's with heterotopic ectopic mucosa within. However, in case of complications, a prep scan with CECT may help with the diagnosis, as documented in the cases of incarcerated Littre's hernia<sup>[2]</sup>. In our case, as the patient presented to us in a state of hypotensive shock with lactic acidemia, it favoured progressive intestinal gangrene. Initial abdominal X-ray was suggestive of acute obstruction. The patient was immediately shifted for emergency laparotomy and a preoperative confirmation scan was not deemed necessary at that point of time.

The management of an incidentally detected Littre's is debatable as demonstrated by Soltero and Bill. They suggested that prophylactic removal of an asymptomatic diverticulum can rarely be justified<sup>[8]</sup>. However, a symptomatic Littre in the form of incarceration or strangulation must be treated as quickly as possible. The usual treatment for strangulated Littre's is a wedge resection or intestinal segmental resection followed by primary anastomosis<sup>[9]</sup>. However, a non-operational management trial can be administered to the intestine if intraoperative 100% hyper oxygenation and warming improves vitality and perfusion to the affected segment.

In our case, the strangulation was on the brink of impending gangrene and the patient had lactic acidosis. However, the bowel perfusion improved after the above-said manoeuvres, and hence no resection was done. The bowel was reduced back into the abdomen. The abdominal defect can be primarily closed with or without an on-lay meshplasty. In case of incarceration and strangulation or the presence of significant peritoneal contamination, meshplasty is relatively contraindicated<sup>[10]</sup>. A mesh can significantly increase the rates of intra-abdominal sepsis and is hence avoided. If the hernia recurs or if a second surgery is required, the abdominal wall defect can be repaired with mesh.

## CONCLUSIONS

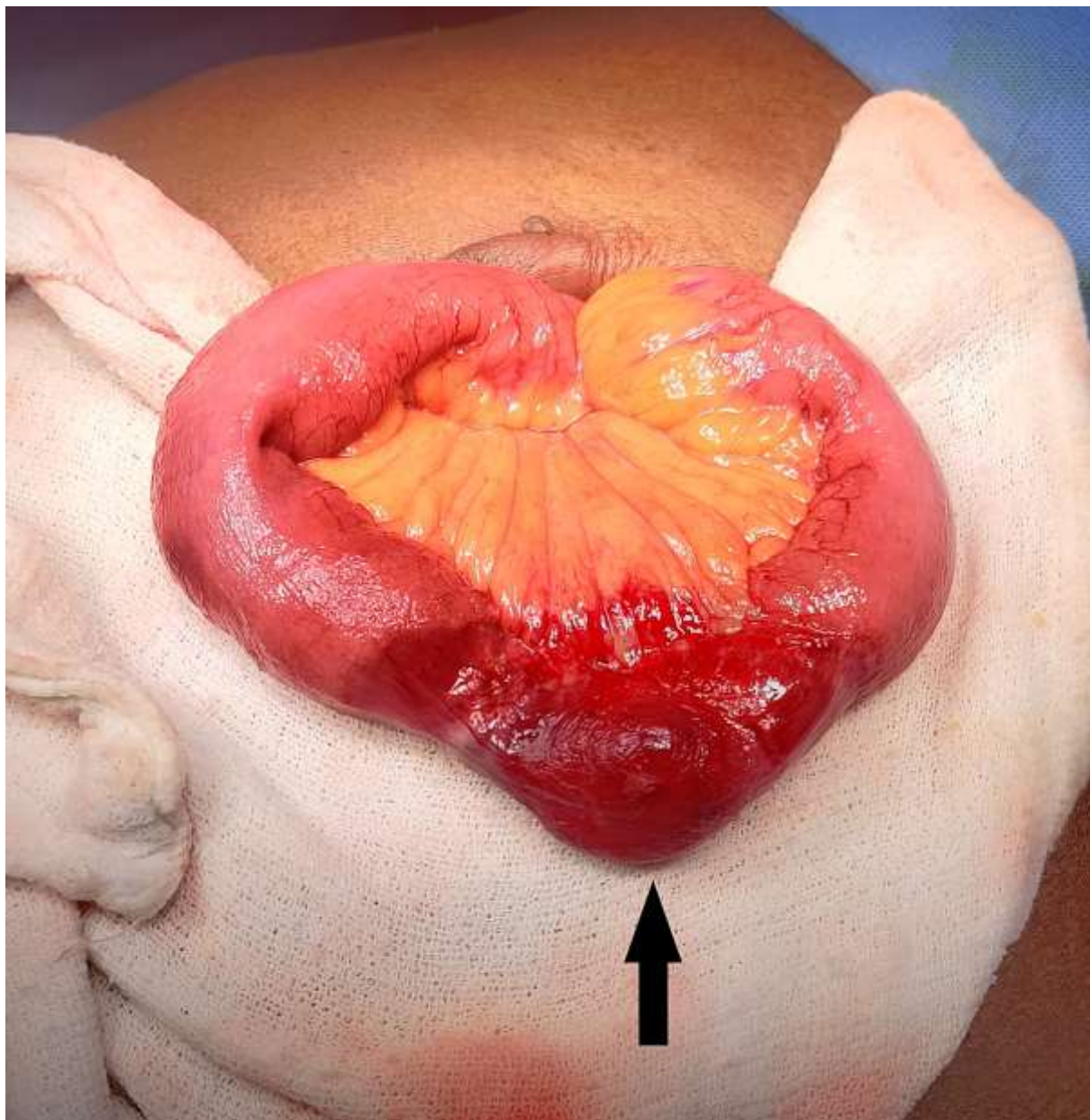
In a nutshell, we present one of the rarest cases of Littre's hernia presenting in an umbilical herniation. Although most cases are random, asymptomatic and do not justify intervention, clinicians should maintain a high risk of suspicion for an apt diagnosis. It's a common masquerader in the spectrum of acute abdomen. Henceforth a rapid diagnosis and optimal surgical intervention in a complicated Littre is expected and leads to a favourable outcome.



**FIGURES**



**Figure 1: Abdominal X-ray showing dilated small bowel loops (black arrows)**



**Figure 2: Intraoperative photo showing the strangulated Meckel's diverticulum (black arrow)**

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# VOICE ASSISTANT – AN ARTIFICIAL INTELLIGENCE SPEECH RECOGNITION MODULE THAT TRAINS THE MACHINE TO PERFORM TASKS USING SPEECH RECOGNITION

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## ABSTRACT

*In the technological advancement, Computers are playing major role. The field is expanding exponentially. Artificial intelligence is the one of the widespread branch of computer science deals with building intelligent systems. AI is a bigger concept in Computer Science. It has various subsets, some of the notable subsets are Machine Learning, Deep learning, Robotics, Natural processing, Expert Systems, Speech Recognition and Machine Vision.*

*The speech recognition is the one of the concept of Artificial Intelligence. This manuscript addresses on training the machine to accept the commands through speech. System accepts vocal instructions and performs the functions.*

**KEYWORDS:** Speech Recognition, Machine Learning, Supervised Learning, Unsupervised Learning, Natural Language Processing.

## 1. INTRODUCTION

Intelligence is the ability to think, calculate, reason and learn from past experience, to solve the problems and to adapt to new situations.

This manuscript specifically trains the computer system to accept commands by recognising the voice.

## 2. RELATED WORK

There are four types of learning in Artificial Intelligence and they are supervised learning, unsupervised learning, semi-supervised learning and reinforcement.

To develop the intelligent system, the python language is used to process the natural language processing.

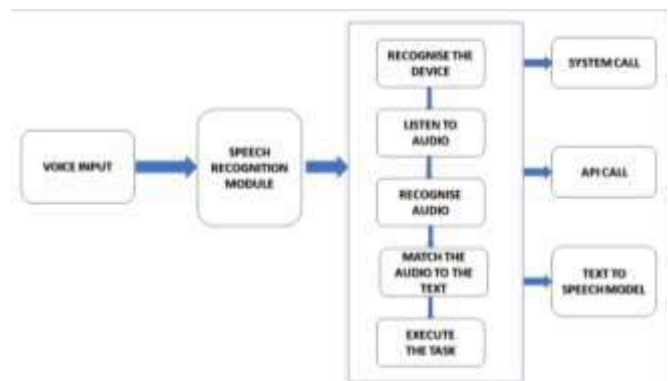
## 3. METHODOLOGY

The set of predicates defined in the system so that system can learn and give the predicted output.

The designed module addresses the following issues:

- Playing Song on YouTube.
- Search in Wikipedia
- Search in Google
- Opening of installed application
- Reading News Paper
- Showing current date and time of the system.
- Conducts interactive sessions like Jokes and asking various questions etc...

## 4. VOICE ASSISTANT WORKING MODEL



## 5. SAMPLE CODE OF SPEECH RECOGNITION MODULE

```

import speech_recognition as sr
import pyttsx3
import pywhatkit
import datetime
import wikipedia
import pyjokes
import webbrowser
import os
listener = sr.Recognizer()
engine = pyttsx3.init()
voices = engine.getProperty('voices')
engine.setProperty('voice', voices[1].id)
  
```

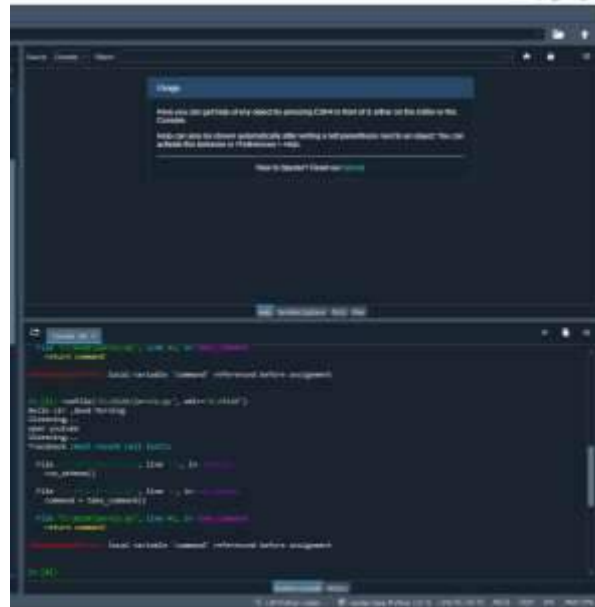
```
def talk(text):  
    engine.say(text)  
    engine.runAndWait()  
def wish_user():  
    hour=datetime.datetime.now().hour  
    if hour>=0 and hour<12:  
        talk("Hello sir,Good Morning")  
        print("Hello sir ,Good Morning")  
    elif hour>=12 and hour<18:  
        talk("Hello sir ,Good Afternoon")  
        print("Hello sir ,Good Afternoon")  
    else:  
        talk("Hello sir,Good Evening")  
        print("Hello sir,Good Evening")  
wish_user()
```



SCREEN SHOT OF SPEECH RECOGNITION MODULE

Machine is trained through the code and the voice input is converted in to natural language and further it checks for the predicates defined in the code, if there is a match, the system executes the command.

## 6. OUTPUT



## 7. CONCLUSION

The machine can be trained according to the user needs. If the dictionary of the system is increased exponentially machine can process natural language, further it can be trained through the past experience.

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# A STUDY OF MENSTRUATION AND STRESS: THE BIOLOGICAL AND PSYCHOLOGICAL OVERVIEW ON MENARCHE AND MENSTRUAL DISORDERS

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## ABSTRACT

*This study explores the relationship between Menstruation and stress though, the average menstrual cycle of a woman is 28 days however anything from 25 to 35 days is assumed to be normal. Slight changes from month to month are familiar but the menstrual cycle should generally be the same every month. So throughout the whole month a feminine reproductive cycle fluctuate due to some internal and external elements. The sources of stress are infinite in reality; stress is deliberated to be a common reason of missed or late menstrual periods. The body's response to stress contains changes in the levels of many hormones it distresses hormone balance and many other processes in the body, psychological stress can also interfere with the menstrual cycle. So a missed period may basis of stress, or perhaps its stress that's triggering irregular periods among women. Hence this study exhibits the intercorrelations between menstruation and stress. Factors those are prominent for menstrual problems and their alleviation as well so the current study suggests that an effective coping mechanisms and tools decreasing the level of stress may aid body to return to a normal menstrual period.*

**KEYWORDS:** Menstruation, Menstrual disorders Ovulation, stress.

## MENSTRUAL CYCLE AFFECTS BEHAVIOURS

Throughout the month hormone levels fluctuate, there are going to be consistent variations in other hormones that are unquestionably going to affect feelings, thought processes as well as physical well-being. Regulation of menstrual periods is controlled by a complex hormonal balance. Similarly, the body's reaction to stress comprises changes in the levels of many hormones. Because it affects hormone balance as well as many other processes in the body, psychological stress can also interfere with the menstrual cycle. In fact, stress is reflected to be a common source of neglected or late menstrual periods. So the feminine reproductive system can be affected by stress too. In fact, for some women, stress may play a role in causing irregular or missed periods. As stress levels increase, there's a chance that menstrual period will temporarily stop, a condition known as secondary amenorrhoea.

In the world Menstruation among women is stigmatised. This disgrace put up because of old dogmas in uncleanness of menstruating women. It doesn't recognise what may have been the cause that enforced the righteous males to mention to menstruating women as 'unclean'. However all religions (apart from Sikhism) mention to menstruating woman as 'ritually unclean'. Across the sphere, females are continuously distress with concerns associated to hormones as well as menstruation. Dysmenorrhoea is one of the greatest

dominant menstrual problems throughout the adolescent period and can severely disturb women's everyday actions, even triggering some women to become bed-ridden (Rafique & Al-Sheikh, 2018).

However, individuals from diverse cultural as well as spiritual backgrounds observed Menstruation is over and over again as dirty or impure, and thus has turn into a depreciating feature of womanhood. Apart from physical risks, the concept that menstrual blood is contaminated and so a menstruating female places undesirable mental stress in some crisis and circumstances (Bhattacharjee, 2018).

Across the world the millions of adolescent girls and women experience the lives natural course of cyclical Menstruation. For womanhood, menstrual health is an essential part of overall health for the reason that, between menarche and menopause, most women menstruate and menstruation can have a major effect on the physical, mental, as well as social well-being. (Matteson et al, 2013).

While in India, menstruation is deliberated a natural occurrence, a gift from the God, and is reflected necessary as it gives womanhood. ( BhattR ,2005) . According to the World Health Organization (WHO) study, menstrual symbols are more common in Asian countries than in Western countries (Carr-Nangle et al, 2006).The most important characteristic of girls of their sexual evolution as well as development in the



course of puberty is the beginning of menstruation. A girl's first menstruation also known as her menarche is considered she is mature enough. At this phase, the first little drops of blood among girl offensively upsetting and mystifying. The cultural and familial attitudes and its understanding of impurity towards menstruation are therefore informed in this stage.

### THE BIOLOGICAL OVERVIEW ON MENARCHE

In the female reproductive system, the menstrual cycle is the regular or natural change that occurs specially in the uterus and ovaries, It is a natural phenomenon linking the release of blood from the uterus completes the vagina, arising at more or less fixed monthly pauses throughout the reproductive life of females which creates pregnancy conceivable by making the uterus for pregnancy and production of ovocytes. Thus, the menstrual cycle is directed by changes in hormone. Menstruation is a physiological process, which is linked with the capability to reproduce. The term "menstruation" originates from the Latin "menses" refer to moon, with mention to the lunar month and lasting also approximately 28 days long. Its onset profoundly fluctuate a young female's life. Menstruation has always been enclosed by altered perceptions all over the world. Today, there is some frankness on the way to menstruation, but variances in attitude still continue between different populations CronjeHS et al (1991).

### THE FOLLICULAR PHASE AND OVULATION

However, the follicular time of menstrual cycle activates on the day that start period and lasts for about 10 to 14 days. For the duration of this time, the hormone estradiol initiates to increase. Follicle-stimulating hormone, or FSH, is secreted; stimulating the production of follicles in the ovaries that contain eggs. In the follicular phase of their cycle females might show more brain activity the estradiol rising in the body can aid to compress the effects of the stress hormones adrenaline and cortisol. This hormone stimulates the release of an egg from the ovaries into the fallopian tubes for fertilization. Estradiol is existing in significant quantities around the time of ovulation, and it can work together with other hormones to increase libido. Estradiol makes insulin more effective, then the insulin says the body to release more testosterone and (testosterone is one of the hormones that regulate sex drive). While After ovulation, the empty follicle that once contained the egg begins to secrete the hormone progesterone to thicken the lining of the uterus and prepare it for the possible implantation of an embryo this is called the "Luteal Phase". cited by Acosta, J. (2012). Hence, Menstrual cycle of woman's typically follows a 28-day cycle and ends with the shedding of uterine lining leading to bleeding. Thus, Menstruation is considered a normal vaginal blood loss, to some extent blood as well as tissue from inside the uterus. It passes out of the body through the vagina that follows as a part of a woman's lifespan once a month. Every month, a woman's build makes for pregnancy. If no pregnancy happens, the uterus sheds its lining.

The first period is Menarche which generally initiates in the middle of twelve and fifteen years of age. Thus, the normal age of menarche is 12–15. They may sometimes start as quick as eight, and this beginning may still be normal. Menstrual bleeding continues 3 to 7 days, averaging 5 days. Menstruation ends arising after menopause which generally happens concerning 45 and 55 years of age. For the duration of the one to two weeks earlier to menstruation the common signs include acne, breasts tenderness, swelling, feeling fatigued, bad temper and mood fluctuations women report having a total of these indications. During their entire life, a woman menstruates for about 7 years. In this period women look many problems. The normal menstrual cycle specifies the appropriate working of hormones and suggests a strong hypothalamo-pituitary axis with an average uterus. On the other hand, a number of illnesses such sudden loss of weight, over-exercising, medical circumstances as well as even stress can delay with a woman's capability to experience a normal menstrual cycle.

### REVIEW OF LITERATURE

Bhavika Garg and Shikha Sharma (2020) studied Effect of academic stress on premenstrual syndrome the sample consisted of 60 students were taken from university with the age group of 18 – 25 years and the findings of the study revealed that there is positive association among academic stress as well as premenstrual syndrome those having severe level of academic stress has exposed severe level of signs of premenstrual syndrome whereas those with mild level of academic stress did not display the signs of premenstrual syndrome. Hence the study concluded that academic stress among the female students has the influence on the intensity level of premenstrual syndrome.

Aparajita Sharma, Aakriti Jain, Anupreet Kaur Arora (2017) investigated the relationship between Menstrual Distress And wellbeing among women. The study consisted the sample of 100 females. Hence the outcomes of the study determined that in women menstruation sources lot of distress, disturbances in their lives she experience psychological as well as physical symptoms leading to a decrease the wellbeing as well as quality of life.

Ruchi Singh, Renuka Sharma, Heena Rajani (2015) investigated the Impact of stress on menstrual cycle. These researchers took total 100 female (50 medical and 50 non-medicals) students and the results shown that the association between the level of stress and presence of premenstrual symptoms was perceived Significant, therefore passage of clots, painful periods as well as the occurrence of premenstrual symptoms was associated with higher stress. Hence likened to non-medical students the number of medical students suffered from higher premenstrual signs. The study also concluded that there is no dissimilarity in the level of perceived stress among non-medical and medical students.

Shahida Nagma et al., (2015) investigated To Evaluate the Effect of Perceived Stress on Menstrual Function. They conducted their study on 100 female undergraduate students



from a medical college. Hence the results concluded that menstrual irregularities related with high levels of stress.

## THE PSYCHOLOGICAL OVERVIEW ON MENARCHE

While, according to the World Health Organization, "health" is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." (WHO, 2019). A woman's general good health is displays ordered menstrual cycle. Abnormal cycles of females with uneven and weighty bleeding, not only disrupt one's professional as well as private life but also involve assessment of a major damaging influence on prospect reproductive and general health. Abnormal menstrual cycles, with uneven as well as hefty bleeding, may have a harmful influence on females' education (Adams Hillard & Deitch, 2005). The menstrual period effects diverse day to day life aspects such as academic achievement, physical condition, behavioural pattern, diet, exercise, mood as well as sleep pattern. This is a period (menstrual) which is very tough and severe time in the life of females, it is a natural sensation. The Concept of Menstruation or the word menses originates from the Latin meaning "months". The term "menstruation" arises from ancient French menstrual, which derives from Latin menstrualis, meaning "monthly," particularly "of or having monthly courses.

## STRESS IMPACTS MENSTRUAL CYCLE

In psychology stress can be defined as any type of change that causes physical, emotional or psychological strain. It is a body response to anything that requires attention or action. Each person experiences stress and it isn't inherently bad, although research suggests that depending on the type of stressor (i.e. the reason for stress) and the timing of the stressor, it can cause changes to a person's menstrual cycle. Stress is a normal psychological and physiological reaction to changes in someone's environment, which could be emotional, physical, social or cultural. Although the association between stress and periods are not much people are known about. On the other hand, stress undoubtedly plays a role in overpowering the functioning of the hypothalamus (part of brain), which panels the pituitary gland (the body's master gland) which, in turn, controls the thyroid as well as adrenal glands and the ovaries; they all work together to manage hormones. Hence, the dysfunction of Ovarian may central to problems with estrogen production, ovulation, or other reproductive processes. Estrogen is an important hormone that helps build the uterine lining and prepares the body for pregnancy. If the ovaries aren't working properly, side effects may involve the menstrual cycle, including missed periods or irregular periods such as anovulation (i.e. no ovulation), or amenorrhea (i.e. absence of menstruation) Dysmenorrhea (i.e. painful menstruation).

The hypothalamus is the part of the brain that controls period. When hypothalamus working properly it releases chemicals that stimulate the pituitary gland, which then stimulate the ovary to release the period-inducing hormones estrogen and progesterone. Enter cortisol, which is a hormone

the body makes when an individual is under stress. It can wreak havoc on the hypothalamus, pituitary, ovary interaction and result in irregular periods. When under stress, the female body produces cortisol. Depending on how the body allows stress, the cortisol may lead to delayed or light periods — or no period at all (amenorrhea). If stress continues, an individual can go without a period for a long time. There's a range, the lighter stress may have lesser impacts, as well as heavy stress may have more intense impacts that last longer, The higher the cortisol levels, the more likely to have missing or irregular periods. If constantly stressed out, there may be more prone to problematic periods. However, Sometimes thyroid issues might interfere with hypothalamus, pituitary, ovary interactions resulting in disturbance of the menstrual cycle, these conditions are generally easy to fix. Hence, Polycystic ovary syndrome (PCOS) is another condition that can impact the menstrual cycle due to a hormonal imbalance. Hence so the first step is to rule out conditions that could be causing the period changes. If periods continue to skip, the body will have a hormonal imbalance. Cited by Swapna Kollikonda, (2020).

## FIVE MAIN WAYS THAT STRESSFUL CIRCUMSTANCE AFFECT THE MENSTRUAL CYCLE

1. The PMS gets worse  
Several women fight with PMS and from time to time it gets so bad that it can consequence in heavy menstrual bleeding, anxiety attacks, and bouts of depression. Throwing stress and anxiety into the combination of fluctuating hormones and mood swings isn't exactly a recipe for success. If observed that the PMS has got a lot worse, then there is a requirement to take a serious look at the stress levels and triggers life in order to be capable to restore normality.
2. The postponement or delay in ovulation  
When women are stressed lead up to ovulation, it makes is truly challenging for certain hormones to be activated and released on schedule. This will outcome in postponement or delayed ovulation, meaning the period will not be on predictable time. Delayed ovulation also poses a significant challenge to women who are design to get pregnant, particularly if they have fight back with fertility issues in the previous.
3. A longer cycle  
No one desires their period to last longer than is absolutely essential; however this is exactly happen as a side effect of stress. When women are going through delayed ovulation, she will inappropriately possible have to suffer a longer cycle than normal, and also experience a heavier flow. The onset of next cycle would also be late.
4. The period ends completely  
Stress conditions can have an influential effect on the menstrual cycle containing the amount of bleeding; the level of cramps, and, in some cases, the period could stop altogether. Hence dealing with a reduced appetite as a



consequence of stress or anxiety, as being underweight can also cause the period to stop.

5. A woman will not ovulate

Although will still bleed each month, won't actually be ovulated. This can be an enormous issue if trying to conceive, as it may look like have period as usual, yet a woman will not be able to get pregnant. One of the most trustworthy methods to figure out, whether ovulating or not, is to chart the cervical mucus to see if it peaks or not; if it doesn't, then might not be ovulating.

Hence, Menstruation is not only restrained to the physical pain as well as symptoms but it distresses the mental health of female adolescents also. Both longer duration of menstrual bleeding and irregularity of the cycle are related with major depression. Hence, Menstrual health not just the absenteeism of illness or sickness, in relation to the menstrual cycle but it is a state of whole physical, mental, as well as social well-being. Menstrual hygiene management (MHM) needs easy right to use to safe, private water and sanitation facilities, along with suitable menstrual resources and supplies, discreet disposal as well as waste management and basic facts on menstrual hygiene in perspectives of displacement (Sommer et al., 2018).

The neuroendocrine structure shows a main part in continuing homeostasis as a consequence of stress and thus effects endocrine and reproductive system. As an outcome of hormonal variations such as activation of the corticotrophin-releasing hormone, the normal menstrual cycle can be affected (Eva et al., 2015).

Based on a biopsychosocial model, "menstruation-related signs are affected not only by biological factors such as hormonal disorders and lifestyle (sport and nutrition) but also by environmental and social factors such as contact with peers, family and colleagues and menstrual and psychological factors such as anxiety, depression, and stress" (Davydov et al, 2005). According to Flug et al 2000 one of the greatest and common disorders in women are menstrual symptoms that comprise irritability, tender breasts, low back pain, skin outbreaks, tiredness, palpitation, social isolation, nausea and vomiting, abdominal pain (cramps) and general weakness (Zegeye et al, 2009) that arise before, during, or after menstrual period.

A range of menstrual-related complaints or menstrual disorders, often experience by College-going young females including

- Dysmenorrhoea
- Menorrhagia
- Irregular Menses
- Polymenorrhea
- Abnormal Vaginal Bleeding
- Amenorrhea
- Oligomenorrhea
- Irregular Menstruation
- Pre- Menstrual Syndrome (PMS).

1. **Dysmenorrhoea**

Dysmenorrhoea is the medical term for painful menstrual periods which are caused by uterine contractions. Menstrual cramps or Dysmenorrhoea with common causes such as heavy flow, passing clots, uterine fibroids or endometriosis.

2. **Menorrhagia**

Menorrhagia is the medical term for menstrual periods with abnormally heavy or prolonged vaginal bleeding with menstrual cycle.

3. **Polymenorrhea** : is a term used to describe a menstrual cycle that is shorter than 21 days. A normal menstrual cycle is between 24 and 38 days long. Polymenorrhea is just one form of abnormal uterine bleeding.

4. **Amenorrhea**: is the absence of monthly menstrual periods. The absence of periods can have causes that are not due to underlying disease example includes menopause, pregnancy, use of birth control, medication side effects, delayed puberty and stress.

5. **Oligomenorrhea** : is when a woman often don't get periods for 35 days or more and as a result have only four to nine periods each year.

6. **Pre- Menstrual Syndrome (PMS)** has a wide variety of signs and symptoms including mood swings, tender breasts, food cravings, fatigue, irritability and depression its estimated that as many 3 of every 4 menstruating women have experience some forms of Pre- Menstrual Syndrome or which is a cluster of troublesome symptoms like backache, fatigue and irritability that develop 7-14 days before the onset of menstruation and subside when menstruation starts.

7. **Irregular Menses /Irregular Menstruation** are missed, delayed or erratic periods or abnormal bleeding patterns.

8. **Abnormal Vaginal Bleeding** : may be minor but it could signal something more serious or even life threatening such as benign growth like a polyp or fibroid, a bleeding disorder, an infection or an injury .it's rare but spotting can be a sign of cancer.

Thus, Psychological disorders may stimulate corticotrophin releasing hormone (CRH) from the nervous system, go along with by raised cortisol and prolactin, causing in symbols of menstruation (Lee et al, 2009). "Psychological factors that occur before and during menstruation can cause amenorrhea, cycle irregularity and increased menstrual cycle length which are important health-related problems in women" (Allsworth et al., 2007).

Females in stress pay slight attention to how often sanitary cloths / pads should be changed in a day, proper



disposal and washing of cloths as well as the heightened need of washing their genitalia (Krishnan & Twigg, 2016).

#### **Future suggestion / Methods to Relief Menstrual Pains**

According to Melissa Conrad Stöppler, 2012 there are some tips for relieving Menstrual Troubles

##### **1. Practice Good Sleep Hygiene**

Sleep quality has an effect on menstrual symptoms and many health conditions. Practice good sleep hygiene to keep painful menstruation symptoms at natural harbour. Getting adequate sleep to promote overall health will help to manage monthly symptoms associated with menstrual cycle.

##### **2. Taking a warm bath.**

A warm bath by adding some luxurious bubble bath or fragrant essential oil may be just the thing that needs to soothe pain and relax tense muscles. Start taking a bath in the evening is a great activity to help wind down and sleep better. A warm shower also can produce similar benefits and reduce pelvic pain and other symptoms.

##### **3. Reach for Heat**

Applying a heating pad, heat wrap, or hot water bottle to abdomen works wonders for relieving menstrual cramps. The continuous application of heat may work as for the relief of dysmenorrhea pain. Heat helps muscles relax.

##### **4. The Sunshine of Vitamin D**

Vitamin D reduces the production of prostaglandins. As Cramps linked with dysmenorrhea can be disabling. Painful cramps associated with dysmenorrhea happen due to increasing levels of prostaglandins, which cause the uterus to contract. These contractions cause the shedding of the uterine lining.

##### **5. Sipping chamomile**

When women menstruate the sipping chamomile tea may aid decrease cramps. Chamomile tea is full of anti-inflammatory substances that inhibit prostaglandins. Sipping chamomile tea inhibits pain-causing prostaglandins and enhances menstrual flow to ease period symptoms. Prostaglandins are made by cells in the endometrium of the uterus. These cells release prostaglandins during a woman's period, provoking muscle contractions of the uterus, pain, and cramps. Prostaglandins in the bloods are responsible for nausea, vomiting, diarrhea, and headache during the menstrual period.

##### **6. Hydrate**

Primary dysmenorrhea or menstrual cramps are a painful part of life for lots of females. Consumption of more water may benefit comfort inflating, which makes period symptoms worse. Especially during period the habit of drinking 6 to 8 glasses of water per day, may help.

##### **7. Fennel**

Extract may be a good alternative for the approximately 10 percent of women who can't do their normal activities for 1 to 3 days during their periods due to severe menstrual cramps.

##### **8. Exercise for Period Cramps**

An easy home remedy for menstrual pain is to perform light exercises that engage the core. Many women find that exercising or Yoga aids relieve menstrual cramps. Exercise releases endorphins, brain chemicals that promote well-being. Whether to enjoy walking, running, or swimming, it's safe to participate in all of these activities during menstrual period. Taking deep breaths may also help women who have primary dysmenorrhea. Physical exercise, receiving peaceful sleep, having a nutritious or healthy diet, conferring with family as well as friends and having healthy social activities can possibly decrease the effects of stress on individual's health Cited by Maegan Boutot, 2016.

##### **9. A Sprinkle of Cinnamon and Ginger**

The women didn't report any side effects related with taking cinnamon pills or using Ginger. Try a sprinkle of cinnamon and Ginger on cereal or cup of hot cocoa. It can't hurt and it might help cramps and other period symptoms.

##### **10. The Anti-Cramp Mineral: Calcium**

Adequate calcium intake may also help relieve menstrual cramps. Calcium is a nutrient that everyone needs, but most women don't get enough. The need of calcium not just for healthy bones, but for proper function of the heart, muscles, and nervous system.

##### **11. More Magnesium**

Magnesium is an essential mineral of the body needs to fuel more than 300 enzyme systems. To build muscles, proteins, and healthy bones, the body needs magnesium for the proper function of muscles and nerves, to regulate blood pressure, and control blood sugar levels. You need magnesium to build DNA and RNA and to manufacture glutathione, the master antioxidant of the body. Magnesium may also help alleviate symptoms of PMS.

**12. Massage:** The natural ways for managing stressful situations is the: Massage through the usage of cannabis oil or CBD oil for stress several individuals have been capable to significantly lessen stress as well as anxiety.

Hence, Findings effective coping mechanisms and decreasing level of stress may aid body to return to a normal menstrual period. Speaking with a therapist/ physician or doctors or feasibly taking anti-anxiety drug cans lesser stress as well as help to manage symptoms of stress and allowing the body system to reappearance to regularity cited by Melanie Winderlich, 2010.

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# IMPLEMENTING VALUE ENGINEERING FOR STRUCTURAL WORKS DURING THE DESIGN PHASE FOR A RESIDENTIAL PROJECT

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## ABSTRACT

*To cut costs without sacrificing quality or performance, value engineering has been found to be a good way to do it. Value engineering is used a lot in construction projects as a way to make decisions about what to do. Value engineering has a lot of benefits and can be used in a lot of different ways, which is why more and more businesses are including the idea of value engineering in their projects. It is well accepted that value engineering should be undertaken early in the life of a project (feasibility and planning phases) in order to maximize the benefits. Some projects fail to address the notion of value engineering and, as a result, subsequently seek to achieve the project specifications in terms of cost and time but fail to do so. The purpose of this work is to shed light on how to incorporate value engineering into the structural component/item of work of a building construction project by examining a case study of an ongoing building construction project in Kolkata during the design phase and evaluating the cost savings that can be realized by substituting alternative items or components without sacrificing quality or performance.*

**KEYWORDS:** Value engineering; Construction Project; Design Phase; Structural work; Pareto Law; Cost to worth ratio; Time and cost.

## 1. INTRODUCTION

Value engineering is a multidisciplinary approach to problem solving that aims to maximize the utility of any product, process, service, or organization in order to meet its intended function or goal (Sharma and Belokar 2012). In order to get the greatest value out of a project, value engineering is used to help make decisions based on a systematic multi-discipline approach and function measurement. This may be done by determining the functions that are necessary to achieve the desired goal value. Additionally, value engineering can perform these duties at the lowest possible cost, with the greatest degree of quality consistency, and with the required performance (Ilayaraja and Zafar Eqyaabal 2015). Total project expenses can be decreased if we can uncover new alternatives that perform the same duties and deliver the same level of performance, if not better, at the lowest feasible cost without jeopardizing the project's quality or other criteria. Value engineering capacity to assist in decision-making throughout the design phase is one of its benefits, which helps to ensure that the cost-savings outcome is as ideal as possible (Joo and Park 2014). Approximately 28% to 30% of a project's overall cost is devoted to structural work. Thus, value engineering may be used to optimize the cost of structural work in a building project.

Therefore, this study is based on a case of a building construction project team that had already completed the feasibility, planning stages and was working on structural designs in the design phase. Following the project's goals, the structural details and drawings were presented to the owner. The client was disappointed after reviewing the outcomes since the designs turned out to be more exorbitant and surpassed the anticipated budget. To overcome this situation, the client hired a value engineering team to implement the notion into their project and see how it would affect the final outcome. Experts in value engineering found that previous team members had no idea what value engineering was and had not included it into the project at an early stage. Thus the present study objective is to implement value engineering at the design stage and analyze the cost savings that may be gained by replacing alternative materials or structural components for those originally planned or specified, without sacrificing quality or performance.

## 2. BACKGROUND OF VALUE ENGINEERING

The phrase "Value Engineering" refers to the process of lowering the cost of products or services via the use of engineering techniques (Eneyo and Shah 2018). These solutions aim to provide a minimum level of quality at the lowest feasible



cost. Value Engineering's planning methodology has always been driven by the function needed and the value achieved. As a consequence, value engineering is not considered to be (Weni Harini and Widyarti 2018):

- Cost-cutting procedure, reducing the project's cost through unit price compression or by sacrificing quality and attractiveness
- Design review, which entails revising the outcome of an existing design
- All designs must adhere to certain specifications, but it should not become mandatory for all designers to do value engineering projects
- Resolve mistakes resulting from planning errors
- Cost-cutting measures include decreasing the appearance and quality
- Value engineering aims to deliver at least the same level of quality as anticipated at the lowest possible cost.

Value engineering is a professional team's job to assess and increase the value of goods, designs, structures and technologies as well as services. In addition to addressing issues and decreasing costs, value engineering has the ability to

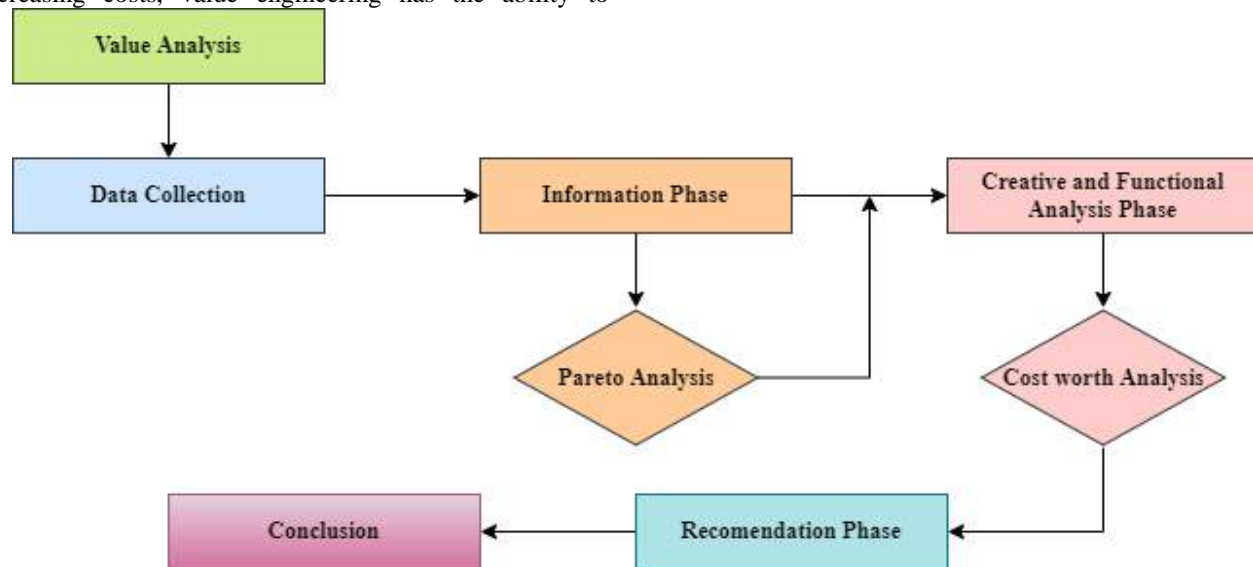


Fig 1. Job Plan for implementing Value Engineering

### 3.1 Value Analysis

Value analysis is analyzing and assessing existing products in order to enhance their functionality or reduce their cost. Value analysis is a subset of function analysis, in which a product is broken into components that are later reviewed. A step-by-step plan enables to evaluate several aspects of a product, including its functionality, alternate components, design, and cost.

### 3.2 Primary and Secondary data collection

Primary data are those that researchers obtain directly and include the following: mounted volumes volumetric calculation.

increase performance or quality standards defined by the project. Based on the link between function, quality, and cost, the following options for value engineering may be used in the design process (Miladi Rad and Aminoroayaie Yamini 2016):

- Cutting costs without sacrificing functionality or quality
- Enhanced value or quality while keeping the price unchanged
- Increasing the expense to increase the function and quality
- Enhancing quality and functionality while keeping the price low

### 3. METHODOLOGY

This study is focused on the case study of a residential building project in the state of West Bengal. To stick to the objective of this research, value engineering is implemented only for the structural works of this project. The research approach used in this study is shown in Figure 1.

Secondary data is information that has been obtained by researchers from previously existing sources and is formatted as follows: Budget Plan for the building that has been roused, specifications or quality of the material that has been determined that the normal poured into work plans and specifications and pictures for construction previously agreed upon by the owner.

### 3.3 Information Phase

The information phase collects the most information on the project, including background information, the project's potential for complexity, cost overrun parameters, and time



overrun parameters. The team conducts a function analysis (Using Pareto Law) and ranking of systems and subsystems' relative costs to identify probable high-cost areas and assist in determining a systematic strategy for controlling cost overruns and completing projects on schedule (Akhter and Reza 2021). As part of this investigation, all of the project's detailed designs and budgets, along with the bill of materials, were collected.

### 3.3.1 Pareto Law Analysis

The cost values that will be used in value engineering will be calculated using Pareto's Law, which will be applied to the data. Through which the value engineering team can determine if it is feasible to save money by altering the execution technique or by employing new materials, as well as to determine the budget for the whole building's workforce throughout the construction process.

### 3.4 Creative and Function Analysis Phase:

The Value Engineering team devises alternative solutions for the project to carry out the stated functions. In this step, each component is examined individually, and a list of feasible solutions to carry out the function is generated (Wao et al. 2018)

#### 3.4.1 Cost-to-Worth (C/W) Analysis:

Value is founded on the cost-to-worth concept, which describes the link between cost and worth. Equation 1 may be used to compute the cost-to-worth ratio. The high cost-to-value ratio suggests an area where a system might potentially save substantial money. A cost-to-value ratio larger than one implies that the organization has room to cut costs (Arumsari and Tanachi 2018).

$$\text{Cost - to - worth (CW)} = \frac{\text{Cost}}{\text{Worth}} \quad \dots\dots \text{Eq.1}$$

### 3.5 Recommendation Phase

**Table 1. Cost wise break down of each category**

Si No	Work Items	Cost (In Rs)	% of overall cost of project	Cumulative %
1	Structural Works	16,97,44,370	41.26%	41.26%
2	Architectural Works	15,12,40,330	38.63%	79.89%
3	Mechanical/Electrical Works	4,80,26,103	12.62%	92.51%
4	Miscellaneous Works	3,12,68,569	6.85%	99.36%
5	Preparatory work	35,21,638	0.64%	100%

As can be observed in Table 1, only structural and architectural elements account for about 80% of the entire cost of the project; as a result, it is beneficial to implement value engineering for these two categories of items. However, since the focus of the research is confined to just structural work, the authors have only used value engineering for structural work in their implementation. Following the completion of the first Pareto

The value engineering team conducts research on the ideas they've selected, developing descriptions and life-cycle cost estimates to accompany the proposals as official value engineering recommendations (Al-Yafei, Ogunlana, and Oyegoke 2017). Value engineering study begins with a concept and evolves into a practical solution through time. The process of development comprises a description of the pros and drawbacks of the offered solutions, as well as an evaluation of the recommended design, capital expenditures, and life cycle costs.

## 4. APPLICATION OF VALUE ENGINEERING FOR STRUCTURAL WORKS ALONE FOR THE PROJECT UNDER CONSIDERATION

### 4.1 Data Collection

**Building Data:** The project is located in the prime area of Kolkata, West Bengal. Project is residential scheme of G+23 floors, consisting 184 units of 3 BHK & 2 BHK. All the primary and secondary data regarding project designs, project history, project hurdles, and project cost were collected from the client.

### 4.2 Information Phase

Based on the information gathered during the first phase, provided by the client, the overall cost of the project was divided into five categories, with the cost breakdown of each category shown in Table 1. Value engineering employs the Pareto principle, which is used to assess the item of work with the greatest cost that has the potential to be studied in order to determine its value. This theory (Pareto Law), also known as the 80–20 rule, or "the law of essential few," "the law of factor sparsity," states that for many events, around 80 percent of the effect is generated by approximately 20 percent of the causes (machines, raw materials, operators, etc.). Only the cumulative cost of 80 percent will be further investigated via the use of value engineering techniques.

analysis on the whole project for all items of work, a second Pareto analysis was performed exclusively on the structural work to further determine which structural work items are truly influencing the cost and time. Detailed cost and Pareto analysis for the project's structural components are included in the following Table 2.

**Table 2 Recapitulation of Structural works Budget according to Pareto Law**

No.	Work Items	Cost	% Prices	% Cumulative
1	Slab	Rs. 5,89,68,123	35%	35%
2	Beam	Rs. 3,96,16,208	23%	58%
3	Column	Rs. 2,58,52,061	15%	73%
4	Wall Partition	Rs. 2,01,61,634	12%	85%
5	Staircase	Rs. 1,25,85,124	7%	93%
6	Footing	Rs. 87,42,928	5%	98%
7	PCC	Rs. 38,18,292	2%	100%

**4.3 Creative and Function Analysis Phase:**

Following a study of the Pareto Analysis only for structural items present in the existing design, substitute items that do not compromise the component's function were explored. Each item was carefully selected by comparing its various properties to those of the originally proposed items. The following components were substituted with the suggested

replacements as given in Table 3. When offering alternatives or replacements, the life cycle cost analysis should be performed. The LCC is defined as the total cost of ownership from planning to usage. A LCC comprises of the following components: investment, financing, operations, maintenance, replacement/repair, tax, and salvage value

**Table 3 Alternate suggestions**

No.	Category	Existing item in design	Proposed Alternative
1.	Slab	Cast-In-situ concrete Slab	Post tensioned Slab
2.	Beam	Conventional Beam	Precast Beam
3.	Column	Conventional Column	Precast Column
4.	Wall Partition	Conventional Wall Partition	Precast Wall Partition
5.	Staircase	Conventional Staircase	Precast Staircase

The LCC is calculated by converting the values of all the above mentioned elements to their current values. In terms of life cycle cost, Table 4 summarizes the results of current items of work and proposed

alternatives.

**Table 4 Comparison of Life cycle cost for existing and proposed alternatives**

No.	Structural item	Existing item in design (Rs)	Proposed Alternative(Rs)
1.	Slab	5,89,68,123	7,56,00,158
2.	Beam	3,96,16,208	3,41,51,904
3.	Column	2,58,52,061	2,26,77,246
4.	Wall Partition	2,01,61,634	2,24,01,816
5.	Staircase	1,25,85,124	1,87,83,768
	Total	15,71,83,150	173614892



#### 4.4 Cost-to-Worth (C/W) Analysis

The assessment of cost/value worth distinguishes value engineering (VE) from other approaches of cost reduction. Before any further alternatives can be considered, the primary goal of the project must be identified. Using an analytical method, the utility value (worth) of each subsystem or

component must be weighed against its predicted expenses. This technique may be used by the VE team to determine the most cost-effective way to design a function and ways to decrease or eliminate the expenditures without sacrificing performance. Table 5 highlights the cost-to-value ratios for the various options under consideration.

**Table 5 Cost to worth Analysis of proposed alternatives**

Sl. No.	Work Items	Alternative Selected	Existing Item Cost (Rs)	Proposed Alternative Cost (Rs)	Cost/Worth	Result
1.	Slab	Precast Slab	5,89,68,123	7,56,00,158	0.78	Unworthy
2.	Beam	Precast Beam	3,96,16,208	3,41,51,904	1.16	Worthy
3.	Column	Precast Column	2,58,52,061	2,26,77,246	1.14	Worthy
4.	Wall Partition	Precast Wall Partition	2,01,61,634	2,24,01,816	0.90	Unworthy
5.	Staircase	Precast Staircase	1,25,85,124	1,87,83,768	0.67	Unworthy

#### 4.5 Recommendation Phase:

A cost analysis was undertaken on structural work alone, comparing current items (that satisfied the Pareto criteria) to proposed replacements. The cost differential between the two groups is displayed in Table 6 in the first row, independent of cost-to-value analysis but incorporating all available options, and it is 9.93 percent more than the original design items which are

not at all a viable option.

Whereas the second row depicts the differences between the two groups, but only for those items (beams and columns) that merited consideration for value engineering based on a cost-to-worth analysis, with a cost difference of 5.65% less than the original design items.

**Table 6 Comparison of cost analysis**

Total Cost	Existing Items	Proposed alternative items	Difference in cost	% Difference
Total Cost without considering C/W	Rs. 15,71,83,150	Rs. 17,36,14,892	Rs. 1,64,31,742	9.93
Total Cost by considering C/W	Rs. 15,71,83,150	Rs 14,85,44,031	Rs. 86,39,119	5.65

## 5. CONCLUSION

Based on the value engineering analysis of the structural work in the analyzed scenario of the residential building project, it can be concluded that the value engineering analysis identifies only beams and columns as items of work that may be optimized. Through value engineering analysis, the percentage of cost reduced by incorporating precast beams and

columns is 5.65. This replacement saves roughly Rs 86,39,119/- on the whole project's cost which is quite a considerable amount to the client. Furthermore, additional research in terms of time or delay analysis should be conducted in order to determine how quickly the project can be finished with the replaced items for the final conclusion to determine if they can be adopted or not.



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# DIGITAL TECHNOLOGIES IN STUDYING ENGLISH AT UNIVERSITY: TRADITIONS AND INNOVATIONS

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## ANNOTATION

*The main direction of development of the modern system of education and teaching of foreign languages, in particular, is the system integration of digital technologies into the educational process. The evolutionary analysis of existing approaches to the issue of digitalization of foreign language learning presented in this study is the methodological basis of this study. The aim of the study is to develop a methodology for the formation of foreign language communicative competence in the process of using digital communication technologies in a non-linguistic university. The study of the evolutionary development of the principles of digitalization of the process of teaching foreign languages and the approbation of the methodology for the use of digital communication products in foreign language lessons at the university actualized the need to include the latter in the language education program.*

**KEY WORDS:** *digitalization of education, foreign language communicative competence, principles of connectivism, means of synchronous communication, means of asynchronous communication, communicative product, artificial language environment.*

Proficiency in a foreign language makes the professional portrait of a modern specialist harmonious and complete, bringing to it such personal and professional qualities as sociability, curiosity, erudition, the ability to think creatively, respond to changes in a timely and adequate manner, work in a team, make independent non-standard decisions, generate new ones, original ideas, solve creative problems. In modern conditions, teaching a foreign language, along with basic linguistic knowledge, should ensure entry into a foreign culture and practice, be aimed at developing adaptation, socialization and professional mobility of a future specialist. To do this, it is necessary to introduce new digital technologies, including in the process of learning English, and also to create the necessary condition for creating students' interest in comprehending spiritual and moral qualities - the opportunity to express themselves in public life, self-determine and present themselves, show mental independence and initiative [9, 10].

To date, in the domestic and foreign methodology, there is a sufficiently developed base for the use of digital educational technologies in the process of teaching foreign languages [1-10]. Most authors note that the use of digital technologies contributes to the formation of foreign language communicative competence of students in the absence of a natural language environment. With their use, it becomes possible to create a situation of communication with a verbal and non-verbal communicative product. However, the analysis of practical classes in English and the questioning of teachers and students showed that today there is some discrepancy between the modern theory of digital education and the practice of implementing digital educational technologies in the process of learning English.

Most of the studies conducted are focused on specialized language training programs. The problems of using digital educational technologies in non-linguistic universities remain open. This situation is justified by the following reasons:

- Insufficient material and technical equipment of universities, which hinders the organization of the educational process using digital communication technologies;
  - Insufficient level of proficiency in the methodology of work on the use of innovative communicative technologies among teachers;
  - The complexity of the selection of digital communication technologies associated with their great diversity;
  - The focus of most digital communication technologies on in-depth study of the language;
  - A relatively small amount of classroom time allocated for learning a language in a non-linguistic university.
- As a result, the following contradictions arise:
- Between the social order of society for the digitalization of education and the unpreparedness of higher education for the use of innovative teaching aids;
  - Between a wide variety of digital educational technologies and the inability of teachers to correctly select them;
  - Between the desire of students to use innovative educational products and the insufficient amount of classroom time for their application.

Digital educational technologies were first introduced into the learning process abroad. In foreign methodological literature, the term digital technologies describes information and communication cloud, mobile and smart technologies.



The process of introducing digital technologies into language teaching, according to Warcher computer assisted language Learning, went through the following stages of development: behavioral, communicative and integration [2]. Let us analyze the advantages and disadvantages of each stage in relation to the communicative significance.

The main goal of the behavioral stage was the development of skills (drill and practice). The computer as a learning tool provided opportunities for objective assessment and choice of one's own pace of work. However, the significance of this stage was lost due to the emergence of a communicative approach in teaching foreign languages. One-way work with a computer did not provide the opportunity to communicate in the target language.

Under the traditional technologies (methods, techniques) of learning, we will understand those that do not provide for the interaction of the subjects of the educational process with the digital environment.

At the moment, the semantic field of the concept of "digital technologies" (including in teaching a foreign (English) language) remains blurred. Many researchers give conflicting interpretations.

So, M. V. Kuzminova, in fact, identifies digital technologies for teaching English with IT technologies associated with the use of the web environment and the formation of "digital literacy" [3].

T. Yu. Kizilova under digital technologies for teaching a foreign language means the use of electronic dictionaries and online lectures [4]. There is also the concept of digital technologies as learning technologies associated with the use of computer technology [5].

In our opinion, these and other interpretations of the term should be associated with narrower concepts of computer learning, computer technologies, etc., still used in pedagogy and teaching methods, but not with digital technologies. I. V. Robert [6] interprets the concept of digital technologies differently. She notes that digital technologies allow you to create a kind of copy of the physical world, while the word "digital" reflects the trend towards the intellectualization of learning and is used to refer to any object that works with discrete values.

The communicative stage set as its goal the creation of communicative products based on their own judgments, and not on the use of ready-made speech patterns. In this regard, it became possible to maximize the use of a foreign language in the learning process and enhanced interaction in the student-computer, computer-student system.

The communicative stage served as a theoretical basis for the creation of new computer programs aimed at independent search for material, self-reflection and interaction between students. There were programs that involve the discussion of issues in writing, which, of course, also contributed to the development of critical thinking. However, practitioners in the field of teaching foreign languages noted the insufficient use of the potential of information technology.

The widespread ubiquity of the Internet, the development of multimedia technologies caused the formation of an integration stage based on the use of a foreign language

in a real communication situation and the simultaneous development of all four types of speech skills. Students have the opportunity to interact synchronously or asynchronously, and, importantly, for free. The conditions of the language environment have expanded their boundaries and functionality. It became possible to conduct joint scientific, scientific-methodical and educational-research activities.

In connection with the expansion of the field of application of digital technologies in education, the current stage can be called socially interactive. It involves active social interaction of users. This stage is due to the rapid development of Web 2.0 social services and their mobile applications, which served as the basis for the formation of an online collaboration system and provided instant access to educational material. At the socially interactive stage, digital technologies become an integral tool in the learning process. On the basis of modern teaching principles, J. Siemens formulated the principles of connectivism of the socially interactive stage [7]:

- The principle of diversity of opinions.
- The principle of semantic association of units of knowledge or sources of information.
- The principle of the predominance of the opportunity and ability to learn over today's knowledge.
- The principle of lifelong learning.
- The principle of finding up-to-date information.

In the Russian method of teaching foreign languages, the social-interactive stage marked the beginning of a competence-oriented concept. This concept implies the development of skills to independently search for the necessary information, identify problems and search for their solutions, critical analysis of the data obtained and the ability to apply them in practice. At the social-interactive stage, all components of the pedagogical process are subject to transformation: gaining access to teaching aids, expanding the forms of implementing integration in the study group and ways of presenting educational material. The leading principles of teaching foreign languages at the socially interactive stage of education are:

- The principle of multimedia
- The presence of visual clarity in the lesson in the format of listening to audio and video recordings
- The principle of interactivity
- Involvement of all participants in the educational process in vigorous activity;
- the principle of personification
- Student orientation.

Today, for higher education, the task of using digital educational technologies to model professional research activities is of particular importance. Social learning contributes to the formation of such a learning system that allows you to implement the principles of learning foreign languages described above and apply them throughout life, constructing an individual learning trajectory.

Thus, the main direction of development of the modern system of education and teaching of foreign languages, in particular, is the system integration of digital technologies into the educational process. The presented



evolutionary analysis of existing approaches to the issue of digitalization of foreign language learning is the methodological basis of this study.

At the present stage of development of education, digital communication technologies can be classified based on various criteria. Consider possible classifications.

According to the source of information, phonograms (audio products) and video products are distinguished. According to the information carrier, authentic and non-authentic - specially created products are distinguished. According to the speed of presentation of information, fast, medium and slow innovative audiovisual means are distinguished. Based on the presented classifications, it is possible to organize the selection of relevant digital products, taking into account the stage of learning a foreign language.

The main digital communication technologies can be divided into two groups:

- means of synchronous communication (synchronous communication tools);
- means of asynchronous communication (asynchronous communication tools).

Synchronous communication tools are digital communication tools that enable real-time communication (chat, video chat or audio chat). Examples of such tools are Skype and Yahoo, Messenger.

Asynchronous communication tools are digital communication tools that provide the ability to communicate with a time delay (forums, and audio and e-mail, websites, blogs, etc.). An example of asynchronous tools are podcasts (from the English. Podcast). These digital tools expand the possibilities in improving the skills of oral foreign speech [8]. It should be noted that synchronous and asynchronous communication technologies have great methodological potential for learning a foreign language for the following reasons:

- ensure the implementation of a differentiated approach in the study of a foreign language, depending on the individual characteristics of students;
- provide the opportunity to repeatedly listen to the material in slow motion or the original pace without time limits;
- offer a choice of materials tailored to teachers and students;
- organize autonomous learning through the didactic integration of modern technologies;
- suggest the possibility of audio and video recording;
- allow you to work with educational material at any time convenient for the student;
- constantly updated.

Let us describe the stages of work with digital communication technologies in the process of formation of the named competence.

The first stage of work is preparatory. This is a preliminary briefing, during which the development of lexical units is organized in order to form conditions for a favorable perception of speech material and setting a communicative attitude.

The second stage is the initial presentation of the material, followed by comprehension and initial discussion of its main idea.

The third stage is a repeated presentation of the material, aimed at detailing and subsequent control of understanding.

The fourth stage is discussion and exchange of opinions based on the proposed content.

The fifth stage is the creation of an independent communicative product based on the presented material.

The sixth stage is a reflexive analysis of the degree of mastering the material on the basis of the created communicative product.

The seventh stage is the setting for further independent improvement of foreign language communicative activity.

In the process of gradual formation of foreign language communicative competence with the help of digital communication technologies, it is advisable to use the following types of tasks:

- reading aloud;
- expressing your opinion about the content of audio and video recordings;
- Discussion of the content of created communication products;
- creating an oral diary;
- Presentation of the results of the group product;
- Oral summarizing of the written text;
- swarm games.

It should be emphasized that digital communication technologies have a number of advantages in relation to the communicative attitude towards language learning. Communication products created in the process of using digital communication technologies become available not only for use in the classroom, but also for a global audience. This factor largely determines the motivating function of digital technologies in learning a foreign language. In an effort to be heard all over the world, a modern student is more attentive to both the external and internal side of a foreign language speech. Digital technologies allow the teacher to implement the principle of differentiation by organizing work in microgroups in accordance with the levels of students.

The introduction of digital communication technologies in the process of teaching a foreign language contributes to the formation of competencies in all types of educational activities:

- in the actual learning activity (elimination of gaps in knowledge, the formation of internal motivation for learning the language and independent learning activities)
- in the independent cognitive activity of students (search for information; its study, development of language and speech skills; creation of the final product);
- in educational activities (formation of the correct ways of using the Internet, the formation of rules of conduct on the network).

The practical significance of the study is in the developed methodology for the formation of foreign language communicative competence using digital communication



technologies, in a proven set of tasks aimed at the phased formation of competence [11,12].

Thus, we can note that the introduction of digital communication technologies in the process of teaching a foreign language forms students' professional IT skills. By participating in the creation of their own communicative products in English, students get the opportunity for self-realization and professional identification, as well as the opportunity to improve their English language proficiency for professional purposes. The value of using digital communication technologies in the process of forming foreign language communicative competence necessitates the modernization of the entire system of language education in higher educational institutions. The advantages of modern technologies are reflected in the formation of internal motivation of students for independent study of a foreign language and, as a result, more formed skills of foreign language communicative competence.

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## TO STUDY THE EFFECT OF UNEMPLOYMENT IN SEVERAL SECTORS USING STATISTICAL METHODS

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Anand S. Bhagat<sup>5</sup>, Nikhil N. Patil<sup>6</sup>, Suraj R. Chougule<sup>7</sup>, Kishor B. More<sup>8</sup>

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### ABSTRACT

*There are few studies on unemployment duration in developing countries. This is the first study on duration aspect of unemployment in India. We use the result of the Household Labor Force Surveys of 2000 and 2001 to construct a cross-section of durations of unemployment spells. We analyze the determinants of probability of leaving unemployment or the hazard rate. The effects of the personal and household characteristics and the local labor market conditions are examined. Non-Parametric and parametric estimation methods are used. Unobserved heterogeneity was not significant. Two alternative definitions of unemployment are considered. The analyses are carried out for men and women separately. Our results indicate that women are experiencing higher unemployment durations than men. Age has a negative and education has a positive effect on the hazard rate. The effect of the local unemployment rate is large and negative. Duration dependence of the exit rate from unemployment is different for men and women. For men, there is slight U-shaped duration dependence, while for women there is no duration dependence.*

**KEY WORDS:** Graphical Representation, Testing of Hypothesis, ANOVA, Level of significance

### INTRODUCTION

Unemployment is a common economic malady faced by each and every country of the world, irrespective of their economic system and the level of development achieved. But the nature of unemployment prevailing in underdeveloped or developing countries sharply differs to that of developed countries of the world. While the developed countries are facing unemployment, mostly of Keynesian involuntary and frictional types but the underdeveloped or developing countries like India are facing structural unemployment arising from high rate of growth of population and slow economic growth.

Structural unemployment may be open or disguised type. But the most serious type of unemployment from which those undeveloped countries like India are suffering includes its huge underemployment or disguised unemployment in the rural sector. Unemployment is a serious problem. It indicates a situation where the total number of job vacancies is much less than the total number of job seekers in the country. It is a kind of situation where the unemployed persons do not find any meaningful or gainful job in spite of having willingness and capacity to work. Thus unemployment leads to a huge wastage of manpower resources.

India is one of those ill-fated underdeveloped countries which is suffering from a huge unemployment problem. But the unemployment problem in India is not the result of deficiency of effective demand in Keynesian term but a product of shortage of capital equipment's and other complementary resources accompanied by high rate of growth of population. Present unemployment problem in India is mostly structural in nature. Unemployment in India remains a subject of concern since it was first recognized in 1950s. During that period; the Government of India had only few initiatives of employment generation until the first Five Year Plan was drafted in the year 1950-1951. This plan laid the foundation for overall and sectorial development in a medium term prospective for achieving the goal of employment growth and increasing the labor force.

For the first time, in the Seventh Five Year Plan (1985-1990), employment was placed at the core of development strategy. In the Ninth Five Year Plan (1997-2002), employment was identified as one of the three important dimensions of state policy with others being quality of life and regional balance. The Eleventh Five Year Plan (2007-2012) mainly focused on 'inclusive' growth and conceived employment as the key element of the same. Thus unemployment has received great importance in the development agenda of India since Independence.



**OBJECTIVES**

- To study meaning of Unemployment in Kolhapur district.
- To study the nature of Unemployment Problem in Kolhapur district.
- To study Causes of Unemployment Problem Kolhapur district.
- To study about remedial Measures to Solve Unemployment Problem.
- To study about employment Policy and Schemes.
- To study of growth of Employment in Recent Years.
- To study of global Economic Recession and its Impact on Unemployment Problem in India.

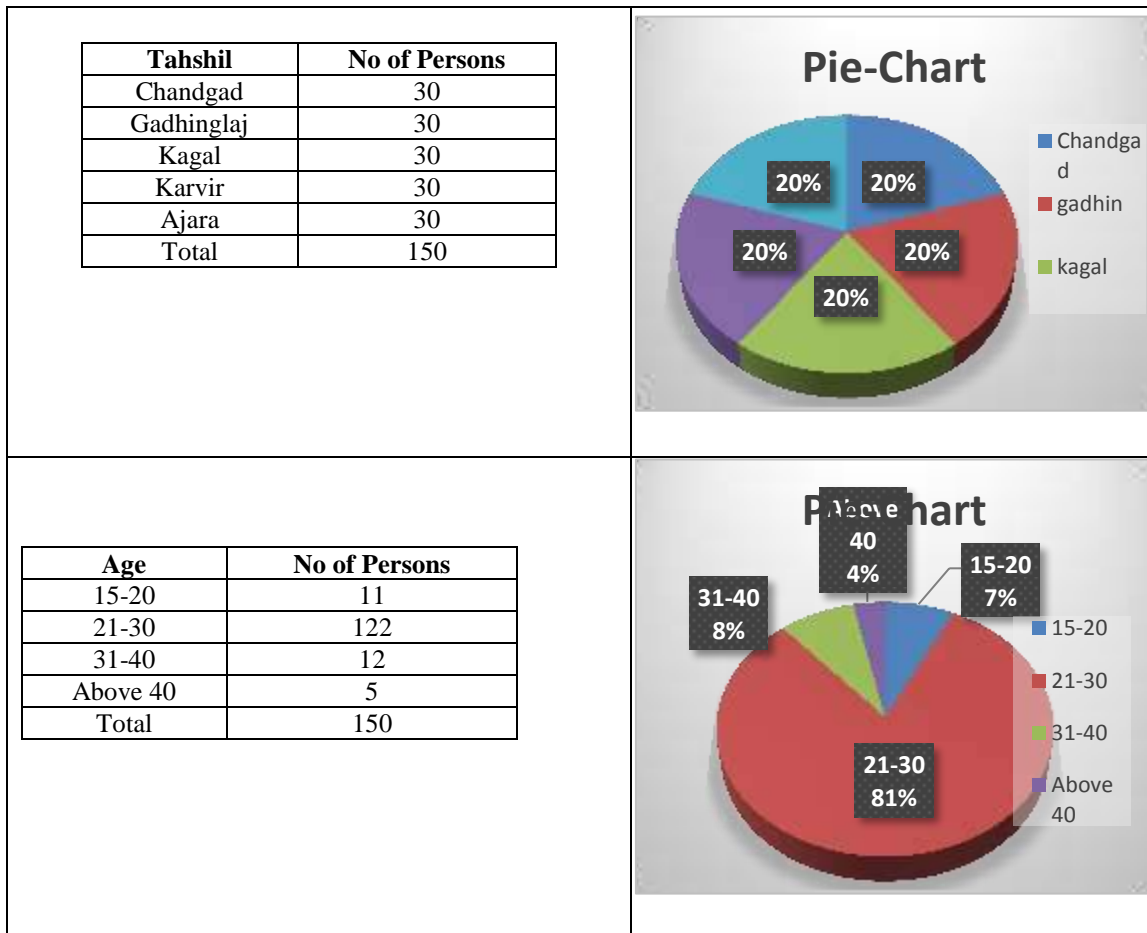
**STATISTICAL SOFTWARE**

MS – EXCEL  
MS – WORLD

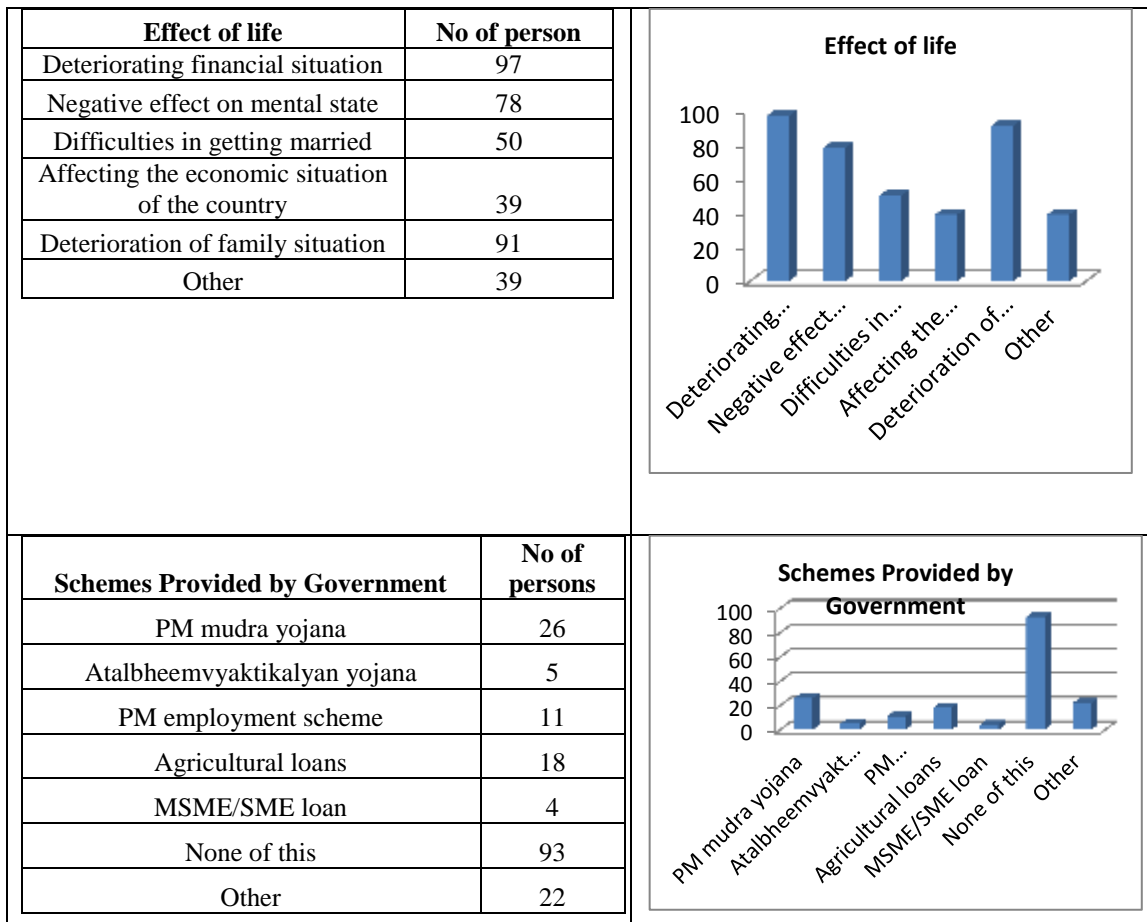
**STATISTICAL TOOLS**

1. Graphical Tools: Bar diagram, Multiple Bar diagram, Pie chart
2. Test: Chi-Square Test, Z test for Proportion
3. ANOVA

**GRAPHICAL REPRESENTATION**



<table border="1"> <thead> <tr> <th>Employment status</th> <th>Frequency</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Employee</td> <td>53</td> <td>35%</td> </tr> <tr> <td>Unemployed</td> <td>97</td> <td>65%</td> </tr> <tr> <td>Total</td> <td>150</td> <td>100%</td> </tr> </tbody> </table>	Employment status	Frequency	Percentage	Employee	53	35%	Unemployed	97	65%	Total	150	100%	<p><b>Pie-Chart</b></p> <table border="1"> <thead> <tr> <th>Employment Status</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Employee</td> <td>35%</td> </tr> <tr> <td>Unemployed</td> <td>65%</td> </tr> </tbody> </table>	Employment Status	Percentage	Employee	35%	Unemployed	65%						
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## TESTING OF HYPOTHESIS

### Chi-Square Test

#### 1) Test for Independence between Area and Gender

##### Hypothesis:

Ho: There is independence between Area and Gender.

H1: There is no independence between Area and Gender.

##### Test statistic

$$\chi_{cal}^2 = \sum(Oi2/Ei) - N$$

$$\chi_{cal}^2 = 3.841$$

$$\chi_{cal}^2 < \chi_{tab}^2$$

#### 2) Test for independence

##### Hypothesis:

H0: There is no correlation between area and type of family

H1: There is correlation between area and type of family

##### Test Statistic:

$$\chi_{cal}^2 = \sum(Oi2/Ei) - N = 9.7116$$

$$\chi_{tab}^2 = 3.8414$$

$$\chi_{cal}^2 > \chi_{tab}^2$$

#### 3) Test for Independence between Gender and Education Status

##### Hypothesis

Ho: There is independence between Gender and Education Status

H1: There is no independence between Gender and Education Status



**Test Statistic**

$$\begin{aligned}\chi_{cal}^2 &= \Sigma(Oi2/Ei) - N \\ &= 8.6082176 \\ \chi_{tab}^2 &= 3.841458821\end{aligned}$$

$\chi_{cal}^2 > \chi_{tab}^2$ , Hence, we reject Ho

**4) Test for Independence between Gender and Employment status**

**Hypothesis**

Ho: There is independence between Gender and Employment status

H1: There is no independence between Gender and Employment Status

**Test Statistic:**

$$\begin{aligned}\chi_{cal}^2 &= \Sigma(Oi2/Ei) - N \\ &= 10.4408 \\ \chi_{tab}^2 &= 3.841459\end{aligned}$$

$\chi_{cal}^2 > \chi_{tab}^2$ , Hence, we reject Ho

**Proportion Test**

**5) Test for proportion**

Ho: There is no effect of unemployment on family, social and economic life

H1: There is effect of unemployment on family, social and economic life

**The test statistic**

$$\begin{aligned}Z &= \frac{\hat{p} - P_0}{\sqrt{\frac{P_0(1-P_0)}{n}}} \\ |Z| &= 4.6197 \\ Z_{tab} &= 1.64\end{aligned}$$

$Z_{cal} > Z_{tab}$ ,

**6) Test for proportion**

H0: There is no negative effect of unemployment on family life

H1: There is negative effect of unemployment on family life

**The Test Statistic**

$$\begin{aligned}Z &= \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}} \\ |Z| &= 2.1648 \\ Z_{tab} &= 1.64\end{aligned}$$

$Z_{cal} > Z_{tab}$ ,

**7) Test for Proportion**

H0: There is no negative effect of unemployment on mental health

H1: There is negative effect of unemployment on mental health

**The Test Statistic**

$$\begin{aligned}Z &= \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}} \\ |Z| &= 2.1668 \\ Z_{tab} &= 1.64\end{aligned}$$

$Z_{cal} > Z_{tab}$ ,

**8) Test for Proportion**

H0: There is no effect of unemployment on leads to intoxicated

H1: There is effect of unemployment on leads to intoxicated



**The Test Statistic**

$$Z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}}$$

$$|Z| = 1.6027$$

$$Z_{tab} = 1.64$$

$Z_{cal} < Z_{tab}$ ,

**9) Test for proportion**

H0: There is no effect of unemployment on suicide rate rise

H1: There is effect of unemployment on suicide rate rise

**The Test Statistic**

$$Z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}}$$

$$|Z| = 1.9798$$

$$Z_{tab} = 1.64$$

$Z_{cal} > Z_{tab}$ ,

**10) ANOVA**

H01: There is no significance effect of education

H11: There is significance effect of education And

H02: There is no significance effect of type of work prefer to do when unemployment

H12: There is significance effect of type of work prefer to do when unemployment

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Education	1747.583	3	582.5278	8.013374	0.016067	4.757063
type of work when unemployment	354.5	2	177.25	2.438288	0.167872	5.143253
Error	436.1667	6	72.69444			
Total	2538.25	11				

For Education

$F_{cal} > F_{tab}$  and  $P_{value} = 0.01606 < 0.05$

For type of work when unemployment

$F_{cal} < F_{tab}$  and  $P_{value} = 0.1678 > 0.05$

**11) Mann-Whitney Test**

To test equality of means of urban and rural area over both types of family

**Hypothesis**

H<sub>0</sub>: Unemployment in urban area and rural area over both types of family are same

H<sub>1</sub>: Unemployment in urban area and rural area over both types of family are not same

R<sub>1</sub> = Sum of ranks of sample and R<sub>2</sub> = Sum of ranks of sample

Test Statistics,

$$U_1 = n_1 n_2 + \frac{n_1(n_1+1)}{2} - R = 1$$

$$U_2 = n_1 n_2 - U_1 = 3$$

$$U = \min(U_1, U_2) = 1$$

$$U' = \max(U_1, U_2) = 3$$



#### Critical value

$$z = \frac{|U - \frac{n_1n_2}{2}|}{\sqrt{\frac{n_1n_2(n_1+n_2+1)}{12}}}$$

$$Z_{cal} = 2.3237 ; Z_{tab}=1.96 \text{ and } Z_{cal} > Z_{tab}$$

#### Major Findings

- There is independence between Area and Gender
- There is correlation between Area and Type of Family
- There is no independence between Gender and Education Status
- There is no independence between Gender and Employment Status
- There is effect of unemployment on family, social and economic life
- There is negative effect of unemployment on family life
- There is negative effect of unemployment on mental health
- There is no effect of unemployment on leads to intoxicated
- There is no effect of unemployment on suicide rate rise
- There is significance effect of education
- There is no significance effect of type of work when unemployment
- Unemployment in urban area and rural area over both types of family are not same

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# STUDENT-TEACHER RELATIONSHIP AND CLASSROOM SOCIAL CLIMATE AS A PREDICTOR FOR LANGUAGE LEARNING MOTIVATION

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## ABSTRACT

*The purpose of this study was to describe the student-teacher relationship and classroom social climate on the motivation in Filipino language learning of first-year college students. This is a descriptive correlational study which examined the relationship of variables, the student-teacher relationship and classroom social environment as independent variables and the language learning motivation as the dependent variable. This research was conducted on 400 students using stratified random sampling. In analyzing the quantitative data, mean, Pearson r, and hierarchical multiple linear regression were used. It was found that the level of the student-teacher relationship, classroom social climate and language learning motivation in Filipino language are all high as seen by the respondents. There is a significant correlation between student-teacher relationship and language learning motivation, and the classroom social climate and language learning motivation. As seen, both were moderately related. The two identified independent variables were both predictors but it appeared that the classroom social climate was more influential on students' motivation to learn the language. Because of this study, teachers will be able to pay more attention to the possible reasons for strengthening the motivation of students to learn the Filipino language.*

**KEYWORDS:** education, student-teacher relationship, classroom social climate, language learning, motivation, hierarchical multiple linear regression, Philippines

## INTRODUCTION

Meaningful learning will only occur if the language used in instruction will bring meaningful and realistic communication to the teacher and the student. In the field of education and psychology, motivation receives so much attention. Khaydarova et al (1479) pointed out that motivation has a major impact on second language learning. In the process of learning the language, students may have low motivation. Low motivation may mean having low academic performance. In the Philippines, it is not surprising that the results of the National Achievement Test 2019 as announced by the Department of Education are low. In the same year, the results of the local and international assessment of the 2018 Program for International Student Assessment (PISA) of the Organization for Economic Co-operative and Development were also released, in which Filipino students also achieved low performance.

In ensuring students' effective use and understanding of the language, teachers' consideration of each student's motivation in learning should be present. Paying attention to the

importance of language can help develop students' motivation to learn the language even if the motivation is not internal or intrinsic, as stated by Huitt and who was also mentioned by Alizadeh (13). It simply means that students need to see the importance of language in their lives because if there is a lack in motivation or no motivation at all, they may experience many problems. One of these is misunderstanding the lesson. Without the desire to learn, effective learning is very difficult to achieve.

Motivation of students in language learning has been proven to be very important since motivation is the key to develop the language skills. The role of teachers is important to encourage students to learn a second language especially the Filipino language, the second language of many Filipino students, and one of the languages of instruction in the country. As concluded by Anjomshoa and Sadughi (137), motivation in learning a second language is very important and it proved that the motivation of students is the reason why they have effective language learning.



Two of the major contributors to the motivation of students in language learning are the student-teacher relationship and the classroom social environment. According to Psychologist B.F. Skinner (Ugwuanyi et al, 216), a person learns and develops his intellectual ability by motivating, stimulating and reinforcing any good actions or habits that depend on other people. In the field of education, it is the teacher who fosters good behavior or habits. The teacher will determine and reward whether the student has done something good to encourage this behavior or not, so as a punishment to eliminate or stop any bad behavior. On the other hand, Persad's work (62) shows the relationship between the classroom social environment and students' satisfaction in indicating the type of relationship the student has with his teacher as well as with his classmates.

Researchers continue to conduct studies on the motivation of students in language learning in order to further enhance their respective performances in the learning process. Many factors can affect students' motivation in language learning just like the influence of parents (Rahman et al. 544) but in this study, it will be learned whether the connection of the student-teacher relationship and classroom social climate is significant on the motivation of the students in the first year of college to learn the Filipino language. Several studies have been conducted on the variables used in this study but the correlation of these has not been combined. The immediate conduct of this study will help to expand the awareness of schools, even of teachers in the development of language learning. It will also improve the state of the country and also the quality of education by strengthening a more effective teaching and learning process.

## OBJECTIVES

This study aims to describe the student-teacher relationship and classroom social climate on the motivation in Filipino language learning of first-year college students.

## METHOD

The non-experimental design used in the study was conducted by the researchers to observe the natural result of the study without involving in any way especially with independent

variables (Reio 677). Quantitative research is the systematic discovery of events by gathering quantitative data to analyze and interpret (Goertzen 12). This paper is a non-experimental and quantitative type of research. It is a quantitative descriptive method in which the information found in variables is described based on the indicators contained in them. This paper is a descriptive correlational study in which the correlation of variables is ascertained. Lappe, et al. (2) stated that this design is important in a research in describing how one situation relates to another situation. The researchers had no control over the variables that may influence the likely outcome.

This study was conducted in Koronadal City, South Cotabato, Philippines in 400 respondents who are first year college students and taking Filipino subjects at the time the study was conducted. The respondents were purposely chosen adhering to the inclusion criteria set by the researchers. A questionnaire was used in order to answer the problems in the research. The statistical methods used in this study are the mean, pearson r, and hierarchical multiple linear regression. In conducting this study, ethical considerations were followed.

## RESULTS AND DISCUSSION

In the student-teacher relationship, punishment obtained a very high level remarks based in the mean. In the study by Lefton and Kosslyn and Rosenberg cited by Laurent (1), teachers use punishment as one of the most important ways to discipline and control students' behavior. In this research, each item in the penalty indicator was used a reverse code to match it to other items. Because the study found that almost no punishment is imposed on Filipino teachers, that is an indication that they have a good relationship with each other. This was followed by academic support and agreement, affective experience and involvement which in turn reached a high level. Awareness/understanding gained only a moderate level remarks. In the study conducted by Terzi and Celik (55), it is said that the teacher lacks direct access to verbal and non-verbal response from their students in a virtual classroom. The relationship if they had met in person may have been affected because classes were conducted in a virtual manner.

**Table 1: Level of Student-Teacher Relationship**

Indicator	Mean	SD	Level
Academic Support	3.99	.380	High
Punishment	4.32	.774	Very High
Involvement	3.81	.494	High
Awareness/Understanding	3.36	.462	Moderate
Affective Experience	3.89	.519	High
Engagement	3.99	.493	High
Overall	3.89	.406	High



In this variable, promoting mutual respect was found to be very high. In the journal written by Barr (3), a class has a good relationship if a student respects his teacher and fellow classmates, and if the teacher respects his students as well. Teacher support, on the other hand, received a high level remarks. Maulana, Hels-Lorenz, Irnidayanti & Van de Grift (445) found that teacher support is a strong determinant of the fun, challenge and excitement of students' participation and engagement. The achievement of the performance goal, in turn,

obtained the lowest with a moderate level. In research conducted by Bong, Woo and Shin (466), it is said that there are three forms of performance goal. There is the goal according to the self-validation of the students, the goal to achieve normative excellence and the goal to get a good result without considering the normative comparison. As a result of this study, it can be said that students dislike the normative efficiency that leads to comparisons with others. Instead, they prefer to prove their own abilities and achieve good results.

**Table 2: Level of Classroom Social Climate**

Indicator	Mean	SD	Level
Teacher Support	3.80	.596	High
Promoting Mutual Respect	4.44	.627	Very High
Promoting Performance Goals	3.33	.473	Moderate
Overall	3.86	.413	High

Language learning motivation resulted in good results in this study. Integrative motivation gained a very high level. Students are motivated to learn the Filipino language when they see its importance in all aspects of their lives. In the study of Anjomshoa and Sadighi (127), it was revealed that integrative motivation means that a person integrates himself into a culture in order to be part of the society that employs that specific culture. Instrumental motivation gained a high level. This motivation is seen as the use or instrument of language to

accomplish a goal such as finding a job, one's own desire to grow oneself or reading technical literature. Zaker (84) says in his study that students with strong instrumental motivation often think that learning proficiency is sufficient to accomplish the goal of self-improvement in the second language he or she is learning. In this research, many of the respondents were motivated to learn the Filipino language because of their proficiency in class and the grades given to them.

**Table 3: Level of Language Learning Motivation**

Indicator	Mean	SD	Level
Instrumental	3.54	.472	High
Integrative	4.32	.588	Very High
Overall	3.93	.446	High

The results show that the student-teacher relationship and motivation in language learning have a significant relationship having moderate correlation. Students are moderately excited about language learning when considering the student-teacher relationship. In the study conducted by Koca (8), good interaction within the classroom will occur only when the teacher has support in the participation and involvement of

students in any classroom activity and the provision of students honest compliments. The teacher also provides persuasive words to help students perform. Consensus from the teacher and students is one of the most important requirements to develop the well-being and motivation of the students.

**Table 4: Correlation between Student-Teacher Relationship and Language Learning Motivation**

Student-Teacher Relationship	Language Learning Motivation		
	Instrumental	Integrative	Overall
Academic Support	.227** (.000)	.470** (.000)	.429** (.000)
Punishment	-.187** (.000)	.268** (.000)	.078 (.121)
Involvement	.116* (.020)	.517** (.000)	.402** (.000)
Awareness/Understanding	.258**	.395**	.397**



	(.000)	(.000)	(.000)
Affective Experience	.019	.395**	.271**
	(.702)	(.000)	(.000)
Engagement	.246**	.597**	.524**
	(.000)	(.000)	(.000)
Overall	.102*	.543**	.412**
	(.041)	(.000)	(.000)

\*\* p&lt;0.01

\* p&lt;0.05

Between the classroom social environment and motivation in language learning, the result showed that they have a significant correlation having a moderate correlation. Meaning, the

motivation of students to learn the Filipino language is only moderate considering the social classroom environment.

**Table 5: Correlation between Classroom Social Climate and Language Learning Motivation**

Classroom Social Climate	Language Learning Motivation		
	Instrumental	Integrative	Overall
Teacher Support	.372**	.464**	.503**
	.000	.000	.000
Promoting Mutual Respect	.150**	.521**	.422**
	.003	.000	.000
Promoting Performance Goals	-.150**	.207**	.056
	.003	.000	.260
Overall	.198**	.566**	.477**
	.000	.000	.000

\*\* p&lt;0.01

\* p&lt;0.05

The study by Joe, Hiver and Al-Hoorie (133) noted that there is no success in learning a second language without any motivation in the student (Dornye & Ryan). But motivation alone from students is not enough. The social climate the teacher imposes in the classroom will also help. Akhtar, Hussain, Afzal, and Gilani (1202) quoted by Whitaker discovered that the most fundamental aspect of the classroom environment is not the students but the teachers. Good teachers have a high view of students that they can cope with what the teachers provide. Good teachers also give themselves high opportunities. These teachers know the importance of engaging with their students. Having a beautiful and positive classroom social environment also brings about a positive culture where teamwork, solidarity, connection and the desire to achieve performance goals reside.

In table 6, given the result of  $\Delta R^2$  in Model 1, no comparison has yet taken place because only all indicators of the

first independent variable student-teacher relationship can be seen. This means that in the overall percentage of students' language learning motivation is high. In Model 2, the modified result of  $\Delta R^2$  can be seen. There was a comparison of the effect of the student-teacher relationship on students' motivation and the entry result in each indicator of the classroom social environment. The percentage change was the change that took place with the help of both the student-teacher relationship and the classroom social environment. When analyzed, the contribution of the classroom social environment to motivation in students' language learning was overall higher than the student-teacher relationship. It simply means that the classroom social environment is more influential than the student-teacher relationship on students' motivation to learn the Filipino language.



**Table 6: Hierarchical Multiple Linear Regression showing the Influences of Student-Teacher Relationship and Classroom Social Climate in the Language Learning Motivation**

Model		B	S.E.	$\beta$	t	Sig.	$\Delta R^2$
1	(Constant)	1.893	.211		8.979	.000	0.299
	Academic Support	.162	.074	.138	2.200	.028*	
	Punishment	-.065	.034	-.112	-1.910	.057	
	Involvement	-.030	.078	-.033	-.384	.701	
	Awareness/Understanding	.039	.061	.040	.637	.525	
	Affective Experience	-.065	.059	-.076	-1.115	.265	
	Engagement	.478	.070	.528	6.833	.000*	
2	(Constant)	1.775	.218		8.131	.000	0.352
	Academic Support	.109	.071	.093	1.522	.129	
	Punishment	-.053	.034	-.091	-1.540	.124	
	Involvement	-.058	.076	-.064	-.764	.445	
	Awareness/Understanding	.003	.062	.003	.052	.959	
	Affective Experience	-.053	.056	-.061	-.933	.351	
	Engagement	.344	.071	.381	4.861	.000*	
	Teacher Support	.146	.045	.196	3.224	.001*	
	Promoting Mutual Respect	.135	.037	.190	3.675	.000*	
Promoting Performance Goals	-.051	.043	-.054	-1.188	.236		

In Model 1, out of the six indicators, only academic support and agreement emerged with a significant correlation with students' motivation to learn Filipino. This does not mean that punishment, involvement, awareness/understanding and affective experience are worthless. Although they did not have a significant correlation if the statistical result was the basis, they did not contribute much to the existence of the student-teacher relationship. Means the contribution of the four identified indicators is only partially or frequently.

There is no denying that academic support in the student-teacher relationship is significant. In a study conducted by Lee (337), instead of academic support, he used academic necessity in a good student-teacher relationship. He found that the impact of the student-teacher relationship on the outcome of students' performance did not depend on academic need only.

In the indicative agreement, it also had a significant relationship with the student-teacher relationship. In the study conducted by Roorda, Zee, Bosmon and Koomen (74), although the participants were students with special needs, it still appeared that the engagement or agreement of the students was intensifying. When there is a good relationship between teacher and student. However, the good relationship they have within the class depends on the teacher and will cause to intensify the relationship between the student and the teacher, as well as the student in the lesson.

Model 2, on the other hand, shown the comparison of the results from the student-teacher relationship only to the introduction of the classroom social environment. This time, out of a total of nine indicators, only three had a significant relationship with motivation in learning the Filipino language.

These are agreement, teacher support and the promotion of mutual respect. The remaining six indicators mean that there is little help in strengthening the motivation of students in learning the Filipino language.

In relation to agreement or engagement and motivation, in the study done by Pesare, Roselli, Corriero, et al (2) also mentioned in the studies of Reschly and Christenson, Schunk and Mullen; Skinner et al and Bangert-Drowns and Pyke, they often see agreement connected to motivation. Once again these terms are freely interchangeable. Consensus is the hallmark of students' motivation. Therefore, these statements support the results of this research.

Teacher support is important to the motivation of students. That is what is proven in this study which is supported by research article and work by Maulana et al (445) who say that students have a meaningful and positive view of the support provided by their teacher and its relationship to their motivation. and it also brings high motivation to the students.

Promoting mutual respect is also meaningful and related to gaining motivation to learn. Kohler-Evans, a professor, shared that community principles are needed within the classroom to overcome the promotion of mutual respect. This will guide students in what they should behave in class. To do this, the teacher is responsible for it. It is not enough for him to teach only the concepts but also the good qualities that will help to have a good classroom environment that will develop the motivation of the students to learn any subject, including their learning of the Filipino Language.



## CONCLUSION AND RECOMMENDATION

It emerged from the study that academic support, involvement, affective awareness all had a significant relationship with overall motivation in language learning. Among the indicators of the student-teacher relationship, only one had no significant relationship with instrumental motivation and that was affective. One is also significant but negative, the punishment and the rest are positive and significant. All indicators of the student-teacher relationship in integrative motivation are positive and significant. Overall, there is a significant relationship between student-teacher motivation and Filipino language learning. Therefore, it can be said that the student-teacher relationship is really a predictor of students' motivation in language learning.

The results of the study also did not differ from the relationship between the social classroom environment and motivation for language learning. Teacher support and fostering mutual respect are significant in the overall outcome of language learning motivation. To be specific, performance goal promotion was found to be negative but significant to instrumental motivation. Teacher support and fostering mutual respect are both positive and meaningful. In integrative motivation, all indicators in the classroom social environment were found to be positive and significant. In the overall result, the overall result of the classroom social environment and the overall result of motivation in language learning were found to be significant. Thus, the social environment of the classroom is also a predictor of the motivation of first-year students to learn the Filipino language.

The level of student-teacher relationship turned out to be high. The researcher recommends having a variety of seminars to make maintain good student-teacher relationship. This will remind and instill in teachers the importance of good relations between them and their students. It is also appropriate to send a list or suggested strategies on how to build a good relationship. It is also suggested to intensify the teaching of building good relationships within the classroom in professional education subjects to pre-service teachers so that they can consider their approach to building the classroom in case they become teachers.

It was found that the level of classroom social environment was also high. To increase this more, the researcher recommends that the teacher should have enough knowledge in building a beautiful and positive social classroom environment through seminars. It is also important for the teacher to use teaching methods, approaches and strategies that will strengthen the social interaction of the students. This will support the motivation of students to learn the Filipino language.

The level of motivation of the students in learning the language was also high. The integrative motivation is so high that the teachers can only continue what they are used to teaching Filipino where the students see the importance of the

language in the whole aspect of life considering the culture they belong to. The instrumental motivation is high so, the researcher suggests that the motivation of students to use language in a practical way such as just its application in their studies.

Significant results emerged on the correlation of student-teacher relationship and motivation in language learning and the correlation of student-teacher relationship and motivation in language learning. Consequently, the researcher suggests further strengthening and integrating the two indicators in teachers' teaching to students to also strengthen their respective language learning motivations.

It was found that the student-teacher relationship and classroom social environment were predictors of students' motivation in language learning. It is recommended that other predictors can be studied and explored and undertaken by subsequent researchers to assist in the need of teachers and students for the excellence of the teaching and learning process in the country.

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## TECHNIQUES OF TRANSLATION OF SYNONYMS INTO RUSSIAN AND GERMAN LANGUAGES (BY A. KADIRI'S "PAST DAYS")

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### ABSTRACT

The article analyzes the methods of translating synonyms into Russian and German of the novel "Past Days" by the great Uzbek writer A. Kadiri. The authors also distinguish artistic and expressive - phonetic, lexical, syntactic means of translation.

**KEY WORDS:** translation techniques, translation tools, Uzbek language, Russian language, German language.

## ПРИЕМЫ ПЕРЕВОДА СИНОНИМОВ НА РУССКИЙ И НЕМЕЦКИЙ ЯЗЫКИ (ПО ПРОИЗВЕДЕНИЮ А.КАДИРИ «МИНУВШИЕ ДНИ»)

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### Аннотация

В статье проанализированы приемы перевода синонимов на русский и немецкий языки романа «Минувшие дни» великого узбекского писателя А.Кадири. Авторы выделяют также художественно-выразительные – фонетические, лексические, синтаксические средства перевода.

**Ключевые слова:** приемы перевода, средства перевода, узбекский язык, русский язык, немецкий язык.

Данная статья посвящена изучению проблемы перевода художественной литературы, в частности, произведения «Минувшие дни». Актуальность данной статьи определяется необходимостью изучения переводных текстов Абдуллы Кадири на русский язык и немецкий языки.

Несмотря на большое количество переводов произведений А.Кадири с узбекского на русский и немецкий языки лишь малое количество из них проверено и изучено. В частности, можем отметить исследование Г.Саяфутдиновой, посвященное изучению совершенствования социокультурной компетенции студентов путем сопоставления реалий страны

изучаемого и родного языков, на материале перевода «Минувшие дни» с узбекского языка на английский [5; 300], работу С.Айдаровой и Л.Закировой, где проанализированы приемы перевода синонимов на узбекский и английский языки и роман «Минувшие дни» великого узбекского писателя А.Кадири. Авторы выделили также художественно-выразительные – фонетические, лексические, синтаксические средства перевода [1; 10]. Наиболее часто нам необходим художественный перевод, который имеет свою специфику и проблематику. Он считается наиболее изученным, а также наиболее мобильным. Для такого перевода особенно характерна новизна, оригинальность и



стремление к модернизированию. Одной из самых выраженных черт художественного перевода является постоянное использование разнообразных фигур речи - средств, которые применяются для максимального раскрытия текста [2; 4]. Игра слов присутствует в каждом языке, бывает достаточно трудно сохранить все фигуры речи в переводимом тексте. Часто переводчику требуется не только профессиональное знание языка, но смекалка и сообразительность. Часто теряются краски при описании персонажей, исчезают их особенности речи и поведения. Практически невозможно передать речевую специфику итальянского рабочего на русский язык. Большинство переводчиков признают, что многие фольклорные, жаргонные и диалектные фигуры речи остаются непередаваемыми. Художественный перевод нельзя делать дословно - это неизбежно приведет к потере

эмоциональных тонов, ярких красок в речи и искажению смысла произведения [4; 21].

Первостепенной задачей переводчика художественного текста является сохранение индивидуальности и адаптация материала под конкретную культуру. Талант и знание языка - вот те основы, которые нужны переводчику. Предметом нашего рассмотрения стали переводы синонимов на узбекский и немецкий языки роман «Минувшие дни».

Для исследования мы использовали три текста – оригинал на узбекском языке и, на наш взгляд, два очень удачных перевода на русский (С. Липкин.) и немецкий языки (А.Тайсина. Der Shurale). Для большей наглядности тексты с синонимами во всех трех текстах решили показать параллельно в таблице.

на узбекский. яз. (Г.Тукай)	на рус. яз. (С.Липкин)	на нем.яз. (А.Тайсина)
Marg'ulonda shunday kelinimiz bor ekan, biz bilmay yurgan ekanmizda.	Мы не знали, что в Маргилане есть такая красавица-невеста	Wir haben eine solche Braut in Margulan, als wir es nicht wussten.

А.Тайсина использовала союзные слова как градацию, присоединительные конструкции.

на узбекский. яз. (А.Кадири)	на рус. яз. (С.Липкин)	на нем.яз. (А.Тайсина)
O'g'lim, biz sendan suramay bir ish harakat quydik.	Сынок, мы неспрашивив тебя одно дело затаили.	Sohn, wir haben etwas getan, ohne dich zu fragen. [11; 84].

А.Кадири показывает нам культуру семьи узбеков. Писатель использованы смысловые (семантические) синонимы. Липкин, используя фразеологизм, получил удачную рифму, придающую сказочность и переводу. С.Липкин добавляет индивидуальноавторское многошумен и могуч, используя описательный перевод и дифференциацию значений.

А.Кадири применяет контекстуальные синонимы, фразеологизм. С.Липкин использует конкретизацию, сравнение, стилистические синонимы, присоединительные конструкции (...и...). А.Тайсина эту часть пропускает.

Kumushning yuzi oydin kecha yanada chiroili nur taratayotgandiek edi	-	-
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А.Кадири использует семантико – стилистические синонимы: – Otabek g'azal sharobidan mast edi. Переводчик на русский язык эту часть пропускает, так же как и Тайсина на немецком.

С. Липкин для усиления, градации использует повторение отрицательной частицы ни и таким образом передает тяжелое эмоциональное состояние героя. А.Тайсиной эта часть снова пропускается. Таким образом, в процессе художественного перевода на разные языки авторами используются разные приемы и средства. В содержании текстов, принадлежащих разным переводчикам, могут наблюдаться разные смысловые вариации. Так, например, использованные А.Кадири смысловые, семантические, семантико-стилистические, контекстуальные синонимы и фразеологизмы, С. Липкин переводит на русский язык используя фразеологизмы, описательный, дословный перевод, дифференциацию значений, конкретизацию, сравнение, транслитерацию,

оценочную лексику, градацию, риторический вопрос. А.Тайсина при переводе на немецкий язык применяет такие способы и приемы перевода как присоединительные конструкции, калькирование, переводческую транскрипцию, авторскую пунктуацию, риторический вопрос, целостное преобразование, где происходит замена устойчивой фразы на другое клише.

Таким образом, переводчики очень часто передают смысловое значение и стилистический смысл не теми средствами, какими он выражен в оригинале. На основании сравнительного анализа двух переводов С.Липкина и А.Тайсиной нами был сделан вывод о том, что идея автора передана переводчиками с максимальной точностью.



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## SCIENTIFIC AND MEDICAL BASES OF WOMEN'S HEALTH

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### ABSTRACT

*This article presents treatment of women primarily as subjects with their own physiology and phylogenetic development, they pay more attention to the morphological features of their organism than men in the phylogenetic and physiological development of women, their careful approach to their lifestyle, activities, reproductive life, etc., and the importance of scientific and medical recommendations for women's health in the socio-philosophical sense, as they are not formed separately from psychological stereotypes, attitudes and ethnocultural experiences*

**KEYWORDS:** *physical culture, human health, socio-philosophical, modern knowledge, synthesis, medical philosophy, women's health, genesis of medical science, personal health, phylogenetic and social security, gender philosophy, theory and methodology of physical education, valeology, anthropology, modern physiology, living as a team, social unity.*

One of the important tasks of philosophy is to generalize the accumulated experience and scientific results in the study of human health from a socio-philosophical point of view, to analyze them through the synthesis of modern knowledge. Although the first research on the philosophy of medicine [1] was conducted, it was not continued consistently, as a result of which this direction came to a standstill under the pressure of certain bureaucratic requirements. The problem of women's health could be continued in this direction, it could be nourished by the scientific research of A. Razzakov. Unfortunately, for the reason mentioned above, we have to limit ourselves to dwelling on the general medical grounds of the problem. However, it is natural that we

rely on certain socio-philosophical views of A. Razzakov.

The researcher emphasizes the need to shape the philosophy of medicine as a separate branch of science and seeks to define its paths. According to him, ensuring human health and striving for "physically healthy self-formation" in social life has always been a problem of socio-philosophical nature. It is known from the genesis and development of medical science that the health of the individual was not separate from or contradictory to general social problems. Although the correct understanding of this socio-philosophical concept has been different in different periods and in different ethno-medical experiments, it has been perceived and considered in the system of harmony of human society and health. In this regard,



according to A. Razzakov, ethno-medical experiments associated with the name of Ibn Sina and their role in the phylogenetic and social support of the development of the human body can be the basis of modern medical and philosophical views [1; 34-48]. The scientific and medical basis of women's health can also be studied based on this approach. However, the problem is broader, that is, the scientific and medical basis requires reliance on the results of gender philosophy, theory and methodology of physical education, valeology, anthropological valeology, modern physiology and biological sciences. Such a broad approach can only be realized within the framework of social philosophy.

The scientific-medical approach encourages women to look primarily as subjects with their own physiology and phylogenetic development. Women are therefore a subject, they pay more attention to the morphological features of their organism in their phylogenetic and physiological development than men, and they are very careful about their lifestyle, activities, reproductive life, and so on. Over the centuries, axiological assumptions instilled in their consciousness and way of life have made health care a core value. While men are willing to sacrifice their lives, to be the first to come to the fore when there is an external threat [2], women have formed a social unit by first caring for their children, not leaving the hearth on fire, and living as a team. For males, hunting, fighting with the outside world, searching for rivals, and testing physical strength have been the main

occupations. "In the 19th century, anthropologist Boid studied the brains of 2,000 people. He found that the brains of 7-14-year-old boys weighed 1,622 grams and that of girls 1,473 grams. The peak of brain development is in women aged 20-30 years and 1565 grams, and in men 30-40 years and 1721 grams. According to the calculations of anthropologist G. Ploss, the brain of a woman aged 20-60 years is 126-164 grams lighter than the brain of a man of the same age, and at the age of 60-90 years it is 123-158 grams. Today's research shows that the number of cells in a man's brain is 4 million more than in a woman... The weight or size of the brain does not mean that a man is smarter and more talented than a woman, but they do make differences between women and men. Therefore, no matter how much the structure of the brain affects a person's lifestyle and thinking, it is appropriate to accept the differences between men and women, the peculiarities, first of all, as differences between people. Gender differences between people are a continuation of differences" [3; 6]. If we rely on the results of these scientific and anthropological studies, we will understand that the differences between the sexes, why the same exercise is perceived differently by women and men, and psychophysiological factors determine these differences. The same physical load is perceived differently by women and differently by men, their psychological setting is different. This means that the attitude to exercise is not only the product of the human body, its physiological capabilities, but also its psychological establishment and



ethnocultural experiences formed over many centuries. In the socio-philosophical sense, no matter how important scientific and medical recommendations for women's health, they are not formed separately from the psychological stereotypes, attitudes and ethnocultural experiences formed in the process of anthropological and phylogenetic development.

Special research shows that a woman's thoughts and attitudes towards physical culture are different from a man's. Doctor of Philosophy, Professor V. Alimasov, summarizing the results of special research, writes: "A woman has almost no free time, she is always busy with something. While she is resting, she either looks after her child or grandchild, or cleans the rice and grain. The kitchen is the woman's second, but not the first, home. If a man wants to do something in his spare time, he chooses a profession-related, intimate activity. This means that a woman's leisure time is always in the context of household chores, child rearing, and a man's leisure time is specialized and narrowly focused [3; 10]. Engaging in physical culture takes place mainly in leisure time, while women's attitude towards leisure comes as an expression of their attitude towards physical culture. According to the observations of E. McCobi and K. Jacqueline, boys and girls under 8 years of age develop physically rapidly and equally. As they approach puberty, boys grow physically faster and are different from girls at 18-21 years of age. Their views on power, authority, and governance are also formed at this age. Boys choose a profession that allows them to use

their power, and girls choose areas that expand their artistic and aesthetic potential, strengthen interpersonal and family relationships [3, 30]. However, these processes are also related to a person's interests, desires and psychophysiological capabilities, special studies show that among women and men, the tendency to choose a close profession, type of activity is around 18-20%. This means that one in five men have a career and interests chosen by women, and one in five women have a masculine personality and interest in exercise. That is why some (18-29%) women tend to choose male exercise.

Scientific and medical knowledge is mainly derived from gender differentiation. There are women's clinics and medical departments, institutes, the direction of which is different from that of men. This is not only explained by gynecology, but also by the fact that the phylogenetic and physiological development of women differs from that of men. In recent years, obesity and overweight have become more common among women. One of the main reasons for this is low mobility, hypodynamics. It is known from scientific and medical observations that the body of women, unlike men, is more prone to obesity and fat accumulation. For example, fat deposits (adipocytes) in the body of men are around 15%, while in women it is around 22%. There are 28 billion fatty tissues in men and 35 billion in women. "No one can change this situation, it is the foundation of the human body" [4, 17]. Interestingly, no matter how quickly the human body, especially the female body, tries to lose and reduce the



naturally accumulated fat, the body strives to restore it further. Women need to sit up 20,000 times to reduce 450 grams of fat, which reduces fat after 20 minutes. If the athlete runs 80 km, it burns only 900 grams of fat [4; 16]. True, exercise helps to reduce excess weight, fat in the body, improves mood, increases the tone of life, has a positive effect on performance. However, medical experts say that women need fat for their bodies, and that their reproductive health is linked to excess weight and fat. "Women need fat for reproductive purposes, even if you don't plan to give birth in the near future. She will continue to accumulate the fat and weight she will need in the future. Athlete women, dancers and dieters report that menstruation stops when there is a sharp decrease in body fat" [4; 17-18]. This means that the female body naturally tends to accumulate fat and excess weight, which is an internal feature of their physiological development. But this situation should not be abused. Excess weight and fat undermine the beauty of the female body, slim figure, beautiful appearance, leading to rapid aging. Excess weight and fat accumulation are explained by physicians as a lack of a culture of nutrition, consumption of foods mixed with artificial compounds, sitting in one place for long periods of time, hypodynamics and nervousness. Therefore, in recent years, nutrition is developing as an important scientific and medical field, culture, and is considered the most effective way to protect human health. They are developing certain norms of rational nutrition. One of them is formulated as follows: girls must eat two servings of fish per week, oily fish once;

fat-free dairy products or fat-free pate instead of meat; more than 50% of vegetables, fruits and bread, 2 servings of fruits and vegetables, 4 servings of vegetables, 2 servings of potatoes, rice or pasta, 4 slices of bread per day; they must give up cakes and biscuits; reducing sugar by 5%, meat consumption by 50%, meat boiled in water; should reduce the chocolate by a third, and the sugar and salt by half.

These do not save from fat accumulation, but they do relieve hypertension in old age. Saturated fatty foods in the daily diet should not exceed 35% and reduce calories by 10%. Carbohydrates should be 50% of the daily norm. "This is a classic diet recipe that is low in carbohydrates, fat, low in salt, and sweet" [4; 23-24]. Scientific, medical and psychological observations confirm that engaging in physical culture makes women energetic, handsome and cheerful. Most women are well aware of this and try not to gain weight or lose weight as much as possible. It also has social consequences. First, obese women are discriminated against. If they try to get a hard-working, smart, energetic woman without too many tests, there will be no good for a fat, overweight woman. Human psychology is structured in such a way that it greets a future employee, a colleague, depending on his clothes, appearance, it is very difficult to change the image he wakes up for the first time. Second, a woman in a high position or aspiring to it has to pay attention to her body structure, because those who want to appoint her to a position are mostly men, and men do not like full, overweight, obese women. Third,



hereditary factors also affect female obesity. The proverb "See the mother - take the daughter" is not in vain. The girl often resembles her mother, even she tends to stay at the weight of her mother [4; 31].

The above considerations cannot be used as a basis for downplaying the role of physical culture. Although the female body of women is prone to obesity, the accumulation of fats, they have the ability to shape their body in the desired shape - graceful, agile, flexible, resistant to stress and psychological shocks. It is not necessary to engage in professional sports, to set records, daily physical training, physical training, running, light gymnastics, etc. can also give the desired results in strengthening health. It is no coincidence that medical professionals, specialists in physical diagnostics and physiological rehabilitation, who deal with the issues of strengthening human health, put on the agenda the issues of transforming physical culture into a way of life.

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## THE CONCEPTS OF MEANING, CONTENT AND CONNOTATION IN WORD-COMBINATIONS

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### ABSTRACT

*This article reflects some assumptions on the concepts of meaning, content and connotation of words basing on the scientific views presented in article So`z birikmalarida, ma`no, mazmun va zamir tushunchalari (The relationship of meaning, content and connotation of words in the study of foreign languages) written by A.J.Jumaniyazov, a professor of Urgench State University.*

**KEY WORDS:** *language, word combinations, meaning, semantics, core meaning*

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Everyone who is interested in any language understands that in order to learn any language, it is necessary to read, write, or spell and pronounce words initially. Thus, the learner sees the spelling of the words at first and then thinks about how to pronounce them correctly. And it sets the task of correct pronunciation of words in front. This case is common in the attitude of a learner that studies a foreign language and used written literature (dictionaries, textbooks, newspapers, magazines, etc.) Now, when the learner encounters a foreign language in oral communication, when learner wants to talk to someone, learner listens to the pronunciation of words (learner can learn by imitation), but s/he can not realize the correct spelling exactly. The knowledge of applied phonetics can benefit foreign language learners solve these problems. Indeed, being aware of phonetic rules is not enough for the communication in a foreign language. By the way, in order correctly to use the words learned by spelling and pronunciation in

speech, the learner should have clear (most comprehensive) understanding of the possibility of form changes of these words by incoming into a semantic relationship with other words in communication. Applied grammar deals with the problems of these issues. However, basing on the experience of learning languages it can be claimed that even without sufficient knowledge of spelling and pronunciation (phonetics) and not mastering the form changes (grammar) of words in communication thoroughly, it is possible to determine that It is possible to have big and small conversations, to express opinions (to report something, to ask something, to urge something) on most topics of life with the speakers of the target language [2]. Or there is always the opportunity to understand or comprehend each other with slight (not serious) mistakes in speech. But there is another (third) important factor, the semantics-the meanings of words, in learning a foreign language. Indeed, without knowing the exact meaning of a word, the knowledge



of its pure spelling and pronunciation and its correct grammatical form is of no use in communication. Words that are unclear to the speaker or listener do not clearly lead to the purpose of communication, the conversation does not provide the expected effect, and may lead to misunderstanding.

In this sense, we try to express some valuable ideas and opinions about the meaning, content and substantive properties of words in this piece of writing in the process of language learning. We would like our thoughts on the topic to be accepted as the emphasis and repetition for those who know the problem (repetition to reinforce existing knowledge), for those who do not know as the suggestions and recommendations for the acquisition of knowledge, and for those who are interested, as a debate (or observation to reveal the truth). To get to the heart of the matter, we will begin our discussion of the meaning, content, and connotation of the words with a commentary on the words involved in the topic of our article. In order, it will be easy for a reader who does not understand the meaning of the words in the topic and what the article is about. So let's start the analysis by focusing on the meaning of each word in the title of the article.

The morphological structure of the word *chet*(foreign) in Uzbek language defines its following meanings used as the noun (*aul cheti*-the edge of country-side), the adjective (*chet ovul* -foreign aul), the adverb (*chet bo'lmoq*-to be far from), and its semantics acquire different contextual meanings. In the title of our topic, the word is used as the attribute and means "stranger, foreigner, alien, outsider on the periphery, unknown, far from us, a person we have almost nothing to with" For the sake of brevity in this article, let's take the meaning 'stranger' of the word aside.

The word *tili* (language(s)) is a miraculous phenomenon for human beings, our minds are still unable to know what it is, and its definition and interpretation are varied and controversial. In our article, we applied it on basis of its definition "the most important means of communication in human society (among people). And in this case, the function of *til(lar)*language(s)as defined as the means "to inform, say, ask something or someone about something (someone) or the content itself, or to get them to something (power) is always in our nature ... , *-ning* (suffix of the genitive case in Uzbek language;). ... *o'rganilishida* in the study(the name of the action, made on the basis of the passive voice form of the verb *o'rganmoq* (to study, to learn), the meaning may vary depending on its use in the sentence, and in the title of the topic it means "a person's knowledge, profession, occupation, work; mastery, possession, knowledge" [2].

A word is also a unit of language the meaning of which has not yet been clearly defined (like the word 'a language'). The definitions vary according to the direction of disciplines associated with it, and analyze its nature differently. Linguistics of today tries to understand and act relying on the following definition of the word: "the smallest unit of language that can be used independently and has an independent meaning".

The word *ma'no*(meaning) -since this article is based on this word and the main focus is on it, we will talk more about this linguistic unit. First of all, it should be noted that Uzbek linguistics still does not have a clear idea of what is meant by the essence of the word. Because it's interpreted in terms of content, notion (*ma'no-mazmun* (meaning-content) or *ma'no-mazmun* (content-meaning) in the explanatory dictionaries of the Uzbek language. It is noted that it has many



contextual meanings, and in some cases, the words meaning and content have the same meaning, and examples are given. However, the words *ma'no* (meaning) and *mazmun*(content) are not only two separate linguistic units, but their meanings are also radically different. Because the core of *ma'no* (meaning) is related to the word *ma'ni* (mean), the core of the word *mazmun* (content) is related to another word *zamin* (ground, earth), and they are related to various events in the perception of the human mind and are used in the syntactic structures associated with these cases. Consequently, *ma'no* (meaning) is abstractly related to the human spirit, and *mazmun*(content) refers to the essence of human activity in a particular situation. In order to prove our objections to the inadequacy of the interpretation of the glossary, we quote from the 2006 commentary on the meaning and content of words in the dictionary of the Uzbek language.

**Meaning** (content, concept, idea) 1. The semantic side of a word, a concept expressed in words: the literal meaning of the word. "I was curious, as is my custom, to know the meaning of the words and the relationship of the names to what was called." Why did they call that village a quick guzar? I asked. *Esdalikalar* (Memoirs) by S.Ayniy.

2. The word *Mazmun* (content). E.g. "*Gavhar bu gapdan "qo'limdan kelsa , yordamimni ayamayman "* degan *ma'no uqdi*(By his words Gavhar could guess the content of "If I can, I'll do my best to help) by O. Xoshimov

3. Definition of something to be understood from some actions, etc. *Xotini uning harakatidan "o'pich ber"* degan *ma'nonani angladi.* – *Shuni to'g'ri aytaqolsangiz nima bo'lar ekan!- dedi*//She understood the meaning of "give me a kiss"

by his act and said "Why not to ask it directly?"

4. The essence of something, what it is, the essence; E.g. *Samandarov zaharhanda qildi: - Bu qanaqa musobaqa bo'ldi? Musobaqaning ma'nosini tushunasanmi o'zing?*//Samandarov said bitterly: - What kind of competition is it? Do you understand the meaning of the competition? (from *Qo'shchinor chinorlari* by A.Qahhor).

In order to clarify the matter, hereby we define the meaning of the word *mazmun* (content) in the above-mentioned dictionaries.

**Mazmun** (content, gist) – (*mundarija*(table of content), *ma'no*(meaning)

1. The logical content that is understood by the mind, thinking, the internal content that is expressed by another sign, the content of the book, and the content of the letter. "– *Qayinotang menga bir xat yozibdur, o'qib-o'qib, mazmuniga tushunolmay xayron bo'laman.*//Your father-in-law wrote me a letter, reading and reading again I'm amazed at the content of it.) *The Days Gone* by A.Kodiriy)

2. The basis, the essence, which determines the action, event, etc. E.g. *Boshqa barcha tinchliksevar xaiqlar singari, tinchlik va ijodiy mehnat xitoyliklarning ham hayot mazmuni, ijod manbayidir*// Like all other peace-loving people, peace and creative work are the content of life and the source of creativity for the Chinese.

3. It is the sum, the basis, of the essential element and the change that defines the essence of an event that expresses things as a unit of form and content.

It is clear from the comments that they do not take into account the most important factor of human observation - the understanding of the meaning and content of words - is inherently and directly related to human emotions. Definitely, as we have



already mentioned in the commentaries on meaning, words are used to refer to things and events in the universe. Humans insert the names of things to their heart through their sense perception (seeing, hearing, tasting, and smelling, touching). Under the influence of the same feeling, a person observes the objective world and feels it in heart. It provides the necessary knowledge about the objects that are understood through that name (word) on basis of the five senses embodied (above). The human mind (which is also basically given to man by nature, like the five sensory organs) treats the meanings understood through the senses consciously, and gains more and more knowledge. And in turn, he improves his understanding. By comprehending and observing the meanings of words emotionally and spiritually, one acquires an understanding of the meaning and content of objective reality.. But understanding is still lacking and not always clear and accurate. However, the expression "man understands" does not mean "man knows for sure "Spirit is needed to know the meaning of words and to feel them in your heart. Until the spirit is involved, it is difficult to fully comprehend first the thing, then the word that names it, and the meaning that is ultimately shared by both. In short, *ma'no* (meaning) is the spiritual understanding of words by relying on the five senses and using the mind. For example, we can see the quality of color (red), but we can't say what object it is. We use our intellect and knowledge to describe it. Because just seeing doesn't tell you what the color is. We understand that the need for light to perceive color through the mind is the formation of color due to the reflection of certain things. As a result of certain light we can witness it. But in order to understand what is the basis and criterion of the three definitions mentioned above, our

senses and mind are still lacking of transparency of ideas, as it requires a higher spirit. Although we feel and understand the true meaning of these words in our minds, and we still cannot express them in words using our linguistic verbal expressive ability. They are formed only and only in the human soul. In the same way, the human spirituality (the words *ma'no* (meaning), *ma'nan* (spiritually), *ma'naviy*(spiritual),*ma'naviyat*(spirituality) goes back to the common root word *ma'niy*), formed under the meanings of things and words (names) is directly related to the human soul. And the soul is such a power that it is not hindered by space, time, and problems (of meanings) [2].

Now it is essential to understand the word "content" in right essence. If we define it as "content, meaning, essence" basing on the definitions offered by our dictionaries, the idea or thought may lead and shift our focus on to the word "meaning" again. The statements of "There is no **meaning** in your words" and "There is no **content** in your words" are understood synonymously. And now, let's take the statement " *So'zingda na ma'no bor va na mazmun* (There is no meaning and no content in your words)". In this case it seems there must be a difference between the words of *meaning* and *content*. Usually we are not interested in the difference, and the reason is not sought even after. We don't deal with the word in zeal, as we are lazy because we are naturally prone to laziness. In fact, even in this case, it is more emotional and mental to be able to clearly imagine what is being expressed through words or names and understood meaning through. Actually, an emotional and mental approach is needed in order to have clear description of the object expressed by words or names, and meant in meaning.



So, it may be easy to observe what is underlying it (basis, source), what it consists of (constituency), its structure and interdependence if the **meaning** of a word is concrete (material). You feel, testify and confirm their existence through your sense perception ability. If the meaning of a word is abstract (abstract, divine), then you visualize, imagine, and conceive its content and form at first in your mind and knowledge, and then in your soul. As a result, symbolic content is formed.

Now, as for the word *zamir* mentioned in the title, we would like to give the full description of the word in order to continue our discussion in a more reasonable way and to make it clear that our explanatory dictionaries have interpreted this word in the same way with the linguistic units of *meaning* and *content*.

**Zamir** 1. conscience, intellect; secret thought/sense. The real essence, the original meaning, the content or basis. *Romandagi qator obrazlarning zamirida konkret tarixiy shaxslar yotadi*// A number of images in the novel are the connotations of real historical figures. 2. Substitution, connotation 3. Zamir (a man's name)

It becomes clear from above mentioned definitions that the words *ma'no*(meaning), *mazmun*(content) and *zamir*(sense,connotation) are synonymous. The words meaning, content and sense in the following sentences can replace one another;

E.g.: *Gapingda ma'no yo'q!*  
*Gapingda mazmun yo'q!* *Gapingda zamir yo'q!*"//There is no meaning in your statement! There is no content in your speech! There is no sense in your words)

The meaning seems the same. In fact, when we say, "There is no meaning in your statement," we usually mean that we don't understand anything by your statement,

or what you say doesn't fit in mind, or you don't know and feel in your heart what you're saying. Now, when it is said that "there is no content in your speech," we mean that your speech is unfounded, abstract, does not rely on concrete things, empty, no material evidence, superficial and general.

When we say, "There is no sense in your speech" the underlying point is that there is no stand in for object for what you say in your speech or your speech is dry, or you mean nothing.

The word *Zamir* in Persian means something equal to a exchange, and in Arabic it is an adjective meaning *hidden, secretly*. Based on it, we can define the word *zamir*, the degree of value of the word, the object that can be exchanged after a certain word is said, or the object that can be substituted or obtained after hearing this word.

For example, when the word "water" is used, the meaning of the word is that it is equal to water (liquid, drinking) and that the person who utters the word (for example, a patient) must be given water. That is, water is a type of beverage, a chemical and the object meant by this word.

The study of words in special groups and classification is commendable, although the meanings of words have been studied in our linguistics critically as noted above. The Uzbek linguistics classifies the following types of word meaning which make the meanings of words learn easily:

- Nominal meaning.
- Representative meaning.
- Lexical meaning(primary, original)
- Figurative meanings

For example, the word 'fox' means the name of an animal and the nominal meaning of the word is used as the code to distinguish it from other animals. The



representative meaning of the word is understood along with the name of 'fox': "Hunting the foxes is banned in this season!" It is now the lexical meaning of the word defines 'the fox as a wild, savage, cunning animal' The connotational meaning of a word is **a different association that replace its literal meaning**, which is known as denotation and can be either positive, negative, or neutral. The connotational meaning of the word fox is 'cunning people'. The meaning 'cunning people' is replaced with the word fox.

As a wrap-up of ideas, we offer a single, simple example to show the importance of the meanings of words in the study of foreign languages more clearly. To make it easier to understand the problem in a certain sense, we will focus on the meanings of auxiliaries and their paradigmatic applications.

E.g: "*Kecha majlisdan sen haqingda gap bo'ldi*"//you were talked about in yesterday's meeting"

In this sentence the Uzbek auxiliary word *haqingda* (about) can easily be replaced with the following synonyms in this sentence of same context, for example, "*sen to'g'ringda*" (about you), "*sen bobingda*" (you), "*sen mavzungda*" (about you), "*sen ustingda*" (on you), "*sen "xusus(i)ngda* (about you)"

Now, when it comes to the impact of meaning of words, having heard this statement one is immediately turn pale or upset. He ignores the meaning of the above auxiliaries and may think that she has been discussed or gossiped about. However, there is a single more negative variant 'ustingda' of the above auxiliaries, and hearing the rest we must just have rejoice only of the positive meaning. As, the word '*haqida*' denotes the that the person under discussion is just and

right in life and work, "*to'g'rida*" means that the person is virtuous, on his right way, or has the right attitude towards the surrounding sphere, "*xususida*" means that the person has peculiar features and good properties worthy discussing; "*bobida*" means that the scope of discussion was large, and part of it concerned on that person; "*borasida*" means and notes that such a person "exists" or 'alive' in life. Now, if we take a closer look at this sentence, a negative perception of auxiliaries and the negative impact of the statement are related to the phrase "*gap bo'lmoq*" in some extent. As, the Uzbek phrase "*gap bo'lmoq*" has a negative connotation, like being talked about or to become the subject of gossip or laughing stock.

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## LEXICAL AND STYLISTIC ANALYSIS OF PROVERBS AND SAYINGS IN MEDIA TEXTS

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### ABSTRACT

*This article presents the research results dedicated to the lexical and stylistic analysis of proverbs and sayings in media texts. The language of the media quickly reflects changes in society. At the same time, intertextuality is becoming the central concept of a rapidly changing language.*

**KEY WORDS:** *media language, mass media, proverbs, sayings, linguistics.*

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People strive to pass on the accumulated knowledge and life experience to future generations. The historical features of the development of a nation, its lifestyle, moral character and rich traditions are only a small part of what proverbs and sayings are able to reflect. In different languages. there are sayings and proverbs that are completely identical or very close in thought. But there are such turns that in other languages have no analogues. The latter are of particular difficulty for the translator.

Every day in speech, we use various idiomatic expressions. They give speech expressiveness and imagery. How versatile the mind of the people can truly be seen in the proverbs, since all the proverbs were composed by the people. You can quite easily

understand how the country developed, consider the features of everyday life, worldview, traditions of one or another people. The language and style of the modern press seek to soften the restrained and dry tone of the official letter, to replace it with colloquial forms. Also in the language of the press you can see a tendency to search for new means of expression. Such is the nature of the use of proverbs and sayings [5, c. 93].

The language of the media quickly reflects changes in society. At the same time, intertextuality is becoming the central concept of a rapidly changing language. It is this fact that determines the use of proverbs to create the so-called “fragmented” discourse [3, c. 86]. Proverbs and sayings become a way of expressing the cultural experience of a people,



but moral or categorical imperatives can change under the influence of political, social or economic shifts. Consequently, proverbs and sayings change.

The functioning of proverbs and sayings in the language of the media is characterized by their formal transformation. In this case, the components of the proverb can be replaced. Most often, this technique is used in online media: В семье не без героя; Лечению время – потехе час; Еда не приходит одна и т. д. [1, с. 280]. A special case of component replacement is the proverbial contamination context: Сила есть – закон не писан; Либо рыбку съесть, либо голова в кустах и т. д. [1, с. 208].

For example, the case of the author's interpretation in the proverb «Вот тебе, бабушка, и ВТО!» («Рабочая газета», №176, 5.10.12, с. 2) also becomes the replacement of the structural component with another token. In this case, the initial form of this expression («Вот тебе, бабушка, и Юрьев день») used to express extreme sadness or surprise from a sudden event [7, с. 35]. The same stable expression is transformed in this case: «Вот тебе, вуйко, и книжная столица» (Рабочая газета, № 214, 2.12.11., с. 4). The phrase is again replaced by another phrase of a different thematic plan, however, in this author's interpretation there is also a national Ukrainian component.

You can also observe the process of expansion or, conversely, reduction of the structure of the proverb. The expansion of the structure of the proverb often occurs due to the introduction of a previously absent opposition: Лежачего не бьют, а помогают подняться; Лучше один раз увидеть, чем

сто раз услышать, а тем более прочесть и т. д. [1, с. 209]. In turn, the reduction is reduced to omitting the component of the proverb: Честь – смолоду; Только могила исправит и т. д. [1, с. 209].

For example, as a result of ellipsis, the contradiction between the isolation of form and the coherence of the integral meaning of the phraseological unit is eliminated [2, с. 22]. It is worth noting that such a reduction is possible only if the proverb or saying is well known, and the use of only a fragment will be enough for the reader to understand the meaning of the statement. So in the abbreviated phrase «Терпение и труд» («Известия в Украине», №162, 30.08.12, с. 4) the reader will easily recognize the original version of the proverb «Терпение и труд все перетрут» with the meaning «patience and perseverance in work will overcome all obstacles» [7, с. 96].

The language form of proverbs and sayings is determined by their folkloric origin, the colloquial sphere of use. It should be noted that not only the proverbial form changes, but also its pragmatic meaning. So, expressiveness, as one of the most important properties of a proverb and a saying, determines the strength of its impact on the listener. Moreover, this expressiveness is achieved due to the tropes [4, с. 2].

Many notorious transformations that reflect typed situations quickly acquire stability, begin to play actively in a new design, are repeatedly fixed by different sources, that is, they can become normal, and some (including those that we study in this article) can be considered as individual,



occasional transformations tied to specific individual situations [6, c. 455].

To confirm that this specificity is universal, we will also consider proverbs and sayings in the German media.

The general model, characterized by expressiveness, relevance of the logical and semantic content, is the replacement or substitution of the lexical components of the proverb. In most cases, one or two words are replaced: *Stille Wasser sind teuer* (Mitteldeutsche Zeitung – further MZ. 2008.31.07.) – *Stille Wasser sind tief*. The deformed proverb is used as the heading of the text, which refers to the prices of mineral water offered to the guests of the fashionable Atlantic Hotel in Hamburg [5, c. 93].

The following type of proverbial deformation in the German media language is characterized by cutting off part of the proverb and adding a new proposition: *Fruh ubt sich, der besser fahren will* (MZ. 2007.13.07.) – *Fruh ubt sich, was ein Meister werden; Ende gut, alles gut*. In both cases, the general meaning of the source proverb is preserved, since the source keywords are not replaced. The change in the meaning of the source proverb is usually associated with the replacement of keywords, which is very popular in commercial advertising as a means of creating original advertising slogans: *Preise gut, alles gut – Ende gut, alles gut*. With the replacement of the keyword, the general meaning of the source proverb has changed, but the newly formed idiom sounds like a well-known saying, and the consumer believes it [5, c. 94].

A characteristic feature of almost all examples, providing recognition of the source

proverb, is the preservation of its syntactic structure and alliteration with the source word. So, the headline of newspaper publications on the theme night of open doors in churches *Nachts sind alle Kirchen auf!* (MZ. 2006.18.08.) has a syntactic proverbial structure *In der Nacht sind alle Katzen grau*. In the anti-spelling as the title *Liebe geht durch den Wagen* (Presse und Sprache. 2009. Februar.) alliteration takes place with the word *Magen* in proverbs *Liebe geht durch den Magen*. The consequence of replacing a keyword in a traditional proverb is to change the meaning of the original. The text refers to the big love of men in Germany for cars [5, c. 95].

As shown by the lexical and stylistic analysis, today it is not the fact of transformation of Proverbs and sayings in the texts of the media that attracts attention, but its scale. Previously, this process could be observed only in the humorous sections of Newspapers, but today the transformation of stable expressions (including phraseological units) becomes almost a separate genre of journalism. This fact allows us to evaluate the updated form of idioms differently-both external and internal. Today, these expressions in the language of the media can be regarded not only as a means of creating expression, but also as a way of expressing additional lexical and stylistic nuances.

The main feature of proverbs and sayings in the texts of the modern press is their strict moralizing. It is these expressions that express the totality of cultural and historical experience developed by one or another people. Through the author's interpretation of proverbs and sayings,



occurring at the lexical and stylistic level, the expression becomes ironic. Such a proverb or saying can help the author not only to present the facts, but also to demonstrate their attitude to the events described.

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# THE CONCEPT OF GLOBALIZATION AND ITS PHILOSOPHICAL INTERPRETATION

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## ABSTRACT

*This article highlights the widespread use of the concepts of "global", "globalization" in the scientific literature and the media, the general features of which are reflected in the universal, planetary reality, international life and international relations under the influence of today's integration and globalization.*

**Keywords:** *Globalization, immanent features, integration, transnational associations, liberal (neoliberal), homogenesis, heterogeneization, bifurcation (separation), fluctuation (vibration), information universalization, investment, capital, postindustrial development, urbanization, means of communication neoliberalism, hegemony, modernization.*

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Today, the terms "global" and "globalization" are widely used in the scientific literature and the media. Most people do not use the term "concept" because they all agree that their common features are universal. Globalization is interpreted as an axiom that is a separate term, a concept.

"Globalization" is derived from the French word "global", which means "general", "related to world". Etymologically, the word "global" is derived from the Latin word "globe". Globe refers to the world. This approach was first used by Aristotle. According to the well-known sociologist E. Giddens, "Globalization is the intensification of local events that take place far away from each other in global social relations" [1]. He noted that this intensification is explained by the formation of the world system of nation-

states, the economy of the world capitalist system, the global military order and the international division of labor. He marks the beginning of the process of globalization with the eighteenth century.

P. Ratland understands globalization as the universal nature of relations between peoples and nations. Based on this interpretation, it is based on the reduction of realities and distances to globalization through information technology, the growing role of transnational corporations, the reduction of state intervention in the economy, the emergence of free trade as a global phenomenon, the emergence of the world currency and its replacement are becoming a reality in economic life, the spread of liberal (neoliberal) democratic values around the world, the habit of political



institutions to serve national interests and globalization, the desire of some countries to present their cultural heritage as a model of global development, the continuation of the tradition of Europeanization and the United States plays a leading role in this. According to him, globalization is a phenomenon of the twentieth century. Robertson defines globalization as the transition of social relations from a local to a global state, the processes of "homogenesis and heterogeneization" that complement each other and in some cases collide with each other [3].

Well-known I. Prigogine considers globalization as a reality of the information system. According to him, globalization is characterized by bifurcation (separation) and fluctuation (oscillation). He links globalization to the second half of the twentieth century. Soros sees globalization as a reality leading to a "global open society." Globalization, he said, is "the development of a global financial market, the rise of transnational corporations and its growing impact on the national economy." At the same time, it is a phenomenon that today represents information and culture, the spread of television, the emergence of the Internet and other forms of communication, the mobilization and commercialization of ideas [5]. Many scholars have concluded that globalization began in the 1970s and 1980s.

German researcher Ulrich Beck divides globalization into two stages: the first modern and the second modern. The first modern includes scientific and technical discoveries, the development of science,

travel and the processes of conquest of other countries and continents. According to him, Marx and Wallerstein connect this period with the XV century. The emergence of the capitalist system, the transformation of commodity-money relations into a global reality is a characteristic feature of this stage. According to Ulrich Beck Robertson, the beginning of globalization dates back to 1870-1920. Perlmutter argues that the disappearance of the East-West conflict, the disintegration of the USSR, marked the beginning of global civilization. Analyzing these views, Ulrich Beck describes globalization as "a phenomenon that bridges the gap between the sometimes incomprehensible and inappropriate transnational forms of life" [6].

Uzbek scientist B.Umarov writes, "The end of the XX century - the beginning of the XXI century is a new global order in world development, the essence of the civilized stage, the expansion and complication of relations between states and peoples, the global information space, capital, the emergence of a completely new situation in the commodity and labor markets, the growing man-made impact on the environment, the spread of popular culture, the growing threat of information-ideological and religious extremist attacks, in short, all spheres of society - economy, politics, ideology, culture, and even personal lifestyle. This process has led to the emergence of a global communications network, the information revolution, the internationalization of capital, increased competition in world markets, the shortage of



natural resources and the intensification of the struggle for them, the proliferation of weapons of mass destruction, the threat of global catastrophe"[7].

H.S. Jumaniyazov, M.A. Sobirova and U.B. Nigmanova describe globalization as "a sharp increase in the interaction and interdependence of different countries and peoples in the political, economic and spiritual spheres of society." Its main features can be interpreted as follows:

- Globalization is a continuous process;
- Globalization is a process of homogenization and universalization of the world;
- Globalization is a process of "washing away" national borders;
- Transition to international forms of production, acceleration of the movement of factors of production;
- Introduction of common international standards in the world economy;
- The manifestation of the European way of life (westernization), the American way of life in the culture and daily life of the peoples of many countries;
- Assessment of globalization as a complex process that accelerates and expands the flow of investments, capital, machinery and goods around the world;
- The connection of globalization with the radical changes caused by

popular culture, which brings different peoples closer together;

- Globalization as a result of democratic processes is a condition that contributes to rising living standards and a significant reduction in poverty throughout the world;
- Globalization is seen as an integration process that stimulates production efficiency and capacity building, creating additional jobs in exchange for economic growth;
- Globalization is closely linked to the information revolution;
- Globalization consists of certain threats to individuals, families and communities, which are manifested in changes in habitat and increased risks associated with financial relationships [8].

The authors date the advent of globalization to the 1980s. It is obvious that there are different approaches to the term globalization, its origin, immanent features, manifestations. Some authors even attribute the buds of globalization to the Achaemenids and the Alexander the Great. Yes, these empires have forced peoples, nations, East and West to integrate through military campaigns. We see the same effect in other empires, in the First and Second World Wars.

But they were integration by force, invasion, means of war. The international life and international relations that are emerging under the influence of today's integration and globalization are of a voluntary nature. They



are often the product of factors such as socio-economic cooperation, communication, enjoyment of cultural riches, human rights and freedoms, the spread of liberal and neo-liberal values, and the assimilation of the achievements of civilization. Integration and differentiation, on the one hand, the pursuit of universal unity and cooperation, on the other hand, the preservation of national identity and cultural identity are the hallmarks of today's globalization.

"The term "globalization" was first coined by the American sociologist T. Livitt. In his 1983 article in the Harvard Business Review, he analyzed and described globalization as the global business of transnational corporations, a partnership that trades in world commodity markets. One of them is the debate over the means of realizing globalization.

These tools are:

- Trade;
- Financial transactions;
- Economic cooperation;
- mastering scientific achievements;
- Mass media, especially TV, Internet, space telecommunications, mobile communications;
- International organizations (UN, UNESCO, UNICEF, BVB, Shanghai Cooperation, Daos Forum, EU, Eurasian Economic Cooperation, CIS, etc.);
- International tourism;
- Advisory Councils (Advisory Council of Central Asian Leaders in Astana in 2019);
- International Olympics and Sports Games;

- Creative festivals, competitions (Eurovision, Film Festival, Oriental songs);
- International (regional, regional, global) forums of civil society institutions.
- Globalization is often associated with industrial, especially post-industrial, development.

According to the American sociologist D. Bell, one of the promoters of the concept of postindustrialism, the main feature of the pre-industrial period was the predominance of manual labor, the stage of industrial development shifted to the use of technology, humanity in the post-industrial stage. The stage of post-industrial development focuses on the human factor, its intellectual potential, and seeks to fully realize neoliberal ideas of human rights and freedoms. All the achievements, conveniences, urbanization, means of communication created by civilization must serve man. Thus, neoliberalism does not declare human rights and freedoms as liberal ideas, it fully realizes these rights and freedoms, sees them as indicators of progress, turns them into an index of development, all political institutions, nation-states. It encourages compliance with these requirements. These calls for neoliberalism are in line with the post-industrial stage of development and the positive aspects of globalization.

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## LINGUISTIC FEATURES OF SOME NAMES CONTAINING AFFIXIODES IN THE DASTANS "GOROGLY" AND "OSHIQNOMA"

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### ABSTRACT

*This article examines the linguistic features of names and nicknames containing affixoids in Khorezmian dastans, and their etymology and semantics. In addition, the sociolinguistic factors influencing the origin of anthroponyms in dastans are discussed, and the ideas are supported by examples.*

**KEYWORDS:** *dastans, affixoids, ethnolinguistics, sociolinguistics, proper nouns, folklore*

Personal names are formed in connection with the development of society, the classification of members of society for certain reasons, the division of labor and products, the origin of forms of ownership, and a number of other factors [1]. For example, in the Uzbek language, the parts of the names of a number of people, such as *boy, qul, xon, xo'ja, said, beka, poshsho*, are historical traces of inequality, stratification, domination and subordination in society. This feature also applies to dastans, which are an artistic form of folklore. Because dastans are written by peoples living in a particular area, they are no doubt based on their history, culture, and especially their language (sometimes dialectal features). Nicknames are a common ancient custom among the Uzbek people and have a unique scientific and theoretical basis. They are

formed on the basis of a characteristic, defect or advantage of a person (physical or mental), character, as well as anthropological structure, in some cases, his ethnographic features. In general, there are some ideas about nicknames, their naming principles and types [4].

In the onomastics of dastans, nicknames are a unit that gives additional meaning to the main names and expresses the image more clearly. Nicknames are so well-developed in folklore, especially in dastans and fairy tales, that they are not given to all heroes. The character traits of the nicknamed hero are evident from his nickname. Because the nickname is also given to him because he has a feature that distinguishes him from others. Nicknames, like the names given to people, arise because of the need to distinguish one



person from another (usually several people with the same name). Therefore, it can sometimes be used in place of a person's name. However, this requires a community that has lived together for a long time in a particular area. They need to get to know each other better.

Khorezmian dastans also have a number of nicknames, which indicate the characteristics of each of the heroes of the epic. Here are some of the features of the nicknames:

1. What ethnic group do the heroes belong to, such as *Hasan bulg'or*, *Abulqosim Qurayshi*, *Bektosh arab*, *Rayhon arab*, *Safar avg'on*. Nicknames with ethnic symbols are mostly given to non-Turkic peoples. Nicknames related to Turkic ethnonyms are also used, but they are often used in isolation from human names: *Barlos*, *Chovdir*, *Yovmit*, *Taka*, and others.

2. Some of the nicknames are based on the social status, position, occupation of the heroes: *sulton*, *bek*, *to'ra*, *sardor*, *vazir*, *mehtar*, *noib*, *darg'a*, *biy*, *miroxur*, *mirshab*, *og'abegi*, *xalloj* and others. Here are some of them:

**Bek.** It is a Turkic term meaning "gentleman" in Turkish. In the Central Asian khanates, the head "bek" of a city or region is appointed by the khan. An honorary title given to the sons and relatives of khans and statesmen in Khorezm. The beks owned certain lands and collected taxes from them. The word *bek* also means ruler, nobleman, gentleman. The word is used in the names *Bek Go'ro'g'li*, *Go'ro'g'libek*, *Bek Ravshan*, *Mamadali Bek*, which are found in Khorezmian dastans.

**Biy.** A title bestowed on tribal elders of nomadic and semi-nomadic peoples, including Uzbeks. In the 18th and 19th

centuries, the chiefs of the large Uzbek tribes and clans were subject only to the central government. The title of *Biy* has been passed down from generation to generation.

In Khorezm, *biy* was one of the honorary titles after fatherhood and brotherhood. The *biy* commanded 300-500 *navkars*. It should be noted that even though *Biy* was later promoted to a higher position, he retained his old title. The word is used in Khorezmian dastans as *Oyla biy*, *O'tagan biy*, *Sharmon biy*, *Ermon biy*, *Tulimbiy*.

**Vazir.** It is an Arabic word meaning helper, supporter. The title of *vazir* first appeared in the 8th century during the Abbasid dynasty. From then on, they began to serve as high-ranking officials in the governments of Muslim countries. In Khorezmian dastans, *Porma vazir*, *Pormoz vazir*, *Husain vazir*, *Lang vazir*, *Hamdam vazir*, *Qosim vazir*, *Bahrom vazir* are mentioned.

**Darga.** In Khorezmian dastans it is used in such names as *Sheri darga* (meaning Ali), *Eshimdarga*. The term has the following meanings:

1. In the Mongol language, it means governor, and during the reign of the Mongols, Timurids, and Shaybanids, they were at the level of provincial or city governors. They are responsible for administering the province or city, registering the population, accounting for it, and collecting taxes from them.

2. The chief of guards is called by this name. In the Khorezm dialect, the word is adapted to pronunciation and is widely used in dastans. In fact, the word was in the form of "doruga." In recent times, the captain has been called a *darga*.



**Sarkor.** The word is specific to the Persian language and (sar + kor) means "beginning of work". In the Middle Ages, he was an official who controlled the lands and waters of the feudal lords and managed all the economic affairs. The personal treasurer of the rulers was sometimes called the sarkor.

**Sardor.** It means chief, leader [6]. Commander of the khan's army in the Central Asian khanates, leader of the people's army. It is used in Khorezmian dastans as *Saydali sardor*, *Ahmad sardor*, *Mamatsoyin sardor*.

**Sultan.** The word is typical of the Arabic language and means ruler. In the 8th century, the Caliph of Baghdad awarded his friend Kozim ibn Yahya, who was in charge of all the affairs of the state at the palace of Harun al-Rashid, with the new title of Sultan (سلطان) as a sign of respect and great trust in him. Beginning in the tenth century, the ruler of Islamic countries began to be called a sultan. Later, the title was changed to that of a governor or a tribal chief. By the 15th century, Shaibanikhan's close relatives were also called sultans. It is used in Khorezm dastans. as *Vais sultan*, *Gorogly sultan*, *Mirza sultan*, *Munavvar sultan*, *Nadir sultan*. In some nations, the sultan has become a component of women's names. For example, the names of the Temurid princesses *Robiyasulton* and *Ruqiyasulton* are mentioned in historical sources.

**Miroxur.** It is found in the dastans of the "Gorogly" series: "...Soqi miroxurga qarab, G'irotni Avazjonga abzallab keltirgin, – deb bir so'z dedi..." [2]. (**Meaning:** Soqi looked at the horseman and told him to prepare and bring Girotni to Avaz). Miroxur was a high-ranking (sixth-ranking) official in the Emirate of Bukhara

and was the head of the palace stable. He is in charge of all the stables and equestrian courts in the palace. The term is derived from the Arabic and Persian units "mir" (amir, lord) and "oxur".

**Mehtar // Mihtar** (مهتر) Two different forms of the name are related to its reading in Arabic. It is also used in dialects as a matal. Occurs in the dastan "Avazkhan":

...*Toymos begim balli Rustam bo'lmadi,*  
*Dali Mehtar, Hamdam vazir kelmadi,*  
*Safar og'am mandan xabar olmadi,*  
*Duv talashgan to'rt ayg'irim kelmadi* [3]...

The nickname is based on the title. The word means: 1) great; 2) the ambassador; 3) is interpreted as the chief of trumpet players [6]. In the Emirate of Bukhara, the term means the head of tax collectors. In the Kokand and Khiva khanates, the chief musician was called mehtar.

**Mahram // Maram.** It is found in the dastans of the series "Gorogly":

"...o'zlarinnan yoshi ulug'roq Safar mahramni o'zlarina bosh atib, bir cho'listonliqa chiqib, qo'sh diklab, chertak qurib yotvadila..."[3]

In fact, the word is specific to the Arabic language and has a historical and ethnographic meaning. According to Sharia law, relatives such as husband, parents, brothers, uncles, cousins, and grandparents are considered mahrams for a woman. A man and a woman who can see each other, and the closest relatives are considered mahrams.

In the Uzbek classical literature, the word has the following meanings: 1) the closest relative; 2) friend; 3) private servant, domestic servant [6].



In Khorezmian epics and dialects, the *ma:ram* form is actively used, with the second vowel being pronounced a little longer, dropping the consonant "h" in the word [3]. In nicknames, the meanings of the word, such as confidant, inner servant, can be considered as the basis. Because in the dastan, Safar is described as a close person of Mahram Goroglu.

In general, people's position in society has always been considered as a distinguishing feature. Therefore, this group includes *Alibek sotquchi*, *Ashur mirshab*, *Buldur qassob*, *Bobo qalandar*, *Gambik cho'pon*, *Gulzor kaniz*, *Mansur Halloj* (*halloj – paxta tolasini chigitdan ajratuvchi dastgohni ishlatuvchi hunarmand*), *Xo'ja bog'bon*, *Mirishkor bog'bon*, *Omon jarchi*, *Sanjar baxshi*, *Shozargar*, *Zangi zargar*, *Shodmon mergan*, *Zamon og'abegi*, *Avaz badrak*, *Alixo'ja eshon*. Nicknames given to these heroes are found in almost all Khorezmian dastans. Examples show that in terms of the use of nicknames, folk dastans are much closer to the vernacular than to fiction, and reflect its characteristics in this area. Dastans also use nicknames based on some physical or mental attributes of a person who speaks a lively language. Compare: Safar Kusa, Pirovun Kusa (Kusa - a man without a beard), Tokhtamish the Blind, Yazim Barzangi (Barzangi - a tall, strong man), Safarali Ninasoqol, Karam dali, Mustob guppi (guppi - 1. A short cotton robe; in Turkmen "a short jacket with camel hair" (Tds. 219.) 2. Fat, ugly) [7] and others.

Some of the nicknames in the epics are related to spiritual content. The word dali in Karam dali, Dali mehtar and other names is used in modern Khorezm dialects to mean "joy, devil, jinn". The word is also

used in dictionaries of old Uzbek and ancient Turkic languages. Compare: Dali (DLT, III, 251), Old Uzbek. delu ("Tafsir", 117), ozarb. dali (Azrl. 126), "shox, tentak"; turkm. dali; insane (Tds, 286) [7] and others. One such nickname is **Shumtuyok**. In the dastan Edigo: "...Uyg'ur jamoasidin bir boy bor erdi. Hech bir yaxshi ishga qo'l urmag'an, yeb-ichib aslo qorni to'ymag'an, bir tuk asl chiqmag'an, misoli tarvuzdek bir ayyori ko'sa erdi. Otina Kenjaboy ko'sa, laqabina Shumtuyoq der erdilar..." [5]. There are different forms of this nickname in the dialect: Shumtuyoq, Shumoyak, Shumpoy, which mean "unlucky, bad people". In the same sense, words such as *oqpatli*, *oq qil*, *oq oyoq* are also used as nicknames. In the minds of many people, such people always bring misfortune and unhappiness. People who see them don't work either. In the dastans, people who bring misfortune to their heroes are called by similar nicknames.

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## THE PHONETIC FEATURES OF THE KHOREZM KIPCHAK DIALECT

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### ABSTRACT

*This article provides detailed information about the peculiarities of Khorezm kipchak dialects of the Uzbek language. For instance, the phonetic, features of words in the under research dialect are highlighted basing on the examples. The given examples are compared with the options in other dialects. In this article dialect words are given in Cyrillic letters while the literary language forms of words are given Uzbek alphabet in Latin letters, in order to avoid confusion in pronunciation with English sounds of these letters.*

**KEYWORDS:** *dialect, kipchak, classification, phonetic features, morphemic features, singormonism.*

At present, Khorezm is inhabited by the representatives of the Oghuz and Kipchak dialects of the Uzbek language. Although these people live in an area very close to each other, they still retain their distinctive linguistic features, despite the fact that there are continuous economic and cultural ties between them. Linguistically examining these dialects, scholars speculate that the lexicon of these dialects contained elements of Arabic and Persian, which are not found in the central Uzbek dialects, and there are assumptions that such words came from the ancient Khorezmi language. [1:12].

The historical, archeological and ethnographic research carried out in recent years raises the issue not only of the relationship of Khorezm dialects with other Turkic peoples, but also their relationship with non-Turkic peoples, including those living in East Asia and Eastern Iran. [1: 130]. In general, the ethno-genesis of the peoples of the Aral Sea region (Karakalpak, Uzbek,

Turkmen) goes back to antiquity, which is not yet clear, which is explained by certain historical conditions. Due to this region, with its geographical conditions, was a place where different ethno-genetic and cultural relations collided. [3:27]. Therefore, the study of dialects formed in such conditions in the historical-linguistic plan will undoubtedly yield important results.

It is known that many Uzbek dialects are perfectly studied. However, we cannot say the same about some dialects, including Khorezm Kipchak dialects, which have not been fully studied in all its aspects. Although much work has been done on the Oghuz dialect of the Khorezm dialects, only a few notes have been made about the Kipchak dialects.

H.Doniyorov classifies the Kipchak dialect of the Uzbek language in general, basing on the views by N.A. Baskakov, F.Abdullaev, V.V.Reshetov on Kipchak dialects in general and their types and



features, and divides Kipchak dialects into five general types. He classifies the Khorezm Kipchak dialects as the North Khorezm type (northern Khorezm Kipchak dialect). [5:12]. He claims that Kipchak dialects were studied by E.D. Polivanov, F.Abdullaev, A.Ishaev and Y.Ibragimov, and it is necessary to include Kipchak dialects in Karakalpakstan to this type. In his opinion, this type differs from other Kipchak dialects by the abundance of Oghuz elements in Kipchak dialects. [5:12].

According to the language features, people belonging to the Kipchak dialect of the Uzbek language live mainly in Gurlan, Yangibazar districts as well as in some villages of Shovot and Bagat districts in Khorezm region, Beruni, Amudarya, Khojayli, Kungrad and partly Shumanay districts and Nazarkhan village of Nukus district of Karakalpakstan. For this reason, researchers classify them as Beruni-Mangit, Khojayli-Kipchak and Kungrad dialects. [4: 5]. In this classification, the Gurlan-Yangibazar dialects located in the territory of Khorezm region, as well as the dialects of other districts were ignored. Although the researcher A. Ishaev noted that the full classification of these dialects will be covered in detail in another work, for some reason it was not published anywhere. [4: 5].

This study is the result of our observations on Kipchak dialects in Khorezm region and does not claim a perfect solution.

Phonetic features. Khorezm Kipchak dialects differ from the dialects that are the basis of the literary language in terms of the number of vowels. That is, they have 6 vowels, in Khorezm dialects 9 vowels: [и, ы, э (е), у, ў, о, օ, а, ә]

The researchers studying Khorezmian dialects note that there are phonemes [и, ы], the back of the language, as well as the mid tongue variants of the sound in the language.

[6:15]. In fact, there is a slightly back-to-back version of this vowel in the dialect. Compare: *уйначу* (lit. ninachi-grasshopper), *уйт* (lit. it-dog), *уйәр* (lit. egar-saddle), *сыйлы* (lit. izzatli-honorable) and others.

It should be noted that there are only secondary elongated vowels in Khorezm Kipchak dialects, which are formed sporadically (do not have the feature of meaning differentiation). They are the result of the fall of consonant sounds such as [x, й] in the dialect, as well as the addition of two consecutive vowels in some words to form secondary elongated vowels. For example: *сә:p* (lit. sahar-morning), *шә:p* (lit. shahar-city), *мәнат//мийнат* (lit. mehnat-labor), *сә:m//са:m* (lit. soat-hour), *мә:мала* (lit. muomala-treatment), *қана:m* (lit. qanoat-satisfaction) and others

There are no primary long vowels in the dialect that differ in meaning. F. Abdullaev classifies Khorezm dialects according to their phonetic-morphological and lexical features, divides Kipchak dialects into sound й-[j]-added and ж-[dj]-added types. The "ж" dialects spoken in Akkum northeast of Marbutat village, northwest of Vazir village in Gurlan district, as well as the Chinese part of Kipchak (now Amudarya) district of Karakalpakstan, northeast and south of Mangit district, and their specific language features are presented in detail. (2: 259-264). He points out that these dialects retain the main features of the 'j'-added Kipchak dialects, as well as acquire distinguishing features also. In particular, in some words, the [ж] at the beginning of the word is systematically converted to [й] (*јаg* in literary, *йаg* in dialect)

"й" added dialects. Representatives of these dialect type make up 10% to 40% of the population in Gurlan, Mangit and Kholimbek districts of Amudarya district, Yangibazar



district, as well as in almost every district in the south of Khorezm, as well as in Kipchak district of Karakalpakstan (northwest of of China settlement) and in many parts of Beruni and Turtkul districts. They also live in large areas in the Dashoguz district (now Niyazov district) of Dashoguz region in Turkmenistan. [2: 262]

F. Abdullaev points out that these dialects retain the main features of the "ж"-added Kipchak dialects, as well as their differences:

1) The vowels [и] and [ÿ] are "soft" sounds prone to the tongue, but not at the pre-*i* and *ÿ* level in the Oghuz dialect.

2) Diphthongation is much weaker, it is difficult to feel the diphthongation of the vowels *e*, *ö*, *o* at the beginning of a word in fast speech.

3) "ÿ" added form, i.e. *yer* not *жер* (*yer*-earth), *yo'l* not *жол* (*yo'l*-way) (but *jiyda*, *jiyna*). With the exception of addition of sound [ж] in some words, the *ж* found at the beginning of a word encountered in the first type of dialects is systematically converted to [ÿ](even in the literary language the word *жағ* is pronounced as *ÿағ* in Gurlan).

4) The sound [x-kh] is separated from [к] as an independent phoneme.

5) *-ning* affix of the genitive case in some villages of Mangit district, Gurlan district and some villages of Yangibazar district, mainly stable in speech as an episodic feature (in other parts it is replaced with accusative affix *-ni*), the full version of the genitive suffix is preserved in the spoken language of older generation.

6) The short variant of the affix of the accusative case ( *-и+н*, *-с+и+н*) is usually absent.

7) the declension of the noun in the 3<sup>rd</sup> person is formed by the affixes *-нән* // *-иннән*, *-синнән* in the possessive pronoun.

8) affix *-ватир* // *-ятир* are used to form the verb in present tense

9) affix *-тоғин* // *-таған* used to form the adjective of the future tense

10) affix *-ғанча* // *-ғанча* (two affixes are used depending on the final consonant of the word in the Oghuz dialect: *сорағанча*, *галинча*).

In addition, prof. F. Abdullaev points out that in the "ÿ"added dialects, even in Gurlan district, there are some phonetic features characteristic of Oghuz dialects: *däväräk*, *eddi*. In fact, the phenomenon *t > d* at the beginning of the word is typical feature of Oghuz dialects. The scientist argues that this is the result of the interaction of the dialects.

In this regard, it is necessary to emphasize the impact of school-education, changes in society, the development of science, the media. In addition, the territory of Khorezm region has changed significantly since the master scholar F. Abdullayev invested the dialects here. The Amudarya district, which was once part of Khorezm region, was later transferred to the Republic of Karakalpakstan. It is natural that all these changes would have an impact on the classification of Khorezm Kipchak dialects and the language of the people living in this area.

We included the dialects of Gurlan and Yangibazar districts of Khorezm region as the object of our research. There are elements of [ж]-addition in people's speech living in the villages of Gurlan district located in the north of Khorezm and in some parts of it bordering on Amudarya district, more precisely, in Dosimbiy settlement.

Once the people of North Khorezm, and even Uzbeks in Central Khorezm, including



Gurlan district, spoke a common [ж]-added dialect. Under the influence of the Middle Khorezm Oguzs dialects the dialect lost its [ж] feature and began to use [й] instead of [ж]. [10:42] A similar opinion was expressed by the linguist R. Yoldashev, who conducted research on the lexicon of Uzbek dialects in the Dashoguz region.[8: 5-6]

It should be understood that the main reason for the decline of "ж" from North Khorezm to Khiva is the existence of people speaking by adding "ж" in the areas bordering the region, as well as the influence of the neighbouring Karakalpak language. [4:12]

In addition, there is another dialect type with "ä" pronunciation introduced by F.Abdullayev as the third type of Kipchak dialect types. F. Abdullayev noted that there are not many such dialects, mainly in the villages of Shangi and Kangli in Gurlan district, as well as in the Arab settlements of Kipchak in Urgench district, Monok in Shavat district, Naiman in Bagat, Qatagan in Kushkupir, Kangli (Pitnak) in Khazarasp. a characteristic feature is the constant use of the sound [ä] instead of [e] in the first syllable of the words as (кәл -*kel*, тамир -*lit. temir*). [2: 265-266]

Thus, the dialects we are studying belong to the [й] added dialects, the [ä]-added dialects, which is characteristic of the third type of dialects, as well as the Kipchak dialect types, which in some words retain the phenomenon of diphthongization, which is characteristic of the [ж] -added dialects.

E.D. Polivanov calls the presence of [ж]assimilation in Khorezm Kipchak dialects "Kazakhized" dialects due to the signs of non-preservation of the consonant [x] at the beginning of the word. [7: 5]. Indeed, the Khorezm Kipchak dialect types are radically different from the Kazakh language with a number of unique linguistic features. This is

obviously seen in areas where the Uzbek, Kazakh and Karakalpak peoples live in the same area sharing the settlement. Compare: the dialect words *Юмуртов*, *йиланли*. The sounds r, l do not occur at the beginning of the word. The words that have the r, l sound at the beginning of a word will inevitably appear in front of them with a prosthetic vowel. *Ўрозбой-lit. Ro'ziboy* (name. Roziboy), *Иражаб-lit. Rajab* (name.Rajab), *Ўрус- lit. rus* (Russian), *Илай-lit.ilon* (mud), *Илаққа-lit. laqqa* (sheafish), *Иланпачи* (Lanpachi- a lamp repairman) and others.

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## REBAMIPIDE: EFFECTIVE DRUG IN THE PREVENTION OF NSAID GASTROPATHY

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### ABSTRACT

*Prevention of the development of complications from the gastrointestinal tract (GIT) is the most important element of the rational use of non-steroidal anti-inflammatory drugs (NSAIDs). For a long time, proton pump inhibitors (PPIs) were the only means of drug prevention of these complications. However, PPIs are effective only for the prevention and treatment of pathology of the upper gastrointestinal tract (NSAID-gastropathy). Today, Uzbek doctors have a new tool for protecting the gastrointestinal mucosa - rebamipide. The action of this drug is different from that of PPIs: it is a typical gastro- and enteroprotector that enhances the synthesis of endogenous prostaglandins and has a significant anti-inflammatory potential. The drug has long been widely used by doctors in Japan, South Korea and China as an effective and safe remedy for the treatment of many diseases of the digestive system. There is a strong evidence base confirming the effectiveness of rebamipide for the prevention and treatment of NSAID gastropathy. According to controlled studies, it is not inferior to the "classic" gastroprotector misoprostol, significantly surpassing the latter in terms of tolerability. This review presents the mechanism of action of rebamipide and presents the main clinical studies that have studied its therapeutic effect in NSAID gastropathy.*

**KEY WORDS:** *non-steroidal anti-inflammatory drugs; NSAID gastropathy; proton pump inhibitors; misoprostol; rebamipide.*

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Until recently, among the pharmacological agents used to protect the gastrointestinal tract 'Rebagit®, PRO.MED.CS Prague a.o. tract (GIT) from the negative impact of antirheumatic drugs, proton pump inhibitors (PPIs) dominated almost completely. Today, with the advent of a new powerful drug for gastroprotection - rebamipide - the situation can seriously change.

Non-steroidal anti-inflammatory drugs (NSAIDs) have firmly entered clinical practice and everyday life. None of the inhabitants of the Earth wants to put up with pain - the most painful manifestation of diseases and injuries; the world community and the World Health Organization consider the rapid and most complete relief of suffering among the basic principles of respect for human rights. Every patient experiencing pain, regardless of the



disease that caused it (even if it is incurable), should receive effective analgesic therapy. That is why NSAIDs are so widely used, which are the most convenient and very effective class of analgesics [1-3].

Estimating the scale of NSAID consumption is not easy. Many articles indicate that these drugs are used by 30 million inhabitants of the Earth. However, this estimate seems to be clearly underestimated. So, according to modern statistics, at least 10% of the inhabitants of the Earth suffer from chronic rheumatic diseases, such as osteoarthritis (OA), nonspecific back pain (NPS) and rheumatoid arthritis (RA) [4]. It is obvious that many of these patients periodically, and a significant part constantly, take NSAIDs. According to N. Wilson et al. [5], who analyzed the nature of the treatment of OA in 238,536 residents of Spain for 2006-2011, 14.4% of patients with this disease regularly (i.e., at least half of all days) took oral NSAIDs. In a well-known epidemiological study conducted by H. Breivik et al. [6], covering 15 countries of the European Union and Israel, found that 19% of the inhabitants of developed countries experience chronic pain, the cause of which in the vast majority of cases is the pathology of the musculoskeletal system. Only in five states of the European Union (Great Britain, France, Spain, Germany and Italy) there are about 50 million people suffering from pain, with 11.2 million experiencing severe pain. Most of these patients (approximately 2/3) periodically or regularly take analgesics, mainly NSAIDs: 55% are OTC and 44% are prescription [7].

In the US alone, according to 2010 data, NSAIDs were used regularly (i.e., at least 3 times a week for at least 3 months) by 29

million adults [8]. We do not know how many citizens of Uzbekistan take NSAIDs, but in 2013, with a population of 140 million, almost 14 million packages of these drugs were sold in our country [2].

According to long-term statistics, taking NSAIDs leads to the development of dyspepsia in approximately 20-30% of patients; 10-25% of patients who regularly use these drugs develop endoscopic (detected during esophagogastroduodenoscopy - EGDS) and mostly asymptomatic gastric and duodenal ulcers (duodenal ulcers). The most dangerous complications - bleeding and perforation - annually develop in 5-10 people out of every thousand using NSAIDs. In general, fatal gastrointestinal complications are registered 2 times more often in those taking these drugs than in the general population [2, 10, 11].

However, much more often the main symptom of NSAID-gastropathy becomes subclinical blood loss, leading to the development of chronic iron deficiency anemia (IDA). The interest in this pathology is understandable, since even in the absence of life-threatening complications, NSAID gastropathy can have a pronounced negative impact on the patient's health. After all, chronic IDA is accompanied by a significant decrease in the oxygen capacity of the blood, a decrease in resistance to stress, and ultimately increases the risk of developing cardiovascular accidents [2, 11].

According to a series of clinical studies, the regular use of such n-NSAIDs as ibuprofen and naproxen led to damage to the gastric mucosa in 20-50% of healthy volunteers [19-21]. J. Goldstein et al. [19] studied the effect of celecoxib and naproxen on the



stomach. The study group consisted of 413 healthy volunteers who underwent video capsule endoscopy (VCE). After the initial examination, 356 volunteers were selected for participation in the RCT, who did not have a pathology of the stomach. Of these, 3 groups were formed: the subjects of the 1st group received celecoxib 400 mg, the 2nd group - naproxen 1000 mg + omeprazole 20 mg and the 3rd group - placebo. A repeat study was performed 2 weeks later. As a result, among those taking celecoxib, damage to the gastric mucosa was detected in a significantly smaller number of cases than among those receiving naproxen: 16 and 55% ( $p < 0.001$ ). However, even in the celecoxib group, the number of such cases was significantly higher than in the placebo group, in which visible changes were noted in only 7% of those examined ( $p < 0.05$ ).

In patients with rheumatic diseases who regularly use NSAIDs, stomach changes are detected more often and are more pronounced. So, in a recent study by Czech scientists I. Tacheci et al. [22] during VCE, changes in the stomach were found in 44.8% of 143 patients with RA and OA treated with NSAIDs, and in 8.4% these were multiple ( $> 10$ ) erosions and ulcers

The reason for the negative effect of NSAIDs on the gastrointestinal tract is well known. All NSAIDs are inhibitors of the enzyme cyclooxygenase (COX), which forms the precursor of prostaglandins (PG) - the most important mediators of pain and inflammation. The main pharmacological action of NSAIDs is associated with the blockade of the inducible form of COX (COX2), which determines the formation of PG in the area of damage to living tissue. However, in addition to COX2, n-

NSAIDs also inhibit the activity of the "constitutional" variety of this enzyme - COX1 - which is involved in the synthesis of PG in the gastrointestinal mucosa. Here, PG play the role of the most important protective factor: they reduce gastric secretion, increase the formation of mucus and bicarbonate, stimulate the reparative potential of epitheliocytes and increase blood flow. N-NSAIDs significantly reduce the formation of PG in the mucosa of the gastrointestinal tract, thereby provoking its damage under the influence of external factors of aggression - hydrochloric acid and pepsin in the stomach and duodenum, bacteria and their metabolic products in the small and large intestine [2, 11, 26].

It is important to note that in order to maintain the stability of the gastrointestinal mucosa, not only the "constitutional" COX1, but also COX2 is of great importance. After all, this enzyme is always expressed in the area of damage, and the PG synthesized due to COX2 take an active part in the repair processes. The integrity of the mucous membrane of the gastrointestinal tract is often violated - it is damaged by rough, irritating food, microorganisms and xenobiotics that penetrate with it, etc.; we should not forget about *H. pylori*, which infected almost half of the inhabitants of the Earth. Therefore, the blockade of COX2 can slow down the recovery of the mucous membrane and thereby cause its deeper damage [2, 11]. This may explain the negative effect on the gastrointestinal tract of selective COX2 inhibitors (selective NSAIDs - c-NSAIDs), although, of course, it is much less pronounced than that of n-NSAIDs. Quite indicative in this respect is the study by L. Maiden et al. [27], who assessed the frequency



of gastric changes according to VCE data in 112 patients who received n-NSAIDs and 40 patients who took c-NSAIDs: damage to the gastric mucosa of varying severity was noted in 62 and 50% (differences are not statistically significant).

Based on the pathogenesis of NSAID-induced pathology of the gastrointestinal tract, its drug prevention can be determined by two main directions. The first is an increase in the stability of the mucous membrane, i.e., the elimination of the negative effect of NSAIDs on the synthesis of cytoprotective PGs. This approach was implemented when creating misoprostol, a synthetic analogue of PGE1. This drug has demonstrated efficacy in the prevention and treatment of NSAID gastropathy in patients with RA, which was confirmed by a series of well-designed RCTs [28], including a large 6-month MUCOSA study (n=8843) [29]. Misoprostol was also effective for the prevention of NSAID enteropathy [30, 31]. However, it has an important drawback - frequent adverse reactions (AR), primarily diarrhea [28, 32]. Inconvenient dosing regimen and poor tolerability have limited the use of misoprostol. After the widespread introduction of PPI into clinical practice, it lost its importance as the main gastroprotector.

Another way to protect the gastrointestinal tract from the negative effects of NSAIDs is to eliminate the main factor of aggression that causes damage to the mucous membrane (hydrochloric acid of gastric juice). With effective suppression of gastric secretion, the likelihood of developing erosions and ulcers, even against the background of a significant decrease in mucosal resistance, is

significantly reduced [2, 11, 13].

The highest antisecretory potential is observed in PPIs. It is this class of antiulcer drugs, as noted above, that is today the main means of preventing and treating NSAID-induced gastrointestinal complications. Indeed, PPIs effectively prevent the development of dyspepsia, erosions and ulcers, as well as gastrointestinal bleeding [2, 11, 13]. However, PPIs have an effect only at the level of the upper gastrointestinal tract. However, PPIs can increase the risk of developing this pathology [33, 34]. This is primarily due to an increase in the contamination of the intestine with opportunistic and pathogenic flora, caused by a significant decrease in the acidity of gastric juice. A series of population-based studies have shown that taking PPIs increases the risk of developing an infection caused by Salmonella, Campylobacter, Clostridium, and other microorganisms by a factor of 2–5 [35, 36]. In addition, there is an association between PPI use and the development of microscopic colitis. Thus, in a case-control study (comparison of 1211 patients with microscopic colitis and 6041 individuals without this disease), the odds ratio (OR) for PPI was 3.37 [37].

It is obvious that a completely different approach is required to prevent intestinal damage associated with the use of NSAIDs or NDA. And such an approach is the use of rebamipide, a drug that is still little known to Uzbek rheumatologists and therapists. Rebamipide, a derivative of quinolinone, was developed by the Japanese company Otsuka Pharmaceutical Company and has been used in clinical practice since 1990. For a number of reasons (related to the marketing policy of manufacturers), the drug is



used mainly in Asian countries - Japan, South Korea and China, where it gained a reputation as an effective and safe remedy for the treatment of diseases of the digestive system [38-40].

Unlike PPIs, this drug does not suppress the secretion of hydrochloric acid, but has a different, very multifaceted pharmacological effect that determines its effectiveness as a gastro- and enteroprotector. Probably, the most valuable property of rebamipide is a dose-dependent increase in the synthesis of PGE<sub>2</sub> and PGB<sub>2</sub> in the gastrointestinal mucosa [38-41]. Rebamipide also increases the formation of a macromolecular glycoprotein complex (which determines the protective properties of surface mucus) [41], binds reactive oxygen species and inhibits lipid peroxidation [42], stimulates the expression of growth factors, in particular epidermal growth factor and fibroblast growth factor [43], blocks voltage-dependent Ca<sup>2+</sup> channels, preventing an increase in the concentration of this ion inside cells [44]. In addition, it has anti-inflammatory properties, inhibiting the formation of a number of cytokines, including H. pylori-induced hyperproduction of interleukin 8 [45] and adhesion molecules (ICAM-1) [46]. An important element of the enteroprotective potential of rebamipide is its ability to enhance the synthesis of alpha-defensins, natural peptide "antibiotics" that are produced by Paneth cells of the small intestine and play an important role in the natural antibacterial defense system [47].

The efficacy and safety of rebamipide for the prevention of NSAID-induced gastrointestinal injury has been extensively tested. Thus, in 2013 S. Zhang et al. [48]

presented a meta-analysis of 15 RCTs (n=965) that investigated the therapeutic effect of the drug. It was significantly more effective than placebo and was not inferior to other gastroprotective agents: misoprostol, PPIs, and N-blockers. In addition, rebamipide significantly reduced the risk of developing erosive and ulcerative changes in the intestine: OR compared with placebo was 2.7 (95% confidence interval - CI 1.02-7.16).

An example of a comparison of rebamipide and placebo for the prevention of NSAID gastropathy is the recent RCT GLORIA, in which 75 patients with RA, OA and NBS took NSAIDs in combination with rebamipide 100 mg 3 times a day or placebo for 3 months. It is curious that c-NSAID celecoxib was chosen as the NSAID, which is considered the safest representative of this drug group for the gastrointestinal tract. However, in the placebo group, "safe" celecoxib caused ulcers in 5 patients and intolerable dyspepsia in 1 (17.6% of complications in total). In the rebamipide group, no serious gastrointestinal complications were noted while taking celecoxib (p = 0.0252) [49].

The most interesting are the works in which rebamipide was compared with misoprostol, which has a similar mechanism of action. Thus, the data of RCT STORM, which compared the preventive effect of rebamipide 300 mg/day and misoprostol 600 mcg/day (both drugs were prescribed 3 times a day) in 332 patients who regularly took various NSAIDs (aceclofenac, diclofenac, fenoprofen, ibuprofen, naproxen and sulindac). Interestingly, almost half of the patients in both groups (48.5 and 41.7%) had H. pylori. The results of prevention were evaluated according



to the data of endoscopy, which was performed before and after 12 weeks of treatment. As a result, rebamipide was in no way inferior to misoprostol: the incidence of gastric and duodenal ulcers was 4.0 and 3.9% [50].

Recently, new evidence has emerged of the benefits of rebamipide as an agent for the prevention of NSAID gastropathy. T.N. Kim et al. [51] conducted a large-scale RCT in which 479 patients who took NSAIDs (mainly aceclofenac, meloxicam and nabumeton) for 12 weeks received rebamipide 300 mg/day or misoprostol 600 µg/day as prophylaxis. According to endoscopic examination, the number of gastric and duodenal ulcers in patients of both groups was almost the same. But at the same time, cancellations due to NR in the misoprostol group were noted almost 2 times more often (Fig. 1). Dyspepsia in the rebamipide group occurred much less frequently and was less pronounced. So, its severity (on a scale of 0-3 points) at the end of the study in the rebamipide and misoprostol groups averaged  $0.44 \pm 1.05$  and  $0.67 \pm 1.24$  points ( $p < 0.05$ ), and the number of antacid tablets used to relieve dyspepsia was  $7.19 \pm 15.49$  and  $11.18 \pm 22.79$  ( $p < 0.05$ ), respectively.

Of course, the experience of using rebamipide in volunteers is extremely important. However, of much greater interest are clinical studies in which the therapeutic and prophylactic effect of the drug was studied in real patients with NSAID gastropathy. Recently, two works by Japanese scientists have been published on this issue. Thus, in a 4-week study by S. Kurokawa et al. [56] compared the therapeutic effect of rebamipide 300 mg/day and placebo in 61 patients who had

taken NSAIDs and/or NDA for more than 3 months. All patients underwent VCE before and after the course of therapy. It turned out that the number of gastric erosions in the main group significantly decreased, while in the control group it increased in comparison with the initial level ( $p < 0.001$ ; Fig. 2). Similar dynamics was noted in relation to the number of ulcers:  $-0.5 \pm 1.6$  and  $0.1 \pm 0.7$  ( $p = 0.024$ ), as well as the level of blood protein. The latter indicator significantly decreased in the control group, which reflects plasma exudation in the small intestine associated with NSAID gastropathy.

As can be seen, today there are a large number of clinical studies performed in compliance with all the rules of evidence-based medicine, demonstrating the advantage of rebamipide in comparison with placebo for the prevention and treatment of NSAID-induced gastrointestinal pathology. Moreover, we are talking about complications from the upper gastrointestinal tract.

The ability of rebamipide to have a cytoprotective and anti-inflammatory effect made it possible to successfully use it not only in drug pathology of the gastrointestinal tract, but also in other diseases of the digestive system. Thus, a series of large-scale studies performed in Japan, South Korea and China convincingly shows a higher frequency of healing of *H. pylori*-associated gastric and duodenal ulcers, as well as the resolution of chronic antral gastritis when using rebamipide against or after standard anti-*Helicobacter pylori* therapy. [58-60].

T. Kamada et al. [61] evaluated the dynamics of the histological picture of *H. pylori*-associated chronic gastritis in 103



patients who underwent a course of anti-*Helicobacter pylori* therapy. According to the study plan, half of the patients received rebamipide 300 mg/day for 12 months and half received placebo. By the end of the observation, the severity of inflammatory changes in the lesser curvature of the stomach (assessed by the modified Sydney system) was significantly less in the active therapy group compared to the placebo group:  $1.12 \pm 0.08$  and  $1.35 \pm 0.08$  points, respectively ( $p=0.043$ ).

Thus, for Uzbek doctors, rebamipide is a new and promising tool for combating complications caused by NSAIDs and LDA. Rebamipide can be an effective tool for the prevention and treatment of NSAID gastropathy. The therapeutic and prophylactic potential of rebamipide in NSAID gastropathy has been shown in many RCTs, it is well tolerated and practically does not cause serious complications. One might think that the drug will find wide application in rheumatic diseases as an important means of improving the safety of pharmacotherapy.

## CONCLUSION

Rebamipide is a gastroprotector, the main pharmacological action of which is associated with an increase in the synthesis of endogenous PGs and growth factors in the gastrointestinal mucosa, an antioxidant effect, suppression of the expression of pro-inflammatory cytokines and adhesion molecules, stimulation of the formation and release of alphadefensins by Paneth cells, etc.

Clinical studies conducted in Japan, South Korea and China confirm the effectiveness of rebamipide for the prevention and treatment of NSAID gastropathy.

According to RCTs, rebamipide is not inferior in effectiveness to the "classic" gastroprotector misoprostol and significantly outperforms it in tolerability.

The standard dose of rebamipide is 100 mg 3 times a day for up to 8 weeks. At the same time, as evidenced by the data of a number of clinical studies, rebamipide is well tolerated and at a much higher dose (300 mg 3 times a day) and can be safely used in courses up to 6-12 months.

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# EFFECTS OF GAME SPECIFIC AEROBIC TRAINING ON MOTOR FITNESS COMPONENTS AMONG FOOTBALL PLAYERS

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## ABSTRACT

The rationale of this study was to explore the effect of game specific aerobic training on motor fitness components among football players. To achieve this purpose of the study thirty college level men football players were selected from Saraswathi Narayanan College (Autonomous), Madurai, Tamilnadu, India were randomly selected as subjects. Their age ranged in between 21 and 25 years. The subjects were divided into two groups namely game specific aerobic group and control group. The game specific aerobic band group was subjected (for weekly three days monday, wednesday, friday) at evening session for eight weeks. Speed, agility & endurance were selected as dependent variable. After the collection of appropriate data, it was statistically analyzed by using paired 't' test. The level of significance was set at 0.05. The result of the present study showed that the game specific aerobic training has significant improvement on Speed, agility & endurance of football players.

**KEYWORDS:** Specific Aerobic Training, Speed, Agility & Endurance, Football Players.

## 1. INTRODUCTION

Aerobic training focuses on the aerobic energy system and the cardiovascular system, which promotes oxygen supply and use. Aerobic training should be done at least three times a week, at a heart rate of 70 to 80 percent of maximum heart rate, and should last 30 minutes or more. Aerobic training is appropriate for all sports since it establishes a foundation for an athlete's fitness. This is because the cardiovascular system will be specifically developed by exercise, and oxygen delivery is critical in the recovery of each energy system. Marathons, triathlons, long distance cycling such as the Tour de France, and Iron Man are some of the sports that aerobic training is better suited too.

## 2. REASONS FOR SELECTION OF THE TOPIC

The investigator reviewed the number of scientific articles, journals, books, self analyzed and found that selected motor fitness component would influence of aerobic training. The investigator, being a football player, coach, selector, and official was motivated to find out the impact of effect of game specific aerobic training on motor fitness components among

football players. Moreover, very little research had been done on game specific aerobic training among football players. This also motivated the investigator to take-up the study.

## 3. METHODOLOGY

The rationale of this study was to explore the effect of game specific aerobic training on motor fitness components among football players. To achieve this purpose of the study thirty college level men football players were selected from Saraswathi Narayanan College (Autonomous), Madurai, Tamilnadu, India were randomly selected as subjects. Their age ranged in between 21 and 25 years. The subjects were divided into two groups namely game specific aerobic training group and control group. The game specific aerobic training group was subjected (for weekly three days monday, wednesday, friday) at evening session for eight weeks. Speed, agility & endurance was selected as dependent variable. After the collection of appropriate data, it was statistically analyzed by using paired 't' test. The level of significance was set at 0.05.



**Table-I**  
**CRITERION MEASURES**

The test used to assess the motor fitness components are given in.

Variables	Test items	Unit of measurements
Speed	50 meters dash	Second (1/100 sec)
Agility	Zig Zag run	Second (1/100 sec)
Endurance	12 minutes run & walk	In Meters

#### 4. TRAINING PROCEDURE

For game specific aerobic group underwent their training programme as three days per week for eight weeks. Training was given in the evening session. The training session includes warming up and cool down. Every day the workout lasted for 45 to 60 minutes approximately. The

subjects underwent their training programmes as per the schedules such as slow movements, medium movements & fast movements under the strict supervision of the investigator. During experimental period control group did not participate in any of the special training.

#### 5. RESULTS

**Table-II**  
**Comparison of Mean, and 't'-Values of Motors Fitness Components between Pre & Post Test among Game Specific Aerobic and Control Groups**

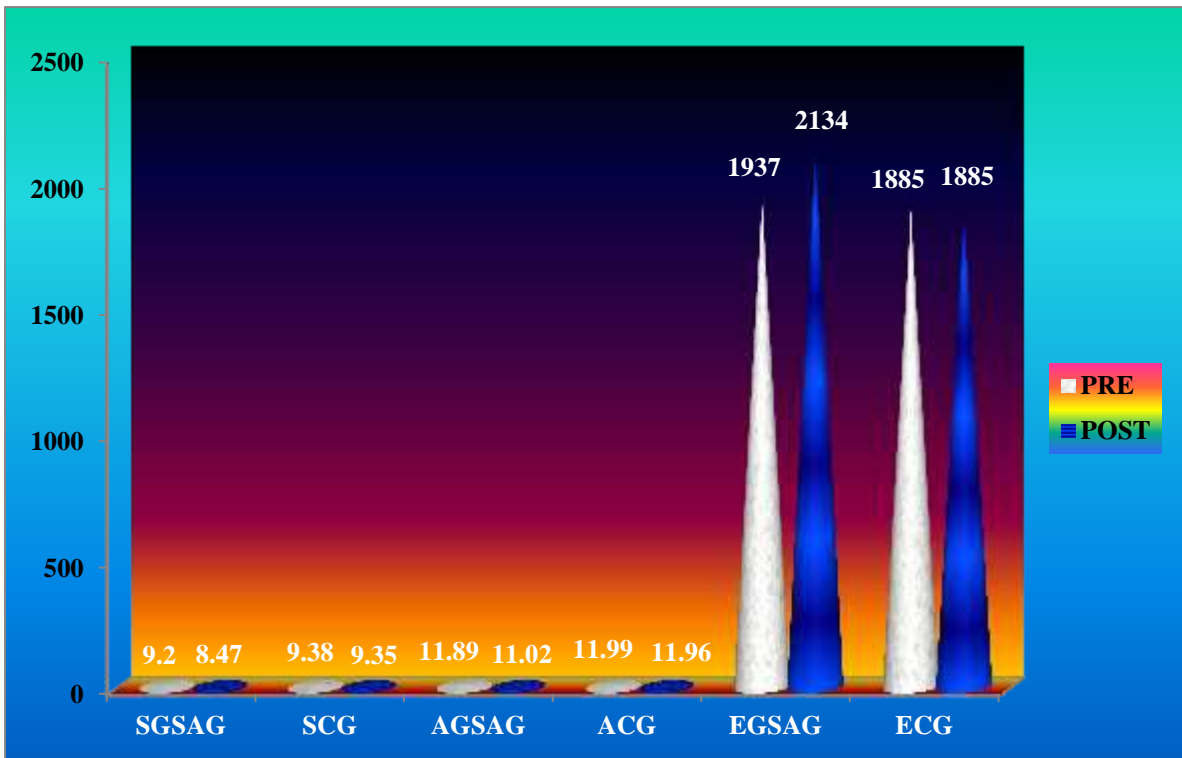
S. No	Motors Fitness Components	Groups	Test	Mean	't' Values
1.	Speed	Game Specific Aerobic group	Pre Test	9.20	8.41*
			Post Test	8.48	
		Control group	Pre Test	9.38	1.10
			Post Test	9.35	
2.	Agility	Game Specific Aerobic group	Pre Test	11.89	11.63*
			Post Test	10.92	
		Control group	Pre Test	11.99	1.16
			Post Test	11.96	
3.	Endurance	Game Specific Aerobic group	Pre Test	1937	47.13*
			Post Test	2134	
		Control group	Pre Test	1885	1.23
			Post Test	1885	

\*Significant at 0.05 level of confidence

Table-II reveals that the obtained mean values of pre test and post test of game specific aerobic group for Speed, agility & endurance were 9.20 and 8.47, 11.89 and 11.02, 1937 and 2110 respectively; the obtained 't' ratio were 8.41\*, 11.63\* and 47.13\* respectively. The tabulated 't' value is 2.14 at 0.05 level of confidence for the degree of freedom 14. The calculated 't' ratio was greater than the table value. It is found to be significant change in Speed, agility & endurance of the football players. The obtained mean values of pre test and post

test scores of control group were 9.38 and 9.35, 11.99 and 11.96, 1885 and 1885 respectively, the obtained 't' ratio was 1.10, 1.16 and 1.23. The required table value is 2.14 at 0.05 level of confidence for the degree of freedom 14. The calculated 't' ratio was lesser than the table value. It is found to be insignificant changes in Speed, agility & endurance of the football players. The mean values of motor fitness components among game specific aerobic group and control group are graphically represented in figure-1.

**Figure-1: Bar Diagram Showing the Pre Test and Post Test on Selected Skill Performance Variables of Game Specific Aerobic Training and Control Groups (SGSAG, SCG, AGSAG, ACG, EGSAG & ECG)**



## 6. DISCUSSION ON FINDINGS

The result of the study indicates that the experimental group namely game specific aerobic training groups had shown significant improvement in all selected motor fitness components among the football players. The control group football players had not shown significant changes in any of the selected variables. The analysis of the study indicates that the game specific aerobic training group had shown significant level difference in speed, agility, and endurance among football players.

It is inferred from the literature and from the result of the present study. That systematically designed training develops dependent variables are very importance quilts for better performance in almost all sports and games. Hence it is concluded that systematically designed training may be programmes of all the discipline in order to achieve maximum given due recognition and implemented properly in the training performance. These findings are in accordance with the findings of **Ooraniyan and Senthil Kumaran (2018)**, **Rashiti (2016)** and **Kumar (2013)**.

## 6. CONCLUSIONS

From the analysis of the data, the following conclusions were drawn.

1. The football players of control group had not shown significant changes in any of the selected variables.
2. The Game specific aerobic training group shown significant improvement in all selected motor fitness components among football players.

3. There football players who had undergone eight weeks of specific aerobic training showed significant improvement in speed, agility and endurance when compared with control group.

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# GOOGLE: ITS INFLUENCE ON THE TEACHING AND LEARNING OF TEACHERS AND STUDENTS IN THE NEW NORMAL

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## ABSTRACT

*Google is named after the mathematical term "googol," which is defined as the value represented by a one followed by a hundred zeros followed by another one. Google is the world's most popular Internet search engine, and its primary service provides customers with targeted search results selected from over 8 billion web pages, according to Google. Larry Page and Sergey Brin, both Stanford dropouts, developed Google search technology as part of a college project in which they were both involved. As a result, an insight into Google Essay discusses how Google works as well as how it came to exist. This paper explained the effects of google on the teaching and learning of teachers and students in the new normal.*

**KEYWORDS:** *Google, teaching, learning, students' learning, teaching skills of teachers, the importance of Google in teaching and learning of students.*

## INTRODUCTION

Google is, without a doubt, the most well-known and interesting company on the planet right now. According to the company's corporate website, its mission is to "organize the data of the world and make it widely available and useful" (Google, 2010).

Google was named the best company in the world by Fortune Magazine in its annual "Best Companies" list, beating out other top businesses in 2007 and 2008 for the second consecutive year. His success as a top employer is attributed to his internal corporate culture, which is the most frequently cited reason. Described as a "fast-paced, high-energy working environment," Google is the ultimate global company with a global reach (Google, 2010).

Because Google is geared toward a "young" internet-savvy market, the average age of its employees is significantly lower than the average age of most businesses. It is estimated that the median age of Google employees is 30 years old, with a 65 percent male to 35 percent female gender distribution (LinkedIn, 2010).

The dress code is "casual" and laid-back because the company places a higher value on skill and hard work than it does on appearance. Google has a very engaging corporate culture that encourages employees to participate. Additionally, Google Mountain View's headquarters, known as the

Googleplex, is intended to have a "campus-like" feel to appeal to the company's predominantly young recruits from college-level institutions (Google, 2010).

Microsoft and Yahoo both make significant investments in search technology and continue to gain market share consistently. 2. With only a few competitors, such as Yahoo and MSN, Google operates in an oligopoly market.

Consequently, Google may have difficulty retaining its customers if there is little differentiation within the search engine's results. Aside from that, Yahoo and MSN have launched their search engines and targeted marketing systems, and Google is racing against the clock to develop new search instruments that will attract customers and expand their marketing networks.

Click fraud has been identified by Google as one of the potential "concerns" that could have an impact on its revenue. In reality, as a result of click fraud, Google has admitted to issuing refunds regularly.

In reality, as a result of click fraud, Google has admitted to issuing refunds regularly. Click fraud occurs when an individual, automated script, or computer program impersonates a lawful user of a web browser to generate an erroneous charge per click in an online pay-per-click advertising to generate an erroneous charge per click in pay-per-click advertisement.



For instance, network click fraud occurs when you host advertisements from Google AdSense on your private website. Google will charge you every time someone clicks on an advertisement for your website. It is fraud if you sit at your computer and constantly click on the advertisement, or if you write a computer program that clicks on the advertisement constantly. Because this type of fraud is easy to detect by Google, clever network clicks fraudsters simulate distinct IP addresses or install Trojan horses on other people's computers to generate fictitious clicks.

## PROFILE

Larry Page, given name Lawrence Edward Page, (born March 26, 1973, East Lansing, Michigan, United States), American computer scientist and entrepreneur who, with Sergey Brin, co-founded the online search engine Google, which is now one of the most popular sites on the Internet. Larry Page is the son of Larry and Karen Page.

Having graduated from the University of Michigan with a bachelor's degree in computer engineering in 1995, Page went on to the Stanford doctoral program, where he met Brin. Page's father was a professor of computer science at Michigan State University. Increasing the ability to extract meaning from the massive amount of data accumulated on the Internet was something that both of them were interested in exploring further. Together, they created a new type of search engine technology from Page's dorm room, one that took advantage of Web users' ranking abilities by tracking each site's "backing links"—that is, the number of other pages that linked to them.

The search engine founders raised approximately \$1 million in outside funding from investors, family members, and friends to expand the reach of their search engine. This new search engine was given the name Google, which was derived from a misspelling of the words googol and google (a mathematical term for the number 1 followed by 100 zeros). By September 1998, the two had founded Google Inc., with Page serving as the company's chief executive (CEO). Google received \$25 million in venture capital funding the following year and was processing 500,000 queries per day at that point.

Page stepped down as CEO in 2001 to take on the role of president of product development. Eric Schmidt, a technology executive, took over as his successor as CEO. However, he and Brin remained deeply involved in the day-to-day operations of Google. By 2004, Google's search engine was being used 200 million times per day, according to the company. On August 19, 2004, Google Inc. went public with an initial public offering (IPO), netting founder Larry Page more than \$3.8 billion in proceeds. As part of its efforts to broaden its services beyond Internet searches, Google purchased YouTube, the most popular website for user-submitted streaming videos, in 2006 for \$1.65 billion in stock, reflecting the company's efforts to broaden its services beyond Internet searches. When Page returned to his

position as CEO of Google in 2011, Schmidt had been promoted to the position of executive chairman. Google was restructured in August 2015 to become a subsidiary of the newly formed holding company Alphabet Inc., and Page was appointed as the company's chief executive officer. Page stepped down from his position as CEO of Alphabet in December 2019, but he has continued to serve on the company's board of directors.

## ANALYSIS/REACTION

Recent history has shown that education is evolving at a faster rate than at any other time in history. There is a growing awareness among educators and families that today's curriculum must evolve to keep up with the demands of tomorrow's world. Students must learn new skills in addition to using tools and technology to solve difficult problems, collaborate effectively, and express ideas in novel ways.

The Google for Education team collaborated with a global team of researchers and analysts to examine evidence-based shifts in-classroom education to gain a better understanding of these transformations.

"Google's offering enables businesses to track and analyze their website traffic, which provides some useful information. However, to truly grow an online retail business, it is necessary to link web analytics to revenue and close the loop. These revenue-based metrics enable businesses to make decisions based on total return on investment (ROI), rather than just traffic volume or overall conversion percentage. The fact that it does not provide revenue-based metrics that are truly beneficial to a company's top and bottom lines makes it understandable why they chose to make it available for free."

In response, Richard Holden, the project management director at Google, says, "Our business model is fundamentally based on trust." In the absence of user trust, we are unable to operate in the search business. When it comes to advertising, we don't have a business unless we have a search business. It would be counterproductive for us to follow the advice of our competitors."

In Holden's words, Google is providing the free analytics tool to assist advertisers in measuring the effectiveness of their advertising and, in a broader sense, to assist developers in creating better websites. At the end of the day, it's the customer who benefits from being able to find the information or products that they are looking for more easily," Holden said.

## TEACHING AND LEARNING IMPLICATION

Because of Google, people are more connected than they have ever been. Every day, people use Google to find the information they are looking for. Google has made it simple for the general public to find information. Thanks to Google, anyone with an internet connection can easily research any topic they are interested in. People can easily and directly share documents and information with others using Google Docs,



which is free to use. Google has a plethora of tools that enable people to connect from anywhere in the world specifically in education.

Google has had a significant impact on the modern business world. Many of the business tools that Google has to offer can help businesses get a leg up on the competition. Google provides cloud computing services to businesses. Google Cloud Computing Services Because of this, the company's operating costs are reduced. Is it possible to create a website that caters to a specific clientele? Work with Google to have your website appear on the first page of search results.

Thanks to Google, people who are specifically looking for your product will be directed directly to your website. Businesses can also advertise on Google's websites, according to the company. Through the use of Google's search function, a company can advertise directly to the people who are most interested in their products or services. Google will only display advertisements for products and services that are relevant to the search term entered by the searcher. Every day, hundreds of millions of searches are carried out on Google's search engine. This is a significant number of people who can be reached by businesses through Google advertising. Businesses are well aware that they must use Google to be competitive.

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Through the use of Google's search function, a company can advertise directly to the people who are most interested in their products or services. Google will only display advertisements for products and services that are relevant to the search term entered by the searcher. Every day, hundreds of millions of searches are carried out on Google's search engine. This is a significant number of people who can be reached by businesses through Google advertising. Businesses are well aware that they must use Google to be competitive.

## CONCLUSION

The Internet has decreased the cost of information transfer while simultaneously increasing the speed of information transfer. This has altered the economic landscape, allowing for the development of new and exciting methods of generating revenue that are both complementary to and distinct from traditional economic models. Studying and contrasting several large internet businesses has allowed us to examine the

attention, free, network, and gift economic models in greater depth. Google has been chosen as a unique business case study because it has incorporated elements of all of the models we studied throughout its history, allowing us to explain how they work in greater depth.

When Google first launched, it offered a gift economy intending to organize and make information accessible over the internet. It eventually evolved into an attention economy, in which the company profited financially from the traffic to its pages, which was monetized through the use of an advertising platform that tailored advertisements to individual viewers. As long as it continues to offer products and services, Google can build an online community of users who visit the site regularly (a networked economy) to take advantage of the services it provides.

We have outlined the principles and practices that support internet commerce straightforwardly and understandably by providing simple explanations of the various economic models and applying them to the case study that we have chosen. After reviewing some different online businesses, we were able to zero in on one that made use of a variety of economic models to better explain the similarities and differences between the various methods of conducting business online.

## RECOMMENDATION

When a user opens a file in Google Drive, a machine-learning system predicts which files the user will want to open next. By including Quick Access recommendations on the Drive homepage, users were able to cut the amount of time they spent locating their files in half. Taking into account all of Drive's 1 billion users, the time saved adds up to a total of 1000 work weeks saved every single day. Here, we discuss the difficulties of iteratively improving the quality of a personal recommendation system as well as the various approaches that we used to improve this feature to achieve our goals. Various deep network architectures, novel modeling techniques, additional data sources, and the effects of latency and biases on the user experience were investigated. The challenges and successes encountered in our efforts to improve this product are discussed, as is how we scaled and managed the system's increasing complexity. Those who work with private corporations, as well as those who are developing a large-scale production recommendation system, will, I believe, find these insights particularly useful.

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# TEACHING LISTENING THROUGH BEHAVIORAL APPROACH

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## ABSTRACT

*This paper talks about teacher's techniques or behaviors that may enhance the acquisition of listening skills. Listening is receiving language through the ears. Listening involves identifying the sounds of speech and processing them into words and sentences. When you listen, you use your ears to receive individual sounds (letters, stress, rhythm and pauses) and you use your brain to convert these into messages that mean something to us.*

*Listening in any language requires focus and attention. It is a skill that some people need to work at harder than others. People who have difficulty concentrating are typically poor listeners. Listening in a second language requires even greater focus. In this article you will learn some techniques and behavior as a teacher that has an effect on the performance of the students.*

**KEYWORDS:** *listening, behavior, strategies, and techniques*

## INTRODUCTION

While the following are examples of implicit strategies to teach listening, their deliberate implementation can reap real rewards in improving listening comprehension with tweens and teens.

## BEHAVIORAL APPROACH IN TEACHING LISTENING

**SET AN EXAMPLE.** Students must have the opportunity to get to know their professors. When both sides have an understanding of who the other is, authentic interactions occur. Older pupils are better at detecting tiny nonverbal signs that indicate the goal of listening. Teachers must set an example for students to emulate.

**BE RESPONSIBLE.** Some teachers use a strategy called "three before me," which encourages students to rely on and listen to each other before going to the teacher. In a virtual classroom, this might be assigning a student to monitor the chat bar and answer procedural questions that classmates are posing.

**INVOLVEMENT.** Calling on students to answer questions provides accountability for listening in the classroom. Teachers need to be transparent in how they choose students for random name choosers. They can also provide optional supports for students who might not know the answer to the question or get overly anxious.

**ACTIVITIES.** Teachers should be planning specific opportunities to teach listening comprehension skills explicitly. Teens really do pick up on skills that are modeled for them, so teachers who include implicit listening opportunities will see significant improvements in their students' listening comprehension and self-assessments.

**GIVE SIGNALS.** In virtual classrooms, teachers can have students hold up a thumb or finger, use polls or allow student reactions to listening tasks. Providing real-time opportunities for students to show their listening comprehension in ways other than writing responses is an important component of the learning experience at the college.

**TALKING.** Teachers often think of whole-class discussions as avenues for students speaking, but the flip side of speaking is listening. In a remote class, breakout rooms enable students to talk with each other (and listen) More and more students should be asked to turn-and-talk in class.

**NOTES.** Note-taking is an informational listening skill that rarely gets taught explicitly. It's easy to include this vital skill in other content lessons. Students who chose the wrong main idea, for example, might find it valuable to review not only what the teacher intended as the main idea.



**TECHNOLOGY.** Listenwise has a list of creative ways to blend classroom apps to encourage further student engagement.

## CONCLUSION

There are two specific points for teachers to keep in mind as they bring student listening comprehension activities into the classroom, encourage good listening habits. Teachers can structure lessons to encourage students to listen without distractions. Listenwise is a great way to help students develop good listening habits. Start with shorter audio pieces and work up to longer audio pieces in the classroom.

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# A SURVEY ON IMAGE PROCESSING TECHNIQUES FOR MOTION DETECTION IN VIDEO SURVEILLANCE SYSTEM

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## ABSTRACT

*Video surveillance is a normal security procedure in the living environments nowadays due to the requirement of continuous cost effective automatic monitoring necessity for the safe and peaceful life structure. The identification and detection of moving persons or objects is a tedious process with the optimal accuracy in dimensions and validity. The essential and required improvements in the entire methodology critically depend upon the image processing approaches with effective care on the image frames. For this goal Image processing plays a vital role in order to handle the video data in proper way for analysis and prediction of performances for the improvement of motion detection in video surveillance system domain results. This paper presents a survey on motion detection analysis for video surveillance system.*

**KEYWORDS**—Image processing, Motion detection, Video surveillance, Prediction, Performance

## 1. INTRODUCTION

Digital image processing is the use of a digital computer to process digital images through an algorithm. As a subcategory or field of digital signal processing, digital image processing has many advantages over analog image processing. It allows a much wider range of algorithms to be applied to the input data and can avoid problems such as the build-up of noise and distortion during processing. Since images are defined over two dimensions digital image processing may be modeled in the form of multidimensional systems. The generation and development of digital image processing are mainly affected by three factors: first, the development of computers; second, the development of mathematics (especially the creation and improvement of discrete mathematics theory); third, the demand for a wide range of applications in environment, agriculture, military, industry, and medical science has increased.

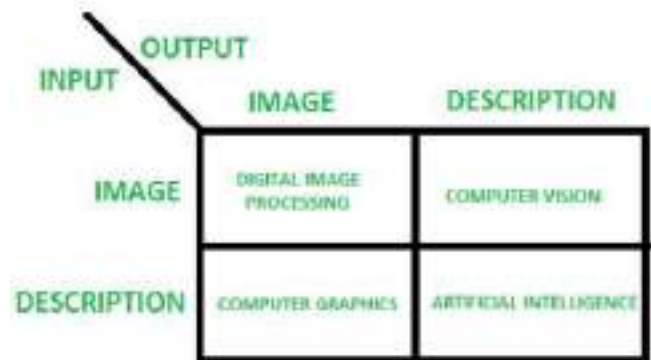


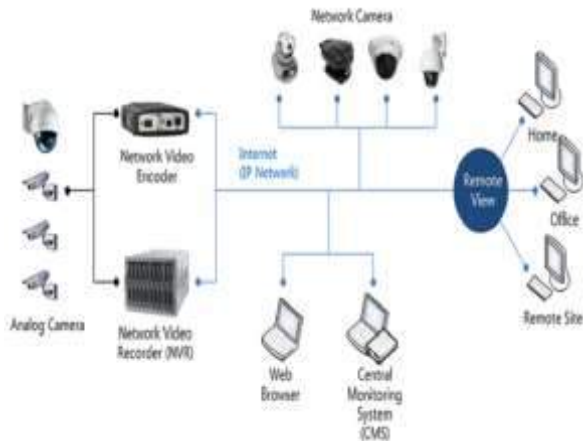
Fig-1: Digital Image Processing

## 2. VIDEO SURVEILLANCE SYSTEM

A video surveillance system / CCTV are composed of a system of cameras, monitors/display units, and recorders. Cameras may be either analog or digital with a host of possible design features which will be discussed momentarily. These systems can be applied to both interior and exterior areas of a building or property. They can operate 24/7, can be designed to only record in response to movement, or set to record during specific times of the day. Footage can be monitored live by a security guard, monitored remotely if using an IP camera and system (more on that in a moment) by a monitoring company, or can simply be recorded and stored



by a DVR (digital video recorder) or NVR (network video recorder) for review later should the need arise. Finally, video surveillance systems are closed – this means its signals are not broadcast so that others could intercept and view the content. Only authorized users can access the recorded material.



**Fig-2: Sample Video Surveillance System [6]**

### 3. TYPES OF IMAGE PROCESSING

There are five main types of image processing:

- ❖ Visualization - Find objects that are not visible in the image
- ❖ Recognition - Distinguish or detect objects in the image
- ❖ Sharpening and restoration - Create an enhanced image from the original image
- ❖ Pattern recognition - Measure the various patterns around the objects in the image
- ❖ Retrieval - Browse and search images from a large database of digital images that are similar to the original image

### 4. IMAGE PROCESSING STEPS

- ❖ Image Acquisition  
Image acquisition is the first step in image processing. This step is also known as preprocessing in image processing. It involves retrieving the image from a source, usually a hardware-based source.
- ❖ Image Enhancement  
Image enhancement is the process of bringing out and highlighting certain features of interest in an image that has been obscured. This can involve changing the brightness, contrast, etc.
- ❖ Image Restoration  
Image restoration is the process of improving the appearance of an image. However, unlike image enhancement, image restoration is done using certain mathematical or probabilistic models.
- ❖ Color Image Processing  
Color image processing includes a number of color modeling techniques in a digital domain. This step has gained prominence due to the significant use of digital images over the internet.

- ❖ Wavelets and Multi resolution Processing  
Wavelets are used to represent images in various degrees of resolution. The images are subdivided into wavelets or smaller regions for data compression and for pyramidal representation.
- ❖ Compression  
Compression is a process used to reduce the storage required to save an image or the bandwidth required to transmit it. This is done particularly when the image is for use on the Internet.
- ❖ Morphological Processing  
Morphological processing is a set of processing operations for morphing images based on their shapes.
- ❖ Segmentation  
Segmentation is one of the most difficult steps of image processing. It involves partitioning an image into its constituent parts or objects.
- ❖ Representation and Description  
After an image is segmented into regions in the segmentation process, each region is represented and described in a form suitable for further computer processing. Representation deals with the image's characteristics and regional properties. Description deals with extracting quantitative information that helps differentiate one class of objects from the other.
- ❖ Recognition  
Recognition assigns a label to an object based on its description.

### 5. LITERATURE SURVEY

Eapen, et al. [1] have proposed a method to enhance the edges and reduce the noise level in the input images before dealing with segmentation process. In the pre-processing module they included image resizing, histogram of medical images. In [2] Sivappriya, et al. proposed medical image edge detection. Medical images pre-processing is an important step in medical image segmentation and 3D reconstruction. Puri, et al. presented a pre-processing technique to group pixels into "super pixels". They would like to work with "super pixels" which were local, coherent, and which preserve most of the structure necessary for segmentation at the scale of interest. They applied the normalized cut algorithm to produce the super pixel map. Both contour and texture cues were used [3] in the method. Afifi et al. [4] proposed a system to maintain the quality of image after the image compression process using Wavelet Algorithm. In their work, JPEG and PNG image was used. It was noted that for JPEG image, the size is reduced almost half of original image by using Haar wavelet algorithm. Raju, et al. [5] proposed a solution that enhances the image quality. The enhanced image was then segmented using a modified watershed algorithm that uses mean-shift clustering. The enhancement technique proposed a hybrid version that combined wavelets, improved anisotropic diffusion.



## 6. ISSUES IN DATA MINING IN EDUCATION

- ✓ Nontrivial issues: Nontrivial issues denote complicated matters. Generally, these matters take a long turnaround time to settle down. In the context of image processing, such issues could be related to filtration, restoration, registration, fusion, segmentation, and classification of pictures. These processes form a hierarchy of data processing, which takes a long time to carry out.
- ✓ Accuracy: It is a pervasive fact that achieving 100% accuracy is a dream while processing images. The client does not get satisfied with the obtained results.
- ✓ Hard Coded Solutions: The hard coded software embeds data directly from the source code, rather than generating it at a run time. Such kind of data could be an image also. In that scenario, enhancing the contrast of images or filtering could be tough. This challenge could stem from source code, kernel.
- ✓ Diverse Methods of Processing: The method of photo processing may vary. If you talk about filtering digitally, for example, there are many types of filter-Spatial Low pass, Spatial High pass, Fourier Representation, Fourier Low pass and Fourier High pass. These filters are then passed through kernel or mask for transformation.
- ✓ Endless Research: This is the most vital part of any kind of processing. A human brain tends to explore through and innovate for discovering smart ways to simplify processing. This is where open research stands out. Image processing is likewise. This domain also requires churning through existing challenges, identifying loops and patching them with innovative patterns.

## 7. IMPLEMENTATION IN RURAL URBAN AREAS

- ❖ Study and perform background analysis of images and videos.
- ❖ Investigate integral functional strategies for surveillance environment
- ❖ Bridge the gap between computationally feasible and functionally relevant time scales.
- ❖ Improve multiresolution state prediction.
- ❖ Combine classical and modern techniques in image processing environment.
- ❖ Sample larger sets of dynamical surveillance images and result matching's.
- ❖ Realize interactive modeling.
- ❖ Foster the development of image processing based model.

## 8. TOOLS PERFORMANCE

The following data illustrates Image processing tools with its implementation scope for the betterment of video surveillance system.

### ❖ DIY Filters

Processing makes it simple to handle images, iterate over the pixels of an image, and perform operations on them.

### ❖ GPU Filters

You can also implement filters using OpenGL pixelshaders.

### ❖ Image Filters

Martin Schneider is currently working on a Processing Library / Wrapper for ImageJ.

## Python Tools

### ❖ PIL

The Python Imaging Library provides you with the power to handle and process images.

### ❖ SciKit-Image

Scikit-image is a collection of algorithms for image processing.

### ❖ SimpleCV

SimpleCV is a python wrapper for OpenCV (and a couple of other tools) that makes image processing really easy.

### ❖ FilterForge

FilterForge is a commercial application that lets you create filters using a node based dataflow programming language.

## 9. RECENT TRENDS

- ❖ Automatic image enhancement and restoration
- ❖ Automatic object segmentation
- ❖ Automatic object detection, classification and recognition
- ❖ Steganography
- ❖ Image Inpainting
- ❖ Text recognition and Information extraction

## 10. APPLICATIONS

- Image polishing and restoration.
- Medical Field.
- UV Sensing.
- Transmission and encoding.
- Robot vision.
- Pattern recognition.
- Video processing.
- Hurdle detection.
- Future Healthcare
- Fraud Detection.
- Intrusion Detection.
- Customer Segmentation.
- Financial Banking.
- Lie detection
- Corporate Surveillance
- Research Analysis
- Criminal investigation
- Bioinformatics



## 11. CONCLUSION

The detailed research survey in the field of image processing domain towards video surveillance system with traditional approach when compared to the digital image processing approaches and recent techniques with advanced tools shows that the higher level of impact in the field of image processing approaches with the cope up towards latest trends and systematic pathways for the improvement progress of several advanced strategies. The approaches for image processing dealt with the various levels of implications towards the selection strategies for the analysis and prediction of intruders or manipulations focusing along with the factors in the development of video surveillance system implementations. The tools performance and applications of image processing provides the several directions for the development of different methodologies to implement in the better way. In future this research will lead the direction of video surveillance system for the corporation sector in an effective way.

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## MOTIVES OF MERGERS AND ACQUISITIONS (M&AS) IN INDIAN BANKING SECTOR

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### ABSTRACT

*This paper examines the motivations for mergers and acquisitions in the Indian banking sector from 2014 to 2019. During this time, nine banks were merged into three, including the Mega-merger of SBI and its five allies. To identify motivations in the banking industry, the data was analysed using a two-stage multivariate technique. The most significant motives in M&As, according to factor analysis, are synergy, diversity, and faster market access, profitability, economies of scale, and quick responsiveness to economic conditions. The contribution of these extracted components to market share was investigated using the regression approach. The findings reveal that the strategic factor, performance factor and growth factor have positive effects on enhancing the market share.*

**KEYWORDS:** Motives, Multivariate, Synergy, Diversification, Performance.

### INTRODUCTION

Indian banking system has performed a pivotal role in the advancement of the economy of the nation (Subramanyam, Lakshman, & Ramanath, 2019). After the paradigm shifts in 1991, the economy entered into the new phase of Liberalization, Privatization and Globalization (LPG). These winds of change have maximum impact on the banking industry. Similarly, Indian commercial banks are witnessing these extensive changes in the form of regulatory framework, risk management and significant financial sector consolidation. These factors have made the Indian banking sector more competitive and created a healthy competition among the world economies (Athma & Bhavani, 2017). Many strategies were followed for expansion and growth in the globalized world. Merger refers to the combination of the two existing company into one entity. There are several alternative forms of merger like vertical merger engage in various stages of production functions, horizontal merger involves in same nature of business activity and conglomerate merger involve merger of unrelated business activity (Weston, Chung, & Hoag, 2007). Further, acquisition refers the acquirer entity taking more than 50 percent ownership in the target company (Ishwarya, 2019). This action may be hostile or friendly nature and acquirer entity made control over the target firm.

The concept of banking in India was introduced in 18th century the General Bank of India and Bank of Hindustan were established in 1786 and 1790 respectively. After that, three bank namely Bank of Bengal, Bank of Bombay and the Bank of Madras were merged and Imperial Bank of India was established in 1921, which was later recognized as State Bank of

India (Goyal & Joshi, 2011). The Indian banking scenario have two era, first is known as pre-liberalization period during which 14 commercial bank in 1969 and six banks in 1980 were nationalized. Secondly, government of India merged New Bank of India into Punjab National Bank during 1993. As a result, nationalized banks were reduce from 20 to 19 (Jatkar, 2012) and further reduced from 19 to 11 banks on April 01, 2020. Indian Government is still pursuing bank merger for enriching synergy, expanding market power and cost efficiency through merger (Pandya, 2018).

### LITERATURE REVIEW

M&As in European banking were imitated for improving complementarities among lines of work from each component (Ayadi & Leleu, 2013). Operating synergies manifest themselves as higher cash flows, while financial synergies can affect both cash flows and discount rates (Damodaran, 2005). There is a positive effect on bidder wealth and it was significantly related to economies of scale, potential economies of scope and the locations of the bidders and targets (Fields, Fraser, & Kolari, 2007). Various Other studies identified motives like growth in market share (Gopinath, 2003), risk diversification, synergies (Seth, Song, & Pettit, 2002), and summarizing the external and internal motives in a merged entity (Calipha, Tarba, & Brock, 2010). The key drivers of mergers had led to improvement in the financial, managerial and operational efficiency in Nigerian banking sector (Ebimobowei & Sophia, 2011). The motives in the form of synergies, managerial capabilities, economic conditions and hubris were triggered in enhancing shareholders' wealth (Sarika & Vasantha, 2018 and Beitel &



*Schiereck, 2001*). EU countries are increasing their market power and enhancing strength of their market and identified various motives and macroeconomic factors that directly influenced merger process. The synergy motive (1+1=3) caused in enhancing shareholders' wealth through economies of scale along with economies of scope (*Badik, 2007*). In U.S, synergy disclosures serve to obtain a more favourable market reception for deals. It provided approximately 5 percent higher bidder stock returns (*Dutordoir, Roosenboomb, & Vasconcelos, 2014*). Profits were increased subsequently in post-merger period (*Berger, Bonime, Goldberg, & White, 2004*). The studies conducted in U.S. from 1972 to 2002 with 10,000 banks and explored that faster and earlier entry in the market is more advantageous (*Berger & Dick, 2007*). A comparison of market power, synergies, tax, etc. was made to analyze the effects of these factors on shareholders' value. The analysis shows that all these factors provided more gain to shareholders' except tax saving as only 1.64 percent synergies were achieved while operating gain was 8.3 percent. Merger transactions are more beneficial if proper diversification of resources is ensured (*Devos, Kadapakkam, & Krishnamurthy, 2009*). The holding entities are playing a leading role in stimulating entry of smaller rivals and achieve prosperous growth (*Feinberg, 2009*). Partners' compatibility, manager's hubris and culture fits were playing great role in merger process (*Yiannaki, 2013*). The study of a sample of 130 Norwegian banks identified the cost cutting and electronic payments for achieving the benefits of economies of scale (*Humphrey & Vale, 2004*). Consolidation is the one of the path for de novo entry in the market but there were also few hurdles in entry like market concentration, expansion and other

incumbent (*M., Adams, & Amel, 2007*). Diversification provided significant gains to consolidated financial sector (*Estrella, 2001*). There was a positive and significant market reaction for two types of transactions i.e. cross-product diversification and geographic specialization. (*Lepetit, Patry, & Rous, 2004*). Numerous empirical studies addressed positive results in financial performance after M&As deal (*Jallow, Masazing & Basit, 2017; Okoye, Modebe, Achugamonu & Isibor, 2016; Onalapo & Ajala, 2012*). Economies of scale, cost cutting, technology up-gradation and growth, etc. were identified as motives of M&As. All the parameters revealed improvement in financial performance in post-merger (*Kwabla- King, 2017*).

Low earning, less capital to assets ratios, great market power is the factors that made the financial institution as acquired entity (*Hannan & Pilloff, 2009*). The analysis of

25 merger cases during 1994-2002, found positive reaction regarding efficient management as powerful entity more likely to acquirer. Post-merger performance had been found significant as it enhanced the market power as well as growth (*Awdeh & EL-Moussawi, 2011*). The larger banks that have high cost to income were more likely to be acquired by other banks in the same country (*Hernando, Nieto & Wal, 2009*). After reviewing the literature it was found that there were numerous motives for M&As in banking sector. But there was no strong evidence that define the exact set of motives which can be segregated into internal as well as external. Some of the general motives found on the basis of review of literature that applicable in whole merger and acquisitions process are shown in table-1.

**Table-1: Classification of General Motives on the basis of Literature Review**

Motives of M&As	Corresponding Author(s)
Synergy achievement (Product or complimentary)	Devos, Kadapakkam & Krishnamurthy, 2009; Seth, Song & Pettit, 2002; Ayadi & Leleu, 2013; Damodaran, 2005; Dutordoir, Roosenboomb & Vasconcelos, 2014; Sarika & Vasantha, 2018; Calipha, Tarba & Brock, 2010; Badik, 2007.
Economies of scale, economies of scope and economic condition	Fields, Fraser & Kolari, 2007; Badik, 2007; Devos, Kadapakkam & Krishnamurthy, 2009; Ebimobowei & Sophia, 2011; Ebimobowei & Sophia, 2011; Yiannaki, 2013; Sarika & Vasantha, 2018; Kwabla- King, 2017; Humphrey & Vale, 2004.
Market Entry in merger environment	Berger, Bonime, Goldberg & White, 2004; Berger & Dick, 2007; Feinberg, 2009; M., Adams & Amel, 2007.
Market share	Gopinath, 2003; Devos, Kadapakkam, & Krishnamurthy, 2009; Hannan & Pilloff, 2009; Awdeh & EL-Moussawi, 2011; Hernando, Nieto & Wal, 2009.
Diversification of risk	Seth, Song & Pettit, 2002; Devos, Kadapakkam & Krishnamurthy, 2009; Yiannaki, 2013; Estrella, 2001; Lepetit, Patry & Rous, 2004; Vallascas & Hagedorff, 2011.
Enhancing shareholders value/ capital	Beitel & Schiereck, 2001; Onalapo & Ajala, 2012; Okoye, Modebe, Achugamonu & Isibor, 2016; Jallow, Masazing & Basit, 2017.

**Source:** Compiled from earlier studies



## RESEARCH OBJECTIVE

The present study is conducted to identify the motives of M&As in Indian banking sector and examine their contribution in enhancing the market share.

## DATA AND METHODOLOGY

This study covered mergers cases of Indian Banking Sector from 2014 to 2019. During this period, ING Vyasa bank was merged in Kotak Mahindra Bank in 2014. The mega merger occurred in the Indian banking history during 2017 when five associates of SBI were merged with SBI (*Satyanarayana, Subba, & Krishnamurthy, 2017*). In 2019, Dena Bank and Vijaya Bank were merged into Bank of Baroda. A questionnaire was designed on five point Likert Scale *i.e.* Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA) to collect primary data. A survey was conducted with a random sample of 102 respondents working at managerial level in post-merger institutions. Reliability of the questionnaire was checked through Cronbach's Alpha coefficient (0.821), which indicates that the questionnaire is sufficiently reliable (*Nunnally, 1978*). Similarly, Bartlett's test of Sphericity ( $p < 0.05$ ) and Kaiser-Meyer-Olkin (KMO) used for determining the sampling adequacy.

## RESULTS AND DISCUSSION

This study used multivariate analysis to recognize the motives in banking sector. The mean value and standard deviation of the statements are shown in Table 2, which shows that quick response to economic conditions (Mean=4.19, SD=0.805), followed by increase the market share (Mean=4.05, SD=0.849) are strong motives for M&As. Kaiser-Meyer-Olkin (KMO) value (0.764) is considered for measuring the sample adequacy. The value of Bartlett's Test of Sphericity ( $P=0.000$ ) is indicating sufficient correlation among the variables. The correlation matrix shows that all the variables are correlated at least with one variable at one percent level of significance. In anti-image matrix, all diagonal elements are known as Measures of Sampling Adequacy. Diagonal anti-image correlation matrix on value over 0.6 analyzed and all variables were included in the study because no value is less than 0.6. In the next step, communalities were verified and the variable whose value is less than 0.5 were excluded from further analysis. The variable making the merged bank strong was dropped as it carried a value of only 0.343 and rests of the variables were used for further analysis and accordingly KMO value was also increased from 0.764 to 0.783.

**Table-2: Descriptive Statistics of Motive for M&As**

S.No	Statements	Mean	Standard Deviation
1	Benefits of synergy	3.47	1.208
2	Increase in market share	4.05	0.849
3	Advantages of diversification	3.92	0.898
4	Quick response on economic conditions	4.19	0.805
5	Overcome financial difficulties	3.92	0.941
6	Faster market Entry	3.84	0.909
7	Increase in shareholders' value	3.76	0.956
8	Increase in number of customers	3.60	0.988
9	Improvement in R&D facility	3.76	1.036
10	Acquiring superior technology	3.62	1.034
11	Making the merged bank strong	3.93	0.893
12	Improved Profitability	3.95	0.894
13	Economies of scale	3.81	1.002
Total number of observation= 102			

Source: Compiled from primary data

**Table-4: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.783
Bartlett's Test of Sphericity	Chi-Square d.f. Sig.	332.608 (Approx.)
		66
		0.000

Source: Compiled from primary data.

Principal Component Method is used on the available data set which converts the correlated variable in a data set into uncorrelated variables. The first component shows the largest variability (17.501) in the data set. These board factors

are rotated orthogonally using varimax rotation with Kaiser Normalization. Table 5 indicates that the first initial Eigen value is 4.105 second is 1.275, third is 1.158 and fourth value is 1.054. The cumulative component variance is 17.501 percent, 33.203 percent, 48.332 percent and 63.278 percent.

**Table-5: Total Variance Explained**

Statements	Initial Eigen values Totals	Initial Eigen values (Percentage of variance)	Rotation sum of square loading (Percentage of variance)	Rotation sum of square loading (Cumulative percentage of variance)
Benefits of synergy	4.105	34.212	17.501	17.501
Increase in market share	1.275	10.628	15.702	33.203
Advantages of diversification	1.158	9.652	15.129	48.332
Quick response on economic conditions	1.054	8.786	14.946	63.278
Overcome financial difficulties	0.903	7.525		
Faster market Entry	0.781	6.512		
Increase in shareholders' value	0.627	5.224		
Increase in number of customers	0.581	4.841		
Improvement in R&D facility	0.459	3.825		
Acquiring superior technology	0.437	3.642		
Making the merge bank strong	0.320	2.663		
Improved Profitability	0.299	2.490		

**Extraction Method:** Principal Component Analysis.

**Source:** Compiled from primary data

Table 6 shows the communalities which is the proportion of the variance of variables explained by four factors. The value ranges

from 0.521 to 0.772 and provides the sufficient explanation of extracted factors.

**Table-6: Communalities**

Statements	Initial	Extraction
Benefits of synergy	1.000	0.663
Increase in market share	1.000	0.698
Advantages of diversification	1.000	0.698
Quick response on economic conditions	1.000	0.772
Overcome financial difficulties	1.000	0.674
Faster market Entry	1.000	0.557
Increase in shareholders' value	1.000	0.521
Increase number of customers	1.000	0.521
Improvement in R&D facility	1.000	0.629
Acquiring superior technology	1.000	0.540
Improved Profitability	1.000	0.685
Economies of scale	1.000	0.635

**Extraction Method:** Principal Component Analysis.

**Source:** Compiled from primary data



The rotated component matrix explained the association between the twelve variables comprises four factors. The variable such as benefits of synergy has the highest loading of 0.797 resulting into synergetic gain of 1+1=3 as supported in the study of (Damodaran, 2005; Dutordoir, Roosenboomb & Vasconcelos, 2014; Sarika & Vasantha, 2018; Calipha, Tarba, & Brock, 2010). First Factor called “Strategic Motives” benefits of synergy with 0.797 loading, advantages of diversification with 0.710 loading; enhanced market share/power with 0.708 loading and faster market entry with 0.460 loading. Further, second factor called “Performance Motives” combined the variables of enhance profitability with 0.762 loading, benefits of economies of scale with 0.728 loading and enhanced shareholders” value with 0.640 loading. Third factor called

“Growth Motives” incorporated three variables naming improving R&D facility with 0.721 loading, acquiring superior technology with 0.683 loading and increase in the number of customers with 0.607 loading. The last factor called “Economic Motives” includes two variables *i.e.* quick response on economic condition with 0.779 loading and overcome financial/economical difficulties with 0.761 loading. The variance explained by the first, second, third and fourth factor is 17.501 percent, 15.702 percent, 15.129 percent and 14.946 percent of total variance respectively. The reliability of these factors was measured by Cronbach’s Alpha coefficient *i.e.* 0.737, 0.637, 0.547 and 0.687 respectively.

**Table-7: Rotated Component Matrix**

Factor(s)	Statements	Factor 1	Factor 2	Factor 3	Factor 4
Factor-I	Benefits of synergy	<b>0.797</b>			
	Advantages of diversification	0.710			
	Enhance market share	0.708			
	Faster market Entry	0.460			
Factor-II	Enhance Profitability		<b>0.762</b>		
	Benefits of economies of scale		0.728		
	Enhance shareholders” value		0.640		
Factor-III	Improve R&D facility			<b>0.721</b>	
	Acquire superior technology			0.683	
	Increase number of customers			0.607	
Factor-IV	Quick response on economic condition				<b>0.779</b>
	Overcome financial/economical difficulties				0.761
	<b>Value of Cronbach”s Alpha of the Factors</b>				
		<b>0.737</b>	<b>0.637</b>	<b>0.547</b>	<b>0.687</b>

**Extraction Method:** Principal Component Analysis.

**Rotation Method:** Varimax with Kaiser Normalization.

**Source:** Compiled from primary data

## REGRESSION ANALYSIS

Regression analysis is used to check whether these factors are helpful in enhancing the market share. The independent variable is “enhanced market share” and the dependant variables are extracted from factor analysis named as strategic motives, performance motives, growth motives and economic motives.

$$\text{Regression Equation: } Y = a + Q_1X_1 + Q_2X_2 + Q_3 X_3 + Q_4X_4 + e_{it}$$

Where; Y= Increase the market share,  $\alpha$  = Y intercept,  $\beta$  = slope coefficient,  $X_1$ = Strategic motives,  $X_2$ = Performance motives,  $X_3$ = Growth motives,  $X_4$ = Economic Motives,  $e_{it}$  = residual or error term,  $i$ = Sample,  $t$ = Time

$$\text{Market Share} = 4.049 + 0.601 (\text{Strategic Motives}) + 0.245 (\text{Performance Motives}) + 0.262 (\text{Growth Motives}) + (-0.108) (\text{Economic Motives})$$

Table 8 indicates the results of regression analysis *i.e.* the value of  $R^2$  and F-statistics. The value of ANOVA (F-statistics) is 56.149 ( $p=0.000$ ) at 1 percent level of significance, which indicates that the regression model is fit. The value of adjusted  $R^2$  indicates that these four factors explained 0.686 percent of variance and rest of 31.4 percent variance may be attributed to some other factors not covered in the study. Three factors (strategic motives, performance motives and growth motives) has shown positive results and found significant, whereas fourth factor (economic motives) shows negative results and also found significant at one percent level. So, it is concluded that first factor is the most important factor in banking sector, which is the cluster of variables like synergetic benefits, diversification and faster entry. The results confirm the finding of earlier research studies (Sarika & Vasantha, 2018; Devos, Kadapakkam, & Krishnamurthy, 2009; Feinberg, 2009) that merger activity enhances synergy, ensure fast entry and provides the advantages of diversification.



Table-8: Regression Analysis

Variables	Unstandardized coefficients beta	t-value	Sign.
(Constant)	4.049	85.976	0.000*
Strategic Motives (Factor 1)	0.601	12.697	0.000*
Performance Motives (Factor 2)	0.248	5.236	0.000*
Growth Motives (Factor 3)	0.262	5.544	0.000*
Economic Motives (Factor 4)	-0.108	-2.286	0.024*
Adjusted R <sup>2</sup>	0.686		
F-statistic	56.149		0.000*

Source: Compiled from primary data, \* Significant at one percent level

## CONCLUSION AND RECOMMENDATIONS

After the economic policy reforms and merger wave, number of changes has been taken place in banking sector. Efforts were also made by the banking sector to remain competitive in the globalized era. Government took initiatives regarding M&As also and is still in the process of announcing and implementing the consolidation activity. After reviewing the existing literature, it was found that synergy was the main motive behind M&As. This study also supports the findings of the earlier studies. But there are some other variables like advantages of diversification and faster market entry which triggers the merger. For increasing market share, three motives *i.e.* strategic motives, performance motives and growth motives are most significant.

## IMPLICATION OF THE STUDY

This study provides the knowledge about the motives behind M&As and will be helpful in formulating and implementing the strategies in future. The regulators can formulate better competitive and defensive strategy keeping in mind the motives behind M&As. The managers can also choose better expansion plans for the banks.

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## DOGWOOD “CORNUS MAS.L” - VERY ANCIENT CULTURE PLANT

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### ANNOTATION

*Dogwood - the oldest, but, unfortunately, almost forgotten southern fruit plant. Archaeologists have found its bones during excavations of settlements belonging to the Neolithic period. It got its name for the red color of the fruit, which means red in Turkic. It may be designated by any of two specific names: dogwood real and male.*

**KEYWORDS.** *Dogwood, garden plant, health, use, medicinal properties, Vitamin C, immunity*

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Dogwood is cultivated in many European countries, but there are no special plantations of it. In amateur gardening, it is common in Italy, France, Poland, the Czech Republic, Slovakia, and Spain. Remember the revelations of Sancho (“Don Quixote” by M. Cervantes) about how dogwood, along with acorns, brought food to the noble knight Don Quixote and his faithful squire Sancho Panza. It happened on the outskirts of Kyiv - on Kurenevka, Korchevaty. There is not a single plantation of dogwood in the CIS countries, and they are not available in European countries. In Russia, single dogwood trees (usually large-fruited forms), and then only occasionally, can be found in family gardens in the North Caucasus and even less often in the Lower Volga region.

Medicines, which are taken from fruits and leaves of dogwood are used as astringents and disinfectants, selectively acting even on the dysentery bacillus, the causative agents of typhoid. According to A.I. Blaze’s data (2000), dogwood is used for rheumatism, colds, fever and skin diseases. This plant is used in ornamental gardening, when creating hedges, as it has beautiful yellow inflorescences, bright, often red fruits; as a soil strengthening and anti-erosion plant; for tanning and coloring leather; like a spring honey plant, and its wood for art crafts. Dogwood has been used since the Neolithic period. The reserves of dogwood are constantly decreasing, which makes it necessary to introduce it into industrial production. Despite the benefits of this crop, there are no industrial

plantations in Uzbekistan, and it is grown only in country houses and household plots. Dogwood grows in mountain forests, on the edges and in thickets of other shrubs, rising to a height of 1500 m in places of its natural growth. It grows in the form of a multi-stemmed shrub up to 4-6 m high or a tree with a spreading crown up to 8 m high. In the first years of life characterized by slow progress. Its life expectancy can be over 100 years in natural conditions and in culture.

Dogwood belongs to early flowering plants. Among fruit trees, it blooms one of the very first, when the average daily temperature reaches 6 ... 11 ° C, in places of natural growth and distribution - in late March - early April, in our country - in mid-late April, sometimes in early May, before the leaves bloom. Dogwood is characterized by a different degree of development of flowers in the inflorescence, so flowering is prolonged for almost a month.



**Fig. 1. Cornus mas.L - flowers**

When it is a sudden onset of cold weather, the flowers shrivel up and hold on until it becomes constant heat when the flowering of plants happens non-stop for 12-15 days. For this reason, during spring frosts, a significant part of the flowers is preserved without damage. Dogwood bears fruit annually and abundantly. Often up to fifty buckets of fruits are harvested from adult

dogwood trees. The period from the end of flowering to the beginning of fruit ripening lasts about 110-120 days, which we mainly have in mid-late September. The total duration of the growing season for dogwood is 192-196 days, and in years with very cold and short periods, its shoots do not have time to ripen before the cold weather.



**Fig. 2. Cornus mas.L - leaves**

Dogwood is a fairly frost-resistant plant; when the shoots ripen, it tolerates temperature drops to  $-30 \dots -32 \text{ }^{\circ}\text{C}$ . At the same time, some forms can withstand frosts down to  $-35 \text{ }^{\circ}\text{C}$  and somewhat lower. However, winter thaws and the early onset of spring with the return of cold weather have a negative effect on it, which is associated with the inability of the plant to restore winter hardiness to its former high value after thaws. This affects both the growth and fruiting of the dogwood. In the period of fruiting, rain and fog during flowering also have a very unfavorable effect. Dogwood forms a powerful root system, lying at a depth of 20-120 cm from the soil surface. The vertical root is weakly expressed, deepens into the soil by 80-100 cm, but the horizontal roots are long. They are well branched and form a thick lobe.

The main part of the skeletal roots is located at a depth of 10-60 cm. Dogwood grows on any soil, but bears fruit abundantly on calcareous soils with a sufficient content of manganese. The powerful cornelian root system, which is concentrated in the upper soil horizon, contributes to the use of even slight rainfall, so it belongs to fairly drought-resistant plants. However, it still prefers moderately moist soils and lacks moisture, especially with a large crop. During a long dry period, in such cases, its leaves curl, sometimes the fruits dry out, and fruit buds may not develop. In order to facilitate the bending of stems and branches to the ground, a constant systematic replacement of very thick old stems with thinner young ones can be practiced. Fruits of dogwood are mainly harvested from wild trees, which are still quite numerous in the

Caucasus, Western Ukraine and especially in the Crimea. If in the conditions of the South, where there are so many beautiful garden crops, people waste time collecting and processing wild-growing dogwood fruits, then these fruits are especially appreciated. Fruits of dogwood are attractive with sweet-sour taste, pleasant aroma, original cylindrical, sometimes spherical or pear-shaped shape, bright red, rarely pink color. They are rich in sugars

(and what is important - easily digestible glucose and fructose), organic acids, which are so important for maintaining normal blood pressure, active compounds - catechins, anthocyanins, flavonols. Dogwood has a lot of pectin, which is especially valuable for our health now, and an unusually high content of vitamin C - up to 120 mg per 100 g of fruit (some varieties have more), whereas other southern crops of this vitamin are usually not sufficient.



**Fig. 3. Cornus mas.L - General view of the fruit**

In Azerbaijan, Armenia and Georgia, a delicacy, “lavash”, has long been prepared from ripe cornelian fruits. The fruits for making such lavash are freed from stones, the pulp is boiled until a thick homogeneous mass is obtained, which is then thinly rolled out on clean planed boards and dried in the open air away from dusty places. Lavash is a concentrate containing all the nutrients that make up the fruit. In a dry room, it is

kept for a long time. Dried dogwood fruits can be stored in a dry form for decades. They are an indispensable seasoning for meat and fish dishes.

For medicinal purposes, fruits, leaves, shoots, bark, roots of dogwood are used. According to research, the fruits have antiscorbutic, antidiabetic, antipyretic, anti-inflammatory, bactericidal, antimalarial,



bile- and diuretic, tonic effects. They treat gastrointestinal diseases, dysentery, typhoid, anemia. They help with measles, flu, scarlet fever, rickets, tonsillitis, diarrhea, tuberculosis, cirrhosis of the liver and other diseases. For example, cakes of dogwood lavash saved the entire Russian army from scurvy during the Caucasian War. Any hemorrhoids with many years of experience are cured with dogwood bones in a week and so on.

Cornel berries of dogwood are often taken raw. They taste a little tart and knit, sour, but after frosting, like the fruits of mountain ash, they become very juicy and sweet. Phytoncides in their composition kill some types of bacteria living in any organism. The increased content of vitamins such as A and C gives the body additional immunity to fight viral infections. The other ways of processing fruits are its boiling or infusion. In this way, various infusions, compotes, liqueurs, kissels, decoctions are obtained, using which the body can be charged with vitamins, acids, oils. In order to obtain and preserve vitamins and microelements in their original form, dogwood berries can simply be thoroughly dried and consumed in crushed form, in the form of dried fruits or pickles even. By the way, the ancient Greeks and Romans

actively used this method, making something like olives out of dogwood.

The care of dogwood plant begins in spring and consists in loosening row spacings and very shallow loosening under young bushes, removing weeds, and, if necessary, watering and fertilizing. Of great importance for the superficial root system of dogwood, with its strong approach to the soil surface in older plants, is the mulching of tree trunks. In this case, loosening of the trunk circles should not be carried out. Any organic materials are used as mulch - grass, straw, hay and others. In the first half of summer, in order to enhance plant growth and better fruit set, liquid nitrogen fertilizing with slurry, mullein, and bird droppings works well. In my practice, liquid dressings with infusion of grass have shown themselves well. In the second half of summer, liquid fertilizing with phosphorus-potassium fertilizers can be used to complete growth more rapidly. However, it is quite challenging to propagate dogwood by seeds due to the difficulty of germination of its seeds, which have a very deep dormancy and have very dense seed coats. Seeds sown in autumn partially germinate in the second, and the bulk - in the third, and even fourth year. Pre-sowing preparation of seeds involves their long-term stratification.



In addition to its berries directly, dogwood is famous for the content of useful components in the seeds, flowers, leaves and even the bark of this amazing shrub. The leaves and flowers give the accumulated active additives best of all when infused and steamed. Infusions of twigs or leaves are shown to be used in the form of a plentiful drink for patients to increase appetite and immunity.

Moreover, the most surprising thing is that the phytoncides secreted by the shrub itself are able to enrich the air around adequately and scare some insects.

Dogwood is a valuable fruit, medicinal, ornamental plant. The main biological features of the species: there is no periodicity in fruiting, biological productivity under favorable growing conditions is 25-00 kg per tree, depending on its age. The plants are practically not damaged by pests and diseases, do not require treatment with pesticides. The garden dogwood does not require any special agricultural technology. The varieties of selection of the National Botanical Garden are the basis for the creation of productive cost-effective farm and private dogwood gardens.

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# THE ROLE OF DIGITAL EDUCATION IN TEACHING FOREIGN LANGUAGES

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## ABSTRACT

*The use of digital technologies in teaching has already become part of the educational process for the generation of the 21st century. Many educators have concerns about whether to include it in the learning process. But digital technologies are already a significant part of students' lives outside the classroom, so their inclusion in the educational process is inevitable. Technology is called upon to play the role of a powerful educational tool. The article analyzes the role of digital technologies in teaching foreign languages.*

**KEYWORDS:** *digital technologies, educational platforms, foreign languages, foreign language information competence.*

Digital tools in education are a subgroup of digital technologies that are being developed to improve the quality, speed and attractiveness of the development of education and teaching digital skills: e-learning courses (Google Classroom, Yandex, Tutorial Stepik, Canvas), social networks (Vkontakte, Facebook), video (YouTube).

Digital educational tools are becoming ubiquitous to improve the process of learning foreign languages and increase the content, interaction and effectiveness of learning. However, their complex use requires innovative methods to meet the organizational curriculum required to meet

the learning conditions. The main benefits of information and communication technology training courses include: Fully updated training in accordance with the latest generation of federal and national educational system standards and social needs and requirements, allowing you to quickly adapt to social changes, transitional knowledge and experience. Improved quality and efficiency through faster transfer from one person to another.

In the development of information technologies in education in modern conditions, the stage of informatization can be considered completed, since almost all educational institutions equipped with



computers and equipment, teachers have a fairly high computer education and information skills using ICT in education.

Digitalization in education is mainly focused on the current trend of maintaining the continuity of education digitalization (sometimes digitization, from the English digitization), as well as innovative technological personalization of education based on individuality. Today there is no single explanation for this term. Digitization takes into account the method of manipulating data with the help of digital devices[2]; computerized systems and various actions to improve the above accessibility [3]; widespread use of digital technologies, including the Internet, e-mail, video communication, etc. Thus, the Internet and mobile communications can be considered the main digitization technologies, allowing organizations to communicate online between various aspects of the educational process.

In linguodidactics, the terms “computer language teaching” and “computer learning” (“computer teaching a foreign language”, “computer linguodidactics”) appeared, which opened active computer learning. This concept does not fully cover the entire arsenal of modern technology. With the advent of interactive websites and mobile applications in education such as e-learning,

mobile learning (mobile learning) has come into use. Thus, the term "Foreign Language Teaching Skills" (FLTS) most appropriately and most accurately reflects the widespread use of ICT in the practice of teaching a foreign language.

Innovative ICTs provide access to information sources in foreign languages and various language variants, as well as a variety of educational content to create a virtual real language environment, as well as opportunities for students to communicate with each other and communicate with teachers via the Internet. Learn and improve self-learning and benefit from the level of a foreign language [35, p. 8-15]. Modern digital technologies significantly improve the process of learning a foreign language through a variety of multimedia and interactive resources, allowing students to explore various types of voice activity in the learning process. Thus, the cognitive activity and motivation of students to grow, respectively, language and communication skills are formed.

However, there are still important advantages of digital teaching tools and they cannot completely change teachers, they only creatively create conditions for the implementation of certain aspects of foreign language practice and special courses. The



most promising direction of teaching foreign languages in higher education is the method of "blended learning". The combination of traditions and online learning is understood as blended learning [5, p. 90]; e-learning system as a combination of various tools is the most effective aspect of combining learning systems with learning processes and distance learning [7, p. 142].

A prerequisite is the combination of blended learning called "foreign language" and traditional learning between online learning and communication, teachers and students. It should be noted that the teacher's role is changing as he becomes the curriculum coordinator, organizing and advising students. This form of education allows you to optimize the learning process and effectively organize students' independent activities using modern digital technologies. In the practice of using ICT in one direction, teaching a foreign language is a teaching computer program, a software tool designed to solve a certain subject content in a certain curriculum, the interaction of tasks with students [8, p. 120]. The OKP software also contains methodological complexes, e-learning courses and e-learning aids, electronic dictionaries, educational software systems,

and so on. This list is constantly expanding and updating.

Computer programs can be widely used in the process of learning vocabulary, practicing pronunciation and speech skills, language and voice, speaking and writing, as well as studying and using documents - this is a basic phenomenon. According to our analysis, the most popular programs are Linguleo, Duolingo, LingQ, FluentU, Rosetta Stone, etc. They involve learning a foreign language through immersion. At an early stage, the level of language proficiency is determined, which is taken into account when developing the curriculum. In addition, the advantage of the program is the opportunity to learn languages, as well as on real materials in accordance with the socio-cultural context in audio and video formats, as well as communication opportunities and online around the world.

Most computer programs now have mobile versions, which makes it possible to use their services on mobile devices. This method is called mobile language learning (shopping mall) in foreign language teaching ("learning a foreign language using mobile technology"), which allows you to create individual actors for personally meaningful situations, which are also selected for evaluation by each student.



the ability to learn a language provides direct feedback, error diagnosis and correction, and self-regulation of the learning process [34]. Mobile interactive services include:

- General (Duolingo, Lingualeo, Semper, Busuu, Lingvist, etc.);
- applications for the formation and development of vocabulary (Easyten, Upmind, Memrise, Quizlet, etc.);
- an app to improve your English grammar skills (English and Filp verbs, colored verbs, etc.);
- the application provides films and develops its own work as a basis for learning foreign languages (FluentU, TED, YouTube, etc.);
- news media (BBCNews, CNNNews, etc.);
- an application for the formation of communication skills in a foreign language (urban dictionary, genius, blacksmith's tour, etc.);
- mobile dictionary (ABBYY Lingvo Dictionary, Word Eater, Multitran, etc.);
- automatic translation (Word Lens, Google Translate, EyeTranslate, etc.).

The mobile application has its own multimedia content and hypertext, which allows you to speed up and improve the process of learning a foreign language as much as possible, develops a stable model,

communication skills and English grammar rules. In addition to transcription and grammar articles, the mobile dictionary provides speech recognition and speech input in vocabulary units. Thus, mobile technologies (or mobile applications) represent the best possible configuration for autonomous or independent learning, as well as group, training and development training courses in a mobile format, helping to use them in the usual technical sense [11, p. 10].

Currently, distance learning technologies for foreign languages such as Skype and Zoom deserve special attention. These video communication tools are attractive due to their affordability and ease of use. Teachers have the opportunity to organize individual and joint courses, large clubs, as well as seminars and video conferences to attract participants from other countries or native speakers. These skills can also be used by students online to practice speaking and listening to text chat to improve their writing skills. The obvious benefit of using Skype and scaling up language learning is that students gain experience in language communication. In the process of communication, I studied vocabulary, grammar, phonetic and linguistic characteristics of native speakers, and also studied entire cultures, worldviews



and lifestyles of different countries [11, 12]. So, you have a unique opportunity to create a real online experience in a foreign language.

Recently, the Skyeng online English school [38] has become increasingly popular, which provides a platform for interactive learning based on Skype technology. Classes with teachers take place around the clock and are complemented by mobile applications, browser extensions and educational communications. After deciding on the introduction of the English language, of course, the methodologist sends individual proposals for training and selection of suitable teachers, taking into account the interests, goals and objectives of students. Effective and engaging learning that encourages careful planning and development of 21 language support materials, consistent lesson plans and task control is English. Although digital technologies have all the advantages of teaching foreign languages, it should be noted that their use should be of an auxiliary nature. Therefore, in order to form a more efficient process in the context of the use of ICT in education, under certain conditions, it is necessary to define the higher education of students with communication skills in a foreign language - this is a universal digital education. Learning conditions are, in fact,

the environment (methods, skills, types of learning organizations, etc.) that strongly influence the outcome of the educational process [36, c. 123]. In this case, we are talking about a set of interrelated conditions that will contribute to the implementation of an effective learning process based on the use of ICT in a foreign language. This includes:

- 1) the improvement of teachers of digital literature means the availability of modern digital educational resources at the appropriate level, as well as the desire to work in a digital educational environment and develop new electronic materials based on the learning objectives;
- 2) including individual activities based on educational methods, including joint production activities in which students participate, taking into account personal and psychological characteristics and knowledge of a foreign language;
- 3) the direction of innovation - teaching foreign languages and the use of modern digital tools and choosing the best tools to use the possibilities of teachers' perception, based on the goal and task of teaching;
- 4) the use of ICT as an educational tool for organizing independent activities in the classroom and the student;
- 5) technical and technical support in the process of teaching a foreign language,



including the availability of the necessary skills and software, Internet access, etc.;

6) the formation of students' motivation to create conditions for the realization of personal and professional goals for mastering foreign languages, their awareness and development of internal needs.

Thus, social networks through psychological and educational conditions in relation to the organizational process of teaching foreign languages help to increase the motivation and activity of cognitive students, develop their creative abilities and skills in the direction of their modern intellect and achieve mutual understanding.

Modern digital technologies used in the practice of teaching foreign languages are also adapted to the educational process, create conditions for self-education and self-development, and form future specialists in communication skills in a foreign language.

Looking at computers and innovation from a pedagogical point of view, we can see that the use of modern digital tools in the classroom opens up new opportunities for learning on this topic, because in the process of using information and communication technologies, teachers are also used to find unused styles and new quality curriculum methods. Among the

most frequently used ICT in the training process, first of all, we should name them:

- Interactive whiteboards, electronic textbooks and manuals, test programs and simulators, electronic reference books and encyclopedias, educational resources, interactive maps and atlases from the Internet, conferences and competitions on audio and video componentization, distance learning.

- Distance learning, research and project materials. In the process of learning the use of information and computer skills, English teaches students to apply their knowledge in online competitions, Olympic competitions, quizzes, exams, various video conferences that can be participated in the Internet, and literature are three news that students can learn. In addition to articles in newspapers and magazines, similar sources of linguistic and cultural material and information on various topics can be obtained. Deepening previously acquired knowledge can be practiced through standard courses and integrated courses, as well as software products, online tests and multimedia presentations.

In general, we can say that in the modern world it is impossible without computers. The Internet is replacing television, the telephone, face-to-face



contact with friends and family, movies, libraries, shopping, writing, etc.

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# A SURVEY ON CUSTOMER SEGMENTATION IN CLIENT STRUCTURED WEB DOMAIN USING MACHINE LEARNING TECHNIQUES

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## ABSTRACT

Nowadays the direct communication between the users and resources are diminished which forces the online web domains to take the responsibility in order to maintain the entire business strategies. The entire web domains are maintaining their customer's information for the retaining purpose towards effective business development in the area of Education, Over the Top (OTT), Government services, and E-Commerce domains. The prolonged improvements in the entire business strategies critically depend upon the classification of customer segmentation. Machine learning helps to extract customer analysis information from huge sets of data. It is the procedure of data classification and segmentation of knowledge from customer data. This research can be considered as an efficient data segmentation of different source of customer information web mining domains to extract the useful segments for the enhanced time and space complexities. This paper presents a survey on customer segmentation in client structured web domain using machine learning techniques.

**KEYWORDS**—Segmentation, Web domain, Client structure, Machine learning, Performance

## 1. INTRODUCTION

Machine learning (ML) is the study of computer algorithms that can improve automatically through experience and by the use of data. It is seen as a part of artificial intelligence. Machine learning algorithms build a model based on sample data, known as training data, in order to make predictions or decisions without being explicitly programmed to do so. Machine learning algorithms are used in a wide variety of applications, such as in medicine, email filtering, speech recognition, and computer vision, where it is difficult or unfeasible to develop conventional algorithms to perform the needed tasks.

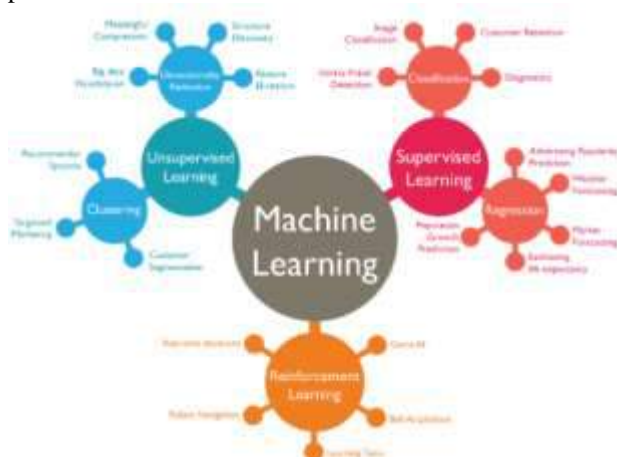


Fig-1: Machine Learning Components [12]

## 2. CUSTOMER SEGMENTATION

Customer segmentation is the process by which you divide your customers up based on common characteristics – such as demographics or behaviors, so you can market to those customers more effectively. These customer segmentation groups can also be used to begin discussions of building a marketing persona.



Fig-2: Customer Segmentation [13]

## 3. COMPONENTS OF MACHINE LEARNING

There are six main components of Machine Learning:

- ❖ Feature Extraction.
- ❖ Feature Selection.
- ❖ Choice of Algorithm.
- ❖ Training.



- ❖ Choice of Metrics/Evaluation Criteria.
- ❖ Testing.

#### 4. BUILDING BLOCKS OF MACHINE LEARNING

- ❖ Machine Learning Building Block #1: Capturing the Input

Every machine learning system needs a lot of data to function. Ultimately, it will take decisions based on the data it captures. And it needs to capture data about the environment it is in, the ambient conditions, user inputs, and so on. Hence, the first building block of any machine learning or AI system is the way it captures and input in the system.

- ❖ Machine Learning Building Block #2: Processing and Storing the Data (Edge and Cloud)

Once capture the data from input units, we will need to either store it or run computations on it. That's basically the choice it boils down to when we're working on a machine learning project. Both of these (processing or storing) can either happen on the system typically called "AI on the Edge" or they can happen on the cloud.

- ❖ Machine Learning Building Block #3: Output or Interaction Unit

Finally, there would be an output or interaction unit in a successful AI or machine learning system. This is the unit where the machine learning system would interact with the outside universe and take action. This could be in the form of a display, voice output, or informal robotic actions. Usually, the output from our machine learning system would have several design considerations as well.

#### 5. LITERATURE SURVEY

In 2018, Ahmad et al. [11] performed an ad hoc literature review, by selecting 166 research papers on the SO that were mainly classified about software development life cycle from the start of the SO website till the year 2016 positively. Similarly, the work of Baltadzhieva and Chrupala [1] thoroughly reviewed and analyzed various questions quality posted on diverse community question answering (CQA) websites like SO. In 2013, Meth et al. [2] conducted an SLR on investigating the works on automated requirements elicitation. Later on, Binkhonain and Zaho [3] conducted an SLR on ML algorithms for identifying and classifying NFRs. Recently, Iqbal et al. [4] presented a survey on ML algorithms and requirements engineering. They provided a bird's-eye view of how ML algorithms are aiding different requirements engineering activities. Besides, there are some surveys, SLR's, and systematic mapping studies done in other areas on sentiment analysis of scientific citations [5], data preprocessing methods for class imbalance problem [6], ML algorithms or techniques based software development effort estimation models [7], usability in agile software development [8, 9], and requirements prioritization [10], among others.

#### 6. ALGORITHMS IN MACHINE LEARNING

Machine Learning is the study of learning algorithms using past experience and making future decisions. Although, Machine Learning has a variety of models, here is a list of the most commonly used machine learning algorithms by all data scientists and professionals in today's world.

- ❖ Linear Regression
- ❖ Logistic Regression
- ❖ Decision Tree
- ❖ Bayes Theorem and Naïve Bayes Classification
- ❖ Support Vector Machine (SVM) Algorithm
- ❖ K-Nearest Neighbor (KNN) Algorithm
- ❖ K-Means
- ❖ Gradient Boosting algorithms
- ❖ Dimensionality Reduction Algorithms
- ❖ Random Forest

#### 7. ISSUES IN MACHINE LEARNING

Although machine learning is being used in every industry and helps organizations make more informed and data-driven choices that are more effective than classical methodologies, it still has so many problems that cannot be ignored. Here are some common issues in Machine Learning that professionals face to inculcate ML skills and create an application from scratch.

- ❖ Inadequate Training Data
- ❖ Poor quality of data
- ❖ Non-representative training data
- ❖ Over fitting and Under fitting
- ❖ Monitoring and maintenance
- ❖ Getting bad recommendations
- ❖ Lack of skilled resources
- ❖ Customer Segmentation
- ❖ Process Complexity of Machine Learning
- ❖ Data Bias
- ❖ Lack of Explain ability
- ❖ Slow implementations and results
- ❖ Irrelevant features

#### 8. IMPLEMENTATION

- ❖ Study and perform background analysis of customer segmentation.
- ❖ Investigate integral functional strategies for web domains.
- ❖ Bridge the gap between computationally feasible and functionally relevant time scales.
- ❖ Improve multi resolution state prediction.
- ❖ Combine classical and modern techniques in machine learning environment.
- ❖ Sample larger sets of dynamical client structured web domains.
- ❖ Realize interactive modeling.
- ❖ Foster the development of machine learning model.



## 9. TOOLS PERFORMANCE

The following data illustrates machine learning tools with its implementation scope for the betterment of customer segmentation in client structured web domain system.

- 1) Scikit-learn
- 2) PyTorch
- 3) TensorFlow
- 4) Weka
- 5) KNIME
- 6) Colab
- 7) Apache Mahout
- 8) Accord.Net
- 9) Shogun
- 10) Keras.io
- 11) Rapid Miner

## 10. RECENT TRENDS

### ❖ Internet of Things

The first and foremost ML trends, for which the majority of computer workers are anxiously anticipating in IoT. A breakthrough in this area will have a big impact on 5G adoptions as it will become the foundation for IoT. Systems will be able to receive and send information at a faster rate because of 5G's incredible network speed. Other machines on the system can be connected to the internet via IoT devices. Every year, we see a large increase in the number of IoT devices linked to the network, resulting in a commensurate increase in the amount of data exchanged.

### ❖ Automated machine learning

Professionals can design effective tech models that assist them to improve production and efficiency by applying automated machine learning. As a result, we will observe the majority of advancements in the domain of effective task solving. AutoML is mostly used to generate highly sustainable concepts that can aid in the derivation of job efficiency, particularly in the development sector, where experts can develop apps without having much programming skills.

### ❖ Improved cyber security

With the advancement of technology, most apps and devices have become smart, resulting in significant technological advancement. However, because these smart devices are continually hooked up to the internet, there is a pressing need for them to be more secure. Tech pros may utilize machine learning to create anti-virus models that will block any possible cyber-attacks and reduce dangers.

### ❖ Ethics in AI

With the advancement of new technologies such as machine learning and artificial intelligence, there is a growing worry about defining some ethical guidelines for these technologies. The more advanced the technology, the more advanced the ethics should be. If these ethics are not followed, machines will be unable to perform efficiently, resulting in poor decisions. This is visible in the self-driving automobiles that are currently on the market. The failure of the self-driving automobile is due to the embedded artificial intelligence, which is the vehicle's brain.

### ❖ Natural speech understanding automation

A lot of information on home automation is being disseminated, which theoretically works on smart speakers. The procedure is eased because of the use of smart voice assistants like Google, Siri, and Alexa, which establish a connection with smart appliances via non-contact control. In terms of detecting human sounds, these computers already have a high level of accuracy.

### ❖ General adversarial networks

GANs, or General Adversarial Networks, are new ML trends that produce samples that must be reviewed by networks that are selective in nature and can delete any type of undesired content. GAN, like the government, has numerous branches that provide checks and balances to ensure accuracy and trustworthiness.

Businesses must innovate in order to achieve their objectives, and they must develop new and innovative ways to do it using technology. ML is the wave of the future, and every company is adjusting to this new technology.

## 11. APPLICATIONS

- Image Recognition.
- Speech Recognition.
- Traffic prediction.
- Product recommendations.
- Self-driving cars.
- Email Spam and Malware Filtering.
- Virtual Personal Assistant.
- Online Fraud Detection.
- Stock Market trading.
- Medical Diagnosis.
- Automatic Language Translation.

## 12. CONCLUSION

The detailed research survey in the field of web domain towards customer segmentation system with traditional approach when compared to the machine learning approaches and recent techniques with advanced tools shows that the higher level of impact in the field of machine learning in the customer segmentation of web domain approaches with the cope up towards latest trends and systematic pathways for the improvement progress of several advanced strategies. The approaches for machine learning dealt with the various levels of implications towards the selection strategies for the analysis and prediction of customer segmentation focusing along with the factors in the development of customer segmentation system implementations. The tools performance and applications of machine learning provides the several directions for the development of different methodologies to implement in the better way. In future this research will lead the direction of customer segmentation system for the E-commerce in an effective way.

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# A SURVEY ON DATA INTEGRATION IN DISTRIBUTED WEB INFORMATION SYSTEM USING MACHINE LEARNING TECHNIQUES

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## ABSTRACT

Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns, and make decisions with minimal human intervention. In our current advanced digital era it is very tedious process to identify an efficient integration of distributed sources in web information with the supported methodology towards enhanced time and space complexities. The existing web data based models are not effective in terms of distributed information processing, lack of optimal techniques due to the complexity in handling different web data resources, checking the effective integration output is also not feasible in the existing web data handling system. This paper presents a survey on Data Integration in Distributed Web Information System using Machine Learning Techniques.

**KEYWORDS**—Segmentation, Web domain, Client structure, Machine learning, Performance

## 1. INTRODUCTION

Machine learning is the science of getting computers to act without being explicitly programmed. In the past decade, machine learning has given us self-driving cars, practical speech recognition, effective web search, and a vastly improved understanding of the human genome. Machine learning is so pervasive today that you probably use it dozens of times a day without knowing it. Many researchers also think it is the best way to make progress towards human-level AI.

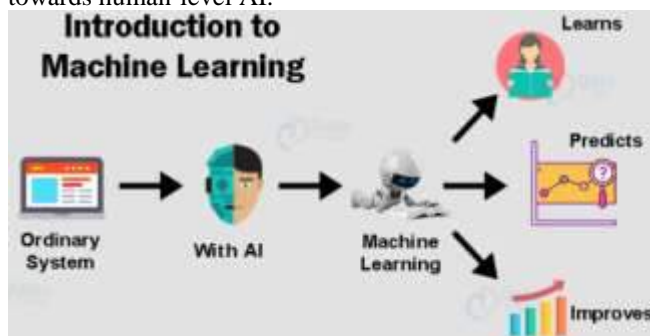


Fig-1: Machine Learning Processing [12]

## 2. DATA INTEGRATION

Data integration is the process of bringing data from disparate sources together to provide users with a unified view. The premise of data integration is to make data more freely available and easier to consume and process by systems and users. Data integration done right can reduce

IT costs, free-up resources, improve data quality, and foster innovation all without sweeping changes to existing applications or data structures. And though IT organizations have always had to integrate, the payoff for doing so has potentially never been as great as it is right now.

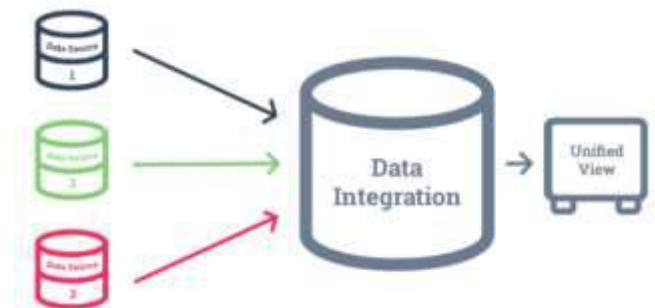


Fig-2: Data integration [13]

## 3. ELEMENTS OF MACHINE LEARNING

### ➤ Data Set

Machines need a lot of data to function, to learn from, and ultimately make decisions based on it. This data can be any unprocessed fact, value, sound, and image, text which can be interpreted and analyzed. A data set is a consolidated data of a similar genre that is captured in different environments. For example, a dataset of currency notes will have images of notes captured in different orientations,



light, mobile cameras, and background so as to achieve maximum accuracy in notes classification and identification.

#### ➤ Algorithms

Simply consider an algorithm as a mathematical or logical program that turns a data set into a model. There are different types of algorithms that can be chosen, depending on the type of problem that the model is trying to solve, resources available, and the nature of data. Machine learning algorithms use computational methods to “learn” information directly from data without relying on a predetermined equation as a model.

#### ➤ Models

In Machine learning, a model is a computational representation of real-world processes. An ML model is trained to recognize certain types of patterns by training it over a set of data using relevant algorithms. Once a model is trained, it can be used to make predictions.

#### ➤ Feature Extraction

Datasets can have multiple features. If the features in the dataset are similar or vary to a large extent, then the observations stored in the dataset are likely to make an ML model suffer from over fitting. Over fitting happens when a model learns the detail and noise in the training data to the extent that it negatively impacts the performance of the model on new data.

#### ➤ Training

Training includes approaches that allow ML models to identify patterns, and make decisions. There are different ways to achieve this including supervised learning, unsupervised learning, reinforcement learning.

### 4. TYPES OF MACHINE LEARNING

#### ➤ Supervised machine learning.

The most common form of machine learning, supervised learning involves feeding algorithm large amounts of labeled training data and asking it to make predictions on never-before-seen data based on the correlations it learns from the labeled data.

#### ➤ Unsupervised learning.

Unsupervised learning is often used in the more advanced applications of artificial intelligence. It involves giving unlabeled training data to an algorithm and asking it to pick up whatever associations it can on its own. Unsupervised learning is popular in applications of clustering (the act of uncovering groups within data) and association (predicting rules that describe data).

#### ➤ Semi supervised learning.

In semi supervised learning, algorithms train on small sets of labeled data and then, as in unsupervised learning, apply their learning's to unlabeled data. This approach is often used when there is a lack of quality data.

#### ➤ Reinforcement learning.

Reinforcement learning algorithms receive a set of instructions and guidelines and then make their

own decisions about how to handle a task through a process of trial and error. Decisions are either rewarded or punished as a means of guiding the AI to the optimal solution to the problem.

### 5. LITERATURE SURVEY

In 2018, Ahmad et al. [11] performed an ad hoc literature review, by selecting 166 research papers on the SO that were mainly classified about software development life cycle from the start of the SO website till the year 2016 positively. Similarly, the work of Baltadzhieva and Chrupala [1] thoroughly reviewed and analyzed various questions quality posted on diverse community question answering (CQA) websites like SO. In 2013, Meth et al. [2] conducted an SLR on investigating the works on automated requirements elicitation. Later on, Binkhonain and Zaho [3] conducted an SLR on ML algorithms for identifying and classifying NFRs. Recently, Iqbal et al. [4] presented a survey on ML algorithms and requirements engineering. They provided a bird's-eye view of how ML algorithms are aiding different requirements engineering activities. Besides, there are some surveys, SLR's, and systematic mapping studies done in other areas on sentiment analysis of scientific citations [5], data preprocessing methods for class imbalance problem [6], ML algorithms or techniques based software development effort estimation models [7], usability in agile software development [8, 9], and requirements prioritization [10], among others.

### 6. ALGORITHMS IN MACHINE LEARNING

Machine Learning is the study of learning algorithms using past experience and making future decisions. Although, Machine Learning has a variety of models, here is a list of the most commonly used machine learning algorithms by all data scientists and professionals in today's world.

- ❖ Linear Regression
- ❖ Logistic Regression
- ❖ Decision Tree
- ❖ Bayes Theorem and Naïve Bayes Classification
- ❖ Support Vector Machine (SVM) Algorithm
- ❖ K-Nearest Neighbor (KNN) Algorithm
- ❖ K-Means
- ❖ Gradient Boosting algorithms
- ❖ Dimensionality Reduction Algorithms
- ❖ Random Forest

### 7. CHALLENGES FOR MACHINE LEARNING

#### ❖ Technological Singularity

This is also referred to as super intelligence, which defines as “any intellect that vastly outperforms the best human brains in practically every field, including scientific creativity, general wisdom, and social skills.” Despite the fact that Strong AI and super intelligence is not imminent in society, the idea of it raises some interesting questions as we consider the use of autonomous systems, like self-driving cars. It's unrealistic to think that a driverless car would never get into a car accident,



but who is responsible? But these are the types of ethical debates that are occurring as new, innovative AI technology develops.

#### ❖ **AI Impact on Jobs**

While a lot of public perception around artificial intelligence centers around job loss, this concern should be probably reframed. With every disruptive, new technology, we see that the market demand for specific job roles shifts.

#### ❖ **Privacy**

Privacy tends to be discussed in the context of data privacy, data protection, and data security and these concerns have allowed policymakers to make more strides here in recent years.

#### ❖ **Bias and Discrimination**

Instances of bias and discrimination across a number of intelligent systems have raised many ethical questions regarding the use of artificial intelligence. How can we safeguard against bias and discrimination when the training data itself can lend itself to bias? Bias and discrimination aren't limited to the human resources function either; it can be found in a number of applications from facial recognition software to social media algorithms.

#### ❖ **Accountability**

Since there isn't significant legislation to regulate AI practices, there is no real enforcement mechanism to ensure that ethical AI is practiced. The current incentives for companies to adhere to these guidelines are the negative repercussions of an unethical AI system to the bottom line. To fill the gap, ethical frameworks have emerged as part of collaboration between ethicists and researchers to govern the construction and distribution of AI models within society.

## 8. IMPLEMENTATION

**A Decision Process:** In general, machine learning algorithms are used to make a prediction or classification. Based on some input data, which can be labeled or unlabeled, your algorithm will produce an estimate about a pattern in the data.

**An Error Function:** An error function serves to evaluate the prediction of the model. If there are known examples, an error function can make a comparison to assess the accuracy of the model?

**A Model Optimization Process:** If the model can fit better to the data points in the training set, then weights are adjusted to reduce the discrepancy between the known example and the model estimate. The algorithm will repeat this evaluate and optimize process, updating weights autonomously until a threshold of accuracy has been met.

## 9. TOOLS PERFORMANCE

The following data illustrates machine learning tools with its implementation scope for the betterment of data integration for the distributed web information system.

- 1) Scikit-learn
- 2) PyTorch
- 3) TensorFlow
- 4) Weka
- 5) KNIME
- 6) Colab
- 7) Apache Mahout
- 8) Accord.Net
- 9) Shogun
- 10) Keras.io
- 11) Rapid Miner

## 10. RECENT TRENDS

- No-Code Machine Learning
- TinyML
- AutoML
- Machine Learning Operationalization Management
- Full-stack Deep Learning
- Generative Adversarial Networks
- Unsupervised ML
- Reinforcement Learning

## 11. APPLICATIONS

### ➤ **Web Search Engine**

One of the reasons why search engines like Google, Bing etc. work so well is because the system has learnt how to rank pages through a complex learning algorithm.

### ➤ **Photo tagging Applications**

Be it Facebook or any other photo tagging application, the ability to tag friends makes it even more happening. It is all possible because of a face recognition algorithm that runs behind the application.

### ➤ **Spam Detector**

Our mail agent like Gmail or Hotmail does a lot of hard work for us in classifying the mails and moving the spam mails to spam folder. This is again achieved by a spam classifier running in the back end of mail application.

## 12. CONCLUSION

The detailed research survey in the field of distributed web information system towards data integration with traditional approach when compared to the machine learning approaches and recent techniques with advanced tools shows that the higher level of impact in the field of machine learning in the data integration for distributed web information system with the cope up towards latest trends and systematic pathways for the improvement progress of several advanced strategies. The approaches for machine learning dealt with the various levels of implications towards the selection strategies for the analysis and prediction of data integration for the distributed web information system implementations. The tools performance and applications of machine learning provides the several directions for the development of different



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# RUSSIA'S INVASION OF UKRAINE: IMPACT ON INDIAN ECONOMY - STRATEGIES TO MITIGATE AND SUSTAIN

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## ABSTRACT

*The Russia-Ukraine war has had a direct influence on India's foreign policy and security. Delhi is in a precarious position since it has allies on both sides of the war. India cannot continue to see Central Europe through Russia's eyes and must make a strategic decision. Russia's GDP growth is expected to be 0.7 percent in 2022, down 1.9 percent from last month's prediction, and 1.4 percent in 2023, according to FocusEconomics panellists. Economists are projected to become even more conservative in the future. The goal is being undermined by an increase in spontaneous risk as well as developing political and economic disparities. Ukraine's government is said to have spent \$270 million on military bond sales. In the foreseeable future, the war will have a substantial economic impact. Because of the severity of the circumstances and the unpredictability of the war, assessing the recession may take some time. Russia maintains that Ukraine was created by the Bolsheviks following the Battle of Brest-Litovsk in 1917. Russia is frequently the world's greatest wheat exporter, while Ukraine is the world's second-largest grain exporter. The researcher analyses the impact of war on the global and Indian economies.*

**KEYWORDS:** Russian-Ukraine war, Inflation, Trade balance, Sanctions.

## INTRODUCTION

Russia invaded Ukraine on February 24, Europe's first major military invasion since World War II. The pressure exerted on Moscow by its southwest neighbor was met with intense hostility. The term "very careful" has been used to describe Russian nuclear weapons, which cause great dissatisfaction and anxiety. The world was watching the violent Russian invasion of Ukraine on February 24, with explosions in Kharkiv, Dnipro, and Chuhuyiv. Many residents of Kyiv, the capital of the country, have fled to the west. On February 24, Prime Minister Narendra Modi addressed Russian President Vladimir Putin, calling for an end to violence. According to C. Raja Mohan of Indian Express, Delhi is in a difficult situation as it has friends on both sides of the issue. India cannot continue to view Central Europe through the prism of Russia and must make a strategic choice as soon as possible. India's foreign policy and security have been directly impacted by the Russia-Ukraine war. Three factors will have an impact on Indian policymakers. To begin with, there is a substantial distance between Moscow and New Delhi that may soon be bridged. Second, anything that benefits China or hurts the United States is plainly against Indian interests. The US Secretary of State, John Kerry, has proposed that the US limit its efforts in Europe in order to focus on Asia. Europe has been unable to consolidate its activities for decades, despite its magnificent looks. Washington is less likely to risk dividing Russia by leaving the issue to Europeans who do not work alone. Russia's

annexation of Crimea, along with its military operations in Ukraine, fuelled post-World War II behavior. Neighboring countries are reviewing their international security plans in response to Ukrainian policies. Pressure tests between Russia and Western countries are becoming increasingly dangerous with increasing bloodshed. After a dramatic decline in the decline caused by the epidemic, global activity is currently declining. After a strong resurgence in the second half of 2020, global growth slowed in the first half of 2021, hampered by the new outbreak of COVID-19. Trade growth has slowed as global economic activity has declined and supply chain problems continue.

## ECONOMIC PROFILE OF RUSSIA

The economic situation has changed dramatically following the Russian invasion of late February in Ukraine. In response to a military coup, Western nations and their allies-imposed sanctions on Russia in an unprecedented way. These sanctions, which included blocking Russian-selected SWIFT banks and freezing Central Bank deposits held abroad, caused damage to Russia's financial system, sent the ruble down sharply and led to the closure of the Moscow stock exchange. In view of this fact and international pressure, foreign trade has suspended operations in Russia, which has led to disruptions in imports, declining productivity, and a reduction in foreign trade. In response, Moody's, Fitch Ratings, and S&P Global have reduced Russia's debt levels, placing the country at the bottom of the garbage dump with automatic credit risk.



Significantly, the economy should grow in Q1, with the full impact of sanctions likely to be seen in Q2. Opinions have deteriorated dramatically in recent weeks. Serious international sanctions will encourage foreign exchange flows and investments in Russia. This, coupled with rising inflation and declining debt due to massive monetary policy moves,

will hurt domestic demand. The increase in spontaneous risk, as well as the growing political and economic divisions, further undermine the vision. FocusEconomics panels set GDP growth at 0.7% by 2022, down 1.9 percent from last month's forecast, and 1.4% by 2023. Predictions are expected to be further reduced going forward.

The important economic profile factors of Russia are presented in Table 1.

S. No	Factors	2015	2016	2017	2018	2019	% Increase from 2015
1	Population (million)	147	147	147	147	147	0
2	GDP per capita (USD)	9,289	8,699	10,718	11,371	11,583	24.7
3	GDP (USD bn)	1,361	1,277	1,574	1,669	1,700	24.9
4	Economic Growth (GDP, annual variation in %)	-2	0.2	1.8	2.5	1.3	330.0
5	Unemployment Rate	5.6	5.5	5.2	4.8	4.6	-17.9
6	Public Debt (% of GDP)	13.5	13.2	14.6	14.9	15.3	13.3
7	Inflation Rate (CPI, annual variation in %, eop)	12.9	5.4	2.5	4.3	3	-76.7
8	Exchange Rate (vs USD)	72.88	60.27	57.63	68.88	61.91	-15.1
9	Trade Balance (USD billion)	148	90.2	115	194	163	10.1
10	Exports (USD billion)	341	282	353	443	418	22.6
11	Imports (USD billion)	193	191	238	249	255	32.1
12	International Reserves (USD)	368	378	433	468	554	50.5
13	External Debt (% of GDP)	38.1	40.1	32.9	27.3	28.9	-24.2
<a href="https://www.focus-economics.com/country-indicator/russia/unemployment">https://www.focus-economics.com/country-indicator/russia/unemployment</a>							

According to table 1, the population growth rate is nil. The per capita GDP (in USD) and GDP (in USD billions) growth rates were 24.7 percent and 24.9 percent, respectively. Since 2016, the yearly fluctuation in percent of GDP has been positive, but it has varied. Since 2015, the unemployment rate has been decreasing. Since 2015, the public debt as a percentage of GDP has been steadily rising, with a 13.3 percent increase since then. Inflation has been kept in check, falling by 76.7 percent between 2015 and 2019. The ruble's exchange rate has also been advantageous to Russia, with the currency falling from 72.88 rubles per US dollar in 2015 to 61.91 rubles per US dollar in 2019. The trade balance (in billions of dollars) increased by 10.1 percent from 2015 to 2019. Exports and imports increased by 22.6 percent and 32.1 percent, respectively, from 2015 to 2019. International reserves have increased by 50.5 percent, while external debt has fallen by 24.2 percent.

spent an estimated \$ 270 million on military bond sales to sustain the military and to maintain vital government services. In addition, the European Union has provided \$ 500 million for military and weapons assistance, while the United States has approved USD 6.4 billion.

However, the conflict has already imposed a toll on the economy that has never been seen before: Domestically, martial law appears to be crushing what little activity exists, while exports of the country's key agricultural goods, maize, and wheat, have been severely disrupted, potentially leading to a drop in exports. While the destruction of critical infrastructure will have long-term consequences, the human toll will be the most catastrophic. Assessing the recession may take some time due to the severity of the situation and the unpredictability of the battle. As a result, the war is projected to have a significant economic impact in the near future as more individuals arrive and the death toll rises. The GDP prediction for the 2022 contract by FocusEconomics is 8.3 percent, down 11.7 percent from the previous month's average. According to the group, GDP would decrease by 3.5 percent by 2023.

### **ECONOMIC PROFILE OF UKRAINE**

Russian President Vladimir Putin has announced the launch of the Ukrainian invasion on February 24, and it has been going on ever since. As a result, the government has



The Economic Profile of Ukraine is presented briefly in Table 2:

S. No	Factors	2015	2016	2017	2018	2019	% Increase from 2015
1	Population (million)	42.6	42.4	42.2	42	41.9	-1.6
2	GDP per capita (USD)	2,055	2,175	2,686	3,120	3,678	79.0
3	GDP (USD bn)	87.5	92.3	113	131	154	76.0
4	Economic Growth (GDP, annual change in %)	-9.8	2.4	2.5	3.4	3.2	-ve to +ve
5	Unemployment Rate	9.1	9.3	9.5	8.8	8.2	-9.9
6	Public Debt (% of GDP)	79.1	80.9	71.8	60.9	50.3	-36.4
7	Inflation Rate (CPI, annual variation in %)	48.5	14.9	14.5	11	7.9	-83.7
8	Exchange Rate (vs USD)	24.03	27.1	28.16	27.71	23.7	-1.37
9	Trade Balance (USD Billion)	-3.5	-6.9	-9.7	-12.7	-14.3	-308.6
10	Exports (USD billion)	35.4	33.6	39.7	43.3	46.1	30.2
11	Imports (USD billion)	38.9	40.5	49.4	56.1	60.5	55.5
12	International Reserves (USD)	13.3	15.5	18.8	20.8	25.3	90.2
13	External Debt (% of GDP)	135	122	101	87.7	79.2	-41.3

*Source: <https://www.focus-economics.com/country-indicator/ukraine/population>*

According to Table 2, the population was found to be declining by 1.6%. GDP per capita in USD increased by 79% from 2015 to 2019. GDP (in billions of USD) also increased by 76% over the period. Economic growth has been strong, from negative growth in 2015 to a positive growth rate of 3.2%. Unemployment decreased by 9.9% and public debt as a percentage of GDP decreased by 36.4%. The inflation rate was fully controlled as it decreased by 83.7%. The exchange rate of the Ukrainian currency (hryvnia) in USD has been reduced from 24.03 to 23.1 hryvnia, indicating a positive trend in Ukraine. Ukraine's imports were found to be much larger than exports, and the nation has been plagued by a negative trade balance. The negative trade balance has risen by more than 300 percent from 2015 to 2019. However, international reserves are increasing by 90% from 2015 to 2019, and external debt as a percent of GDP has decreased by 41.3% during the period.

Russia and Ukraine have significant presence. For example, the region is the world's largest producer of wheat, corn, and sunflower oil, and Ukraine's rich, fertile soil has been named among the handful of Europeans. The country is the world's second-largest exporter of grain, while Russia is often the world's largest exporter of wheat. Russia believes that Ukraine was a Bolshevik creation after Brest-Litovsk in 1917 and "never had a culture of real domination". Russia's intervention in Ukraine has been seen as a major violation of international agreements and a violation of the independence of the independent state.

### **IMPACT OF THE WAR ON INDIA AND THE WORLD ECONOMY**

Table 3 shows Russia's percentage of global crude oil production. Russia's crude oil output is expected to be approximately 12% of global production, according to estimates.

Year	Percentage
2020	13
2025	12.5
2030	11.8
2035	12.3
2040	12.6
2045	12.7
2050	12.7

*Source: US-EIA*

Oil prices have risen sharply as a result of the war, sanctions, and a prohibition on the import of crude oil from Russia.

Transportation will be impacted, and as a result, the price level and cost of living will swiftly rise.



Russia-India trade (April 2020 – March 2021)	Billion USD	Percentage
Indian imports from Russia	5.83	62.63
Indian exports to Russia	3.48	37.37
Total Trade between Russia and India	9.31	100.00
<a href="https://www.indianembassy-moscow.gov.in/">https://www.indianembassy-moscow.gov.in/</a>		

Table 4 shows that Indian imports are more than Russian exports. To put it another way, imports from Russia account for 62.63 percent of total imports, while exports to Russia

account for 37.37 percent. India is reliant on Russian goods, and the war would have a negative impact on the Indian economy.

Table 5 shows the comparison of H1 (first half-year) between 2020 and 2021 of India's exports to and imports from Russia.

Year	India's Export to Russia	India's Imports from Russia	Trade Deficit
2020 H1 (Million USD)	1642.57	2338.16	-695.60
2121 H1 (Million USD)	2017.12	3213.77	-1196.65
Increase (Million USD)	+374.55	+875.61	501.05
Increase (%)	+22.80%	+37.45%	
<i>Source: Federal Customs Service of Russia</i>			

India and Russia have a major trading relationship. Imports from Russia grew by 37.45% in the first half of 2021 compared to the same period in 2020. India's exports, on the other hand, have recently increased by 22.8 percent. India's imports from Russia, on the other hand, outnumber its exports to Russia, showing that India's trade with Russia is substantial.

#### 1. Inflation affects the economy.

The long-running conflict in Ukraine is expected to raise import costs for Ukraine by more than USD \$ 600 billion this financial year. Inflation, growing account deficits, and rupee depletion will be the main consequences. More than 80% of India's crude oil demand is met by imports. According to economists and experts, a 10% increase in crude oil prices will increase India's account deficit by \$15 billion, or 0.4% of GDP, causing a slowdown in inflation. Last year, trade between India and Ukraine was estimated at \$500 million. Brent crude exceeded \$108 per barrel on March 14, 2022. With the decline in the value of the Indian rupee, India will have to pay more. Businesses will face additional pressure due to the current climate of inflation. It remains to be seen if they will choose to send this information to the customer. According to information from the US Energy Information Administration (EIA), Russia produces 12.5 to 13% of the world's crude oil, more than half of the crude oil produced by the Organization of Petroleum Exporting Countries (OPEC) in the eastern region of Central Asia. Many budget figures may not work if green costs continue at current levels, or worse, rise further, as the government will face fewer economic problems (it will have to reduce taxes) and current challenges. Oil prices may rise from their current level of \$108 to \$120 to \$140 per barrel, a significant increase in the near future. Costs of natural gas are also likely to climb. Europe is a slave to Russian gas, and as a result, it is afraid to exclude Russia from the SWIFT international financial system, fearing a more immediate calamity than fortress Russia.

#### 2. Imports suffer due to war.

Vegetable oils and oils (73.3%), fertilizers (10.6%), nuclear power plants, boilers, and equipment were among the largest exports to Ukraine (5.2%). The most common Indian purchases from Ukraine were pharmaceutical products (32.7%), electronics (7.8%), and other items. Agricultural products, metal products, plastics and polymers, and other goods are the main exports to Ukraine by India. According to many media estimates, the cost of importing oil jumped by 99% from April to December 2022, reaching \$ 94.3 billion. Due to the rupee's depreciation, importers will have to pay more in terms of the rupee for the same amount of goods. It meant that, instead of issuing guarantees of export credit for Russian commodities on a case-by-case basis, they would now be granted only as needed.

#### 3. Exports have been severely harmed.

In terms of value, India is the third-largest supplier of pharmaceutical products in Ukraine, followed by Germany and France. The representative offices in Ukraine include Dr. Reddy's Laboratories, Sun Group, and other Indian companies. The rupee started at 75.02 against the US dollar in the foreign exchange market but eventually fell to 75.75. This was due to large sums of money from developing countries due to global uncertainty.

#### 4. Exports benefit exporters.

India's exports to Russia reached Rs 27.114 billion in December 2021, according to data from the Reserve Bank of India (RBI). This was the largest volume of foreign trade in 30 years (1992–2022). Exports benefit from a weak rupee during this conflict because they earn a lot of money (in rupees) for the goods they export. This is especially true for export firms such as TCS, Infosys, and other software companies.

#### 5. Russia may stop exporting critical material.

Putin has the capacity to cut off crucial minerals and gases needed to keep the West's semiconductor chip supply chain running, upping the ante during a worldwide chip crisis. He



also risks suffocating the aerospace and military sectors in the United States and Europe by limiting the availability of titanium, palladium, and other metals. Controlling Ukraine would increase his hold on vital resources, giving him power equivalent to OPEC's 1973 energy embargo. The Kremlin might produce a big inflation shock, followed by a recession, similar to the previous oil crisis. Russia is also an important global source of metals such as aluminium and nickel. Due to rising orders from the construction and packaging industries, which help to create standards for goods in European warehouses, aluminium buyers are already experiencing severe shortages at a time when demand is high.

#### 6. Potential for World War III

China and Russia will be very close, and given the strength of the Chinese economy and the technology available to Russia, the cold war will not be between the unequal blocs as it was in the 1950s. Therefore, it may be very dangerous. Globally, the bloc of a rich nation will not be seen as a trusted partner since recently, the US left its allies in Afghanistan and has now left Ukraine to become independent.

In a nutshell, with rising fuel and food prices, India will see a rapid impact on inflation. Some prices will go up as supply chain issues become worse due to sanctions and the state of war. Due to uncertainty, investment status will deteriorate. The flow of money in the country will decrease, leading to a further decline in the stock market. The P/E rate was already prevailing at high levels, and such a massive shock would hit stock prices.

### STRATEGIES TO MITIGATE AND SUSTAIN

The conditions that allowed India's exports to outperform the rest of the world in 2021 will continue in 2022, allowing exports to remain high. Because India imports very little oil and gas from Russia, the impact on the Indian economy would be minimal in the short term, as most of India's refining businesses are unable to handle Russia's heaviest crudes, and there are high transport expenses from Russia to India.

Indian policymakers will have to deal with three outcomes. First, there are fundamental divisions between Moscow and New Delhi that will not be resolved soon. Second, the interests of the Indians are clearly opposed to anything that strengthens China or weakens the USA, a fundamental conflict with Russia's interests. Lastly, New Delhi should keep in mind the risks involved in this situation and work to reduce them. Indian strategy must be based on what the United States can do, rather than what they would like them to do. Expecting the US to simply withdraw is contrary to the true polarity.

### CONCLUSION

It is clear that a nation with a weak military will not be able to withstand a highly technologically advanced enemy, so it is important that the military gap is closed. Leadership should be professional and not politically motivated for the benefit of the individual. The integrity of defense services should be based on the constitution and not on the ruling party or political party. Being an adversary of America might be

risky, but being a friend can be lethal. This has been verified in the past and is now more frequently reported as fact. The breach of Ukrainian sovereignty is not the most important problem because the West has lately violated the sovereignty of several nations, including Yugoslavia, Serbia, Iraq, Syria, Libya, Panama, Cuba, Vietnam, Laos, and Cambodia. The West is unable to take meaningful actions because it fears an asymmetric reaction, a lighter version of the Cold War's "mutually assured destruction." However, the Kremlin calculus is unlikely to be altered by this Potemkin unity. This promise, which would have surely de-escalated the situation, was not given by President Joe Biden and his administration. Instead, warlike supplies were provided in the hopes of preventing a war.

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# ADOLESCENT MENTAL HEALTH PROBLEMS: AN EXPLORATION WITH A SOCIAL WORK PERSPECTIVE

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## ABSTRACT

*Adolescence is a period of development of emotional sensitivity and self-awareness. The entire family may be impacted, necessitating professional assistance. As the teenager approaches freedom, there is certain to be some turbulence and outbursts. Certain individuals abruptly depart their family, while others gradually achieve independence, while others stay incredibly reliant. To gain a full understanding of mental health difficulties, the present paper has attempted to compile materials in order to gain a better understanding of the prevalence of mental health difficulties among teenagers.*

**KEY WORDS:** *Adolescents, Interventions, Mental Health, Social Work.*

## 1. INTRODUCTION

According to the World Health Organization, mental health is a "state of well-being in which individuals recognize their strengths, are capable of coping with everyday life obstacles, working successfully and productively, and contributing to their communities." Applying adult concepts to teenagers and diagnosing mental health illnesses in children and adolescents can be difficult, given the enormous changes in behavior, intellectual capacity, and identity that occur during adolescence. Changes in adolescent subcultures may also make it more difficult to define adolescents' mental health and mental health concerns. While mental diseases are a symptom of a psychiatric disorder, adolescents may be more severely affected by mental health issues. These include a number of impediments and burdens that impede adolescent development and have a negative impact on the emotional, social, and vocational quality of life (World Health Organization, 2003).

Adolescence is a critical period for the development of critical social and emotional habits necessary for mental health. These include developing appropriate sleep habits, adhering to a consistent physical activity routine, honing coping, problem-solving, and interpersonal skills, and mastering emotional regulation. At home, school, and in society at large, protective and supportive environments are critical.

Numerous elements have an effect on mental health. The more risk factors that children are exposed to, the greater the likelihood that they may experience unfavorable effects on their mental health. Stress can occur for a variety of causes among adolescents, including exposure to hardship, peer pressure, and self-discovery. The influence of the media and

gender standards may deepen the chasm between an adolescent's current reality and future beliefs or goals. Additionally, their family life and relationships with peers play a significant role. Abuse (including sexual assault and bullying), strict parenting, and physical and financial hardship are all recognized as risk factors for mental illness.

Certain youth are predisposed to mental health problems as a result of their living circumstances, stigma, prejudice, or isolation, or a lack of appropriate support and services. Adolescents living in humanitarian and fragile environments; adolescents suffering from chronic illness, autism spectrum disorder, intellectual disability, or another neurological condition; pregnant adolescents, adolescent parents, or those in early or forced marriages; orphans; and adolescents from minority ethnic, sexual, or other discriminated groups (World Health Organization, 2021).

One in every seven, 10-19 year old worldwide suffers from a mental illness, accounting for 13% of the global burden of disease in this age range. In adolescents, depression, anxiety, and behavioral problems are among the primary causes of sickness and impairment. Suicide is the fourth highest cause of death among teens aged 15 to 19. Failure to address adolescent mental health concerns has long-term ramifications for adults, hurting both their physical and mental health and impairing their capacity to live satisfying lives (World Health Organization, 2021).

Hormonal fluctuations are frequently associated with sexual thoughts, irritability, restlessness, rage, and stress. Attraction to the other sex results in a desire to mix and interact freely. In practice, however, this may not always be possible due to cultural constraints on premarital sexual expressions and other pressing obligations during this time



period, such as schooling, employment, and so on. As a result, it is critical for teenagers to develop the ability to patiently face and manage with turbulence. It entails developing a sense of equilibrium as well as self-imposed constraints on the expression of one's goals and desires. Adolescents who are unable to verbalize their desires usually fantasize and daydream, which satisfies their desires in part (Vikaspedia, 2019).

Adolescence is also defined by the development of abstract thinking abilities, which enable individuals to analyze and evaluate in a systematic manner, as well as to recognize and study inconsistencies between rules and behavior. This development is commonly neglected by parents and service providers, and it is a major contributor to the well-known 'generation gap.' Socially, adolescence is defined by transitions from dependence to autonomy, social responses to

physical maturity, sexuality management, skill acquisition, and changes in peer groups. The urge to belong to a gang or a large organization has waned in favor of fewer, more stable, and lasting bonds (Vikaspedia, 2019).

## 2. OBJECTIVE OF THE PAPER

The purpose of this paper is to accumulate an understanding of the mental health structural issues that prevail among adolescents and to suggest appropriate social work interventions.

## 3. SOURCES OF DATA

The paper was prepared using secondary data. The statistics and descriptive data are combined and framed to satisfy the requirements of this article.

**Table No 01: Developmental Characteristics during Adolescence**

Stage with Age	Early Adolescence (11-13 years)	Middle Adolescence (14-15 years)	Late Adolescence (16-18 years)
Physical Growth	*Puberty: A phase of rapid growth *The emergence of secondary sexual traits	*Secondary sexual features continue to develop *95% of adult height is attained	*Physical maturity and reproductive growth plateau and eventually cease
Intellectual / Cognition	*Concrete thought predominates in the "here and now" *Cause and effect links are underdeveloped *Stronger sense of self than "social awareness"	*Experiences growth in abstract thought *Reverts to concrete thought under duress *Better understanding of cause and effect linkages *Extremely self-absorbed	*Development of abstract thought *Future-oriented; capable of comprehending, planning, and pursuing long-term objectives *Philosophical and idealistic in orientation
Autonomy	*Contrary to family structure's authority *Lonely *Wide mood swings *Begins to reject childhood preferences	*Family conflict predominates as a result of ambivalence about increasing independence.	*Adult lifestyle: Vocational/technical/college and/or work *Emancipation: Vocational/technical/college and/or work
Body Image	*Concerned about physical changes and self-criticism *Anxiety about secondary sexual features *Peers are idolised as a criterion for normal appearance (comparison of self with peers)	*Decreased worry about physical changes but increasing interest in personal appearance *Excessive physical activity interspersed with periods of lethargy	*Usually comfortable with body image
Peer Group	*Strong friendships with people of the same sex *Group contact with people of the opposing sex	*Strong peer allegiances-fad behaviours *Adolescents develop sexual desires and begin to explore their capacity to date and attract a mate	*Less impacted by peers on decisions/values *Relates to people more than peer group *Partner selection based on individual desire
Identity Development	*Daydreaming *Frequently changing vocational goals *Developing individual value system *Emerging sexual impulses and sexual exploration *Imaginary audience *Desire for privacy	*Experimentation - with sex, drugs, friends, and jobs, as well as risk-taking behaviour.	*Adults pursue practical vocational ambitions or career employment *Begin to differentiate their imaginations from reality *Establish sexual identity; sexual activity is increasingly prevalent

Source: ((National Health Mission, 2019)



**Table No 02: A Skill-Based Approach to Assisting Adolescents in Addressing Mental Illness**

Setting	Segment	Actions
Home	Social welfare services	<ul style="list-style-type: none"> <li>• Educating parents to assist them understand the emotional needs of teenagers and how to meet those needs</li> <li>• Identifying the types of mental health problems that may emerge, how to respond to them, and when and how to seek treatment</li> </ul>
School	School Staff	<ul style="list-style-type: none"> <li>• Developing individual assets such as self-esteem and life skills</li> <li>• Promoting healthy attitudes and behaviors toward sexual health, injuries, violence, and substance use</li> <li>• Creating a safe (i.e., devoid of physical and emotional violence) and supportive (i.e., where students and staff feel respected and supported) school environment</li> <li>• Collaborating with social health agencies to identify and assist teenagers who are experiencing difficulties</li> </ul>
Community	Community leaders and members	<ul style="list-style-type: none"> <li>• Educating and mobilizing community leaders and individuals in order to foster a loving and supportive environment for teenagers who are experiencing or at risk of experiencing mental health disorders, as well as their families</li> <li>• Educating and mobilizing community members to intervene when there is domestic abuse or other forms of violence in the community</li> <li>• Training chosen community members to identify and refer teenagers in need of health care</li> </ul>
Media and Communication Technology	Media Personnel	<ul style="list-style-type: none"> <li>• Disseminating information about the variables that contribute to mental health problems in adolescents, effective strategies for preventing and responding to mental health problems, and the relationship between substance use and mental health problems.</li> <li>• Preventing suicide from being glamorised</li> </ul>

Source: (World Health Organization, 2003)

#### 4. PAROXYSMAL EMOTIONAL PROBLEMS DURING ADOLESCENCE

- **Depression:** Adolescence marks the shift from childhood depressive disorders (rare, male preponderance, hidden symptoms) to more adult variants, which have a significantly higher frequency, a female predominance, and a larger risk of presenting with sad mood. However, concealed manifestations (for example, behavioral difficulties, substance abuse, school anxiety or failure, exhaustion, and other physical symptoms) continue to be prevalent in early adolescence, particularly among boys (Michaud & Fombonne, 2005).
- **Anxiety Disorders:** Adolescents are prone to anxiety problems, which frequently remain into adulthood. While separation anxiety disorder and mutism are more frequent in younger children, generalized anxiety disorder and panic episodes begin to manifest around puberty. Generalized anxiety disorder is characterized by uncontrollable excessive concern, trouble focusing, impatience, sleep issues, and frequently exhaustion. Panic disorder is defined by recurring spontaneous panic attacks that are frequently accompanied by physiological and psychological symptoms. As is the case with most mental health problems in adolescents, anxiety disorders are frequently co-occurring with other illnesses, most notably depression.

- **Eating disorders:** eating disorders such as anorexia nervosa and bulimia nervosa most frequently manifest themselves throughout adolescence and early adulthood. Eating disorders are characterized by aberrant eating behaviour and obsession with food, which are frequently accompanied by worries about body weight and form. Anorexia nervosa has a greater fatality rate than any other mental condition, frequently owing to medical problems or suicide.
- **Risk Taking Behaviours:** Numerous health-risk behaviours, such as drug abuse or sexual risk-taking, begin throughout adolescence. Risk-taking behaviours can be detrimental to an adolescent's mental and physical well-being when used to cope with emotional challenges.
- **Conduct disorder:** Conduct disorder is described as chronically disruptive behaviour in which a young child violates the rights of others or age-appropriate social standards on a recurring basis. It is frequently preceded in early years by oppositionality and resistance and can become more disruptive during adolescence. Symptoms may include property destruction, deception or theft, truancy, rule infractions, and hostility against people or animals. Teenagers who have a conduct problem sometimes have co-occurring disorders such as depression, suicidal behaviour, and poor peer and adult interactions. Consequences include scholastic and



career failure, as well as legal issues. Parents and families require assistance in ensuring that their child attends school, and seriously impacted teens should be sent to mental health experts for examination and treatment.

- **Suicide and self-Harm:** Suicide is the fourth greatest cause of mortality among older teenagers (15-19 years) in the world. Suicide risk factors are many and include hazardous alcohol consumption, childhood maltreatment, stigma associated with seeking assistance, barriers to care, and availability to means of suicide. As with traditional forms of media, digital media may play a key role in strengthening or undermining suicide prevention initiatives (World Health Organization, 2020).
- **Behavioral Disorders:** Adolescents with behavioral issues are more likely to be younger than older adolescents. ADHD, which is characterized by difficulties paying attention, excessive activity, and behaving without concern for consequences, affects 3.1 percent of 10-14-year-olds and 2.4 percent of 15-19-year-olds. Conduct disorder (characterized by signs of disruptive or difficult behaviour) affects 3.6 percent of ten- to fourteen-year-olds and 2.4 percent of fifteen- to nine-year-old. Adolescents' education can be harmed by behavioral problems, and conduct disorders can end in criminal behaviour. (Global Health Data Exchange, 2019)

## 5. SOCIAL WORK INTERVENTIONS

A comprehensive plan is required to focus on adolescent mental health at all levels. Adolescent's mental health needs to be supported through primary care, training programmes, and service delivery systems. At this age, primary or preventative actions may be possible. Targeted therapies are created for children at high risk of mental illness. Clinical therapies include psychosocial, psychopharmacological, and other environmental interventions for adolescent psychiatric disorders. Preventive interventions not only improve youth mental health but may also reduce adult psychiatric illness.

- **Framing Appropriate Policy:** A whole-of-government and whole-of-society strategy to improving adolescent mental health outcomes may be achieved via the implementation and enforcement of policies and laws, which gives advice and examples of legislation and policy provisions.
- **School based Programmes:** Promoting and safeguarding the mental health of adolescents necessitates taking steps to enhance the physical and digital settings in which they live, learn, and play. Adolescents' physical and social surroundings may be improved by a variety of evidence-based activities, such as school climate interventions, adolescent safe spaces in public places.
- **Web-based interventions:** Computer or online therapies, which frequently incorporate parts of many psychological techniques, have grown in popularity

as a novel and relatively low-cost means of addressing adolescents and young adults.

- **Classroom-based instructional programs:** Classroom instruction enhances adolescents short-term understanding of suicide and suicide prevention. There is some evidence that didactic education programmes are marginally more successful at promoting suicide awareness than experiential treatments. It has no established effect on self-efficacy for suicide prevention.
- **Target Prevention Programme:** Targeted preventive programmes can result in a slight reduction in depression diagnoses following intervention and in the short- and medium-term (up to three months) (four to twelve months). Additionally, they have been shown to be useful in reducing self-reported symptoms, at least in the short term. Universal preventive programmes are ineffective in reducing clinical symptoms, and modest effects for self-reported symptoms and depression diagnosis are detected primarily at immediate post-assessment.

## CONCLUSION

To summarize, teenage mental health is a collaborative effort. Effective interventions require stakeholder cooperation. Mental issues or troubles can be a normal aspect of teenage growth; they may be a response to events or stressors in the adolescent's life. Mental challenges or issues do not fit the diagnostic criteria for diseases; their length, intensity, and impact are all unique. Adolescents with mental health difficulties need prompt access to comprehensive mental health treatments. Mental health preservation and promotion has long been considered as an individual or family duty. Improving public health through extending community mental health services is essential. Beyond typical hospital-based therapy paradigms is urgently required, global service delivery paradigms should be established. Adolescent mental health could be addressed by adopting a youth-specific mental health policy.

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# A REVIEW ON LACK OF AWARENESS ON THEIR OWN HISTORY, CULMINATED INTO LOSS OF HISTORICAL CONSCIOUSNESS AND SOCIO HISTORICAL CONSCIOUSNESS (A Vaddera caste)

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## ABSTRACT

*One of the most significant periods in human history is the Stone Age. Early man initially utilised stones as a material. Human evolution may be shown in stone implements. Throughout their history, such significant stones were a part of their existence. Their livelihood is still reliant on them. Vadderas is their name. One of the largest populations in India's south is the Vadderas, Odde, Waddars, Vaddirajulu, and Od. They were referred to be nomadic tribes in the past because they roamed from place to place looking for labour. They are now mostly settled, although a small percentage of the population is still nomadic.*

*The current research is based on a thorough examination of the literature. Three studies from journals and oral information from Vaddera caste members were chosen by the researcher.*

*According to my understanding, there is only 1% literature, which is insufficient to identify their identity. The Vadderas were given the label of stone peddlers, but they were truly in various holdings throughout history, and numerous castes in India had varied occupations, which still exist now. Future study on the many sorts of castes that arose and their holdings throughout history and into the present scientific world would be required.*

**KEYWORDS:** *Vaddera caste, Identity, literature, History.*

## 1) INTRODUCTION

One of the most significant periods in human history is the Stone Age. Early man initially utilised stones as a material. Human evolution may be shown in stone implements. Throughout their history, such significant stones were a part of their existence. Their livelihood is still reliant on them. Vadderas is their name. One of the largest populations in India's south is the Vadderas, Odde, Waddars, Vaddirajulu, and Od. They were referred to be nomadic tribes in the past because they roamed from place to place looking for labour. They are now mostly settled, although a small percentage of the population is still nomadic.

### 1.1) Orgin

In ancient India, most of the countries (geographical units) were named after the stock of tribes that inhabited the land or the ruler that ruled the state. In the Bhagavata Purana, it is stated that the progeny of Ila-Sudyumna, Dirghatamas, and Sudesna had six sons, namely: ANAGA, VANGA, KALINGA, PUNDRA, SUMHA, and ODRA. The Orissa portion was ruled by their sixth son, Odra, after whom the country was said to have been named after him. According to the Mahabharata traditions, the territory of the Odras lies along with those of Utkala, Mekala, Kalinga, and Andhra. Manu, on the other hand, places the Odra people along with the Pallavas, Kiratas, Chinas, and Khasas etc. However, these statements do not specify the location and extent of the

country. The Natural History of Pliny mentions that Oretes as a race inhabited a country where Mount Meleus is located. The Greek word oretes is rendered in Sanskrit as Odras. Mount Meleus has been identified as Malayagiri near Pallahada, now situated in the district of Angul.

The earliest epigraphic reference to Odras is found in the Soro Copper Plate grant of Somadatta, from which it is clear that Uttara Tosali, with its Visaya 'Sarepahara' identified with Soro of Balasore District, was part of Odra Visaya. The inscription is dated to the 7th century A.D. Uttara Tosali, then forming parts of modern Medinapur and Balasore districts, was a part of Odra Visaya. This reference amply indicates that Odra was a small and powerful territorial unit.

It was mentioned as Odra Visaya in the Soro Copper Plate Grant of the 7th Century A.D. Alberuni described it as Udrabishau in 1025 A.D. In the Tirumalai inscription of Rajendra Chola, circa 1025 A.D., the word Odda Visaya is met with. Furthermore, the term evolved into Odivisa or Udivisa in the accounts of Lama Taranath. In the tantric literature of the late mediaeval period, we still find a slight variant of the term as 'Uddisa'. The Tantrasara mentions God Jagannath as Uddisanatha, while Jnanarnaba speaks of Uddisa as one of the Sakta Pithas.



## 2) OBJECTIVES

- To review the history and origin culmination of Vaddera caste scattered at north and south India.
- To review about the literature contributed about Vaddera caste.

## 3) METHOD

Systemic review of literature and narrative search.

## 4) FINDINGS

**After rigorous search on review of literature I found hardly 2-3 books in which they just mentioned about the Vaddera's, and 2-3 research papers were published but who could not completely draw the picture of Vaddera's. The followings books and papers described about the Vaddera caste.**

1) Studies in Peasant, Backward Classes, Sectarian, Tribal, and Women's Movements edited by M.S.A. Rao. This book has a chapter on the Reform Movement among the Waddars of Karnataka. Here it talks about the status of Waddars, reformers among them, and their social mobilization.

2) Castes and Tribes of Southern India by Edgar Thurston and K Rangachari in its fifth volume, which includes the tribes from letter M to P, mentions the caste names as Odde, Voddas, and Wuddars, giving an insight into their origin place being Odisha and also about their lifestyle, their highly skilled ability in doing work, their innocence, and institutions.

3) The castes and tribes of H.E.H. In The Nizams' Dominion, written by Siraj-ul-Hassan, he gives a note on the Waddars. In this book, he mentions as a remark that they might have ruled Nalgonda at some point of time and also talks about their sub castes and their complicated gotra system, along with a note on exogamy.

4) In Criminal Classes in Bombay Presidency, a book which was published by the Government of Central Press in Bombay in 1908, did talk about Waddars as one of the so-called criminal tribes. It mentions the subdivisions among the waddars, their dressing styles, residences, and the involvement of Ghatti Waddars in theft.

5) The tribes and castes of the northern western provinces and Oudh, authored by William Crooke, do talk about Jasma Devi, who is now worshipped as a deity by the local people who belong to this tribe. He further says that they believe that they were kings once upon a time and that they are called OD and Vadar in the southern regions.

6) In Hindu Manners, Customs, and Ceremonies by Abbe J.A. Dubois, he writes in a very heinous manner, mentioning that Wuddars are of low birth and that their minds are uncultivated in nature.

7) Vaddera (alternatively Vadde, Vadderaju or Waddera) is a caste in Andhra Pradesh, Tamil Nadu and some other states in India. Their ancestors were stonecutters and diggers of wells.

Alternatively, Vaddera people known as Wadders in Maharashtra, Vadde, vaddila, Vaddu Raju in Andhra Pradesh and as Bhovi in Karnataka are an ethnic community native to Karnataka, Andhra Pradesh, Tamil Nadu, Maharashtra, Gujarat, Western Orissa and other states in India.

The Vaddar, have various other names too such as Bhovi, Wadda, Tudugvaddar, Voddar, Vaddar, Girinivaddar, Od and Odde.

The Vaddar have decreased in population considerably during british rule. They are basically from Orisha, meaning the country of rocks and hills located in Southern India.

There are three main groups in the Bhovis, namely Kallu Bhovi who are stone cutters, Mannu Bhovi who are earth-workers and Uppar Bhovi who work as menial laborers in the municipality. They speak Telugu and Kannada.

They warriors by caste, due to the decline of Indian imperial power and invasion of muslims and british rule turned to be many went fugitives and the captive were put to labourous works like stone cutting, earth digging and therefore, the warrior class reduced dust. These unfortunates turned out to be permanently stone cutter, earth-workers, and are constantly moving about in search of work.

The Bhovi women have a role in the economic, social and religious spheres of their community and contribute to the family income. While earth digging, stone cutting and daily wage labors are their traditional and primary occupations, agriculture is the secondary occupation for those settled in villages.

The etymology of the word 'Bhovi' is from the word bhovi meaning the leader or headman of group. vaddars community speaks vaddar language originated from Rayala seema meaning the land of rocks. The vaddars also known as vodde, vaddila, odda, odde, bhovi, odeyar, wadeyar from place to place who are nomadic tribe travel in search of occupations like land levelling for cultivation for farmer community, digging of earth and canals, making of roads, cutting of rocks and stones for the purpose of construction of water tanks, houses and making roads. They are called as Uru oddar or Uru bhovis in the region of Banavasi of Karnataka who are known for surveying of lands to settlement of villages, the Uru means village therefore, those who make land levelling for location of villages and cultivation are known as uru bhovis, similarly the earth diggers and land suppliers of sands to make roads and other construction are known to be matti voddars or mannu vaddaru. Those who transport sand from river beds on the back of donkeys and horses are called as katte vadders or rahuth vadders. those who cut huge rocks and roll out them on huge carts known as Bande vadders or bandi vadders or Gaali vadders. those who mill stone and crush as jelly stone are known as Girini vaddars and those who work on stones, slabs, quarries and Mining are known as Kallu vadders.

There are arstisans in this community who make grinding stones and other house hold articles are known as Pathrots. They claim to be the clan of Bhagirath Ganga, who built a canal from the Ganges in the Himalayas when there was a hundred-year drought in northern India. This Bhagirath was requested by then Kshathriyas to find a solution, in turn he was given the status of Kshathriya and he was successful in excavation of huge canals from Himalayas to the Prayag and diverted the Ganges to the whole northern part of India. Hence the Bhagirath was remembered as saviour of northern part of India and they remember him as the son of the Ganges. Therefore, these wadders being the oldest community in India



claim them as builders of India. They speak ODDE language out of which the Telugu, Kannada, Tulu and after which Tamil, Malayalam and Sihamlese languages said to have taken origin. The wadders were the first to scribe on Rocks during the reign of the Asoka the Great. The King Kharavela claim him as the great Odda and his hathigumpa Inscription subscribes with superscripture as Sri Odde, meaning the blessings of Odda, the fore father of present Orissa.

Bhovi Waddar or Vaddar, Vaddar, Od, Odde, have common Gothras all over Karnataka, Andhara Pradesh and Tamil Nadu. The Gotra is a term applied to an ancestor or an originator through whom a particular family has originated. A Gotra is the lineage or clan assigned to a Hindu at birth. In most cases, the system is patrilineal and the gotra assigned is the gotra of the persons father. Lineage segment within an Indian caste, indicating common descent from a mythical ancestor. Marriage by members of the same gotra is traditionally prohibited. The custom is intended to prevent inbreeding as well as to broaden the influence of each gotra through marriage alliances. A common mistake is to consider gotra to be synonymous with cult or 'Kula'. A 'kula' is basically a set of people following similar rituals, often worshipping the same God (the Kula-Devata - the God of the cult). Kula has nothing to do with lineage or caste and it is possible to change ones Kula based on faith or ista devtha.

Bhovi caste consists several Gotras (Kulams) which has same meaning in Telugu and Tamil language. These gotras are believed to be shared from Reddi. As per folklore belief the Odda was the elder brother among Radda, the Reddy, Kamma and Komati.

Gotras In Telugu The following are examples of exogamous septs among the Bhoivis and Odes: Alkunta Burasu or Oorsu or Poola ( Flower ) Bantula ( Soldier ) Bandi ( Cart ) Bandollu ( Rock ) Cheemala ( Ants ) Cheruku ( Sugar ) Dandu ( Army ) Deringula Gandikota Gampa ( Basket ) Goddali ( axe ) Idakotta ( Break-down ) Janjapu or Kunchapu ( Sacred Thread ) Jeri Bothula or jadbela ( Centipede ) Kotala ( Fort ) Koniali ( Clown ) Mekala or Makali ( Herdsmen ) Nalla Bothula ( Good ) Peetalu ( Strength ) Panthikottu ( pig-killer ) Pasupu ( Turmeric ) Rajulu ( Prince ) Santhalu ( Fair ) Thapta ( Drum ) Thatichettu ( Palymra ) Uppu tolla ( Salt ) Vallapu or Bellappu ( Jaggery ) Vemulu ( Neem ) Thaalluri ( Landlords )

In Tamil Aalam Kulam (Banyan Tree) Eecham Kulam (Palymra Tree) Dhandu Kulam (Army) Dyarangam Kulam (Tent) Karumbu Kulam (Sugar cane) Komali Kulam (Clown) Manjal Kulam (Turmeric) Nallam Kulam (Good) Poosam Kulam (Flower) Raja Kulam (Prince) Raasi Kulam (Luck) Semavar Kulam (Ants) Theku Kulam (Teak Tree) Vembu Kulam (Neem Tree) Uppu Kulam (salt)

## 5) CONCLUSION

Vadderas are one of India's most downtrodden social castes. Rather than intelligence, they rely heavily on hard physical labour. A large portion of the population relies on physical labour to make ends meet. They have a stronger attachment to stone and earth, which is why they are divided into sub-castes. Kallu Waddars, Mannu Waddars, Uppu Waddars, Bandi Waddars, Girni Waddars, Raja Waddars, Aragu Waddars, Tudugu Waddars, and Oru Waddars are the nine sub-castes that remain. Every one of these sub-castes claims to be superior to the others.

During historical times and now, a large number of vadderas have worked or are working as construction labourers on significant construction projects. They tend to build temporary dwellings with thatched roofs at the places where they labour, then move away after the responsibility is over, and repeat the process when they relocate to the next location. One of the primary reasons their children do not get an education is because they migrate from place to place in quest of job. This might also be a reason why they are unable to reap the benefits of progress.

Vadderas claim to be descended from kings in the past, which is why their names include the word "Raju" (king). There is no clear explanation of why they have been reduced to low-wage workers.

Any caste's history should be maintained, however owing to illiterate vadderas and servile behaviour in society, the Vaddera culture and heritage, as well as caste groupings, have been lost to history. There is a void in the preservation of vadders' history. Much research should be done on the Vaddera caste and its subgroups so that the government can easily frame policies for different subgroups and recognise that they have lost their education and democratic skills, based on a systematic review of papers, despite the fact that there are few papers on the subject. Through current studies on Vaddera caste via several sub-types, data gathering methods such as case studies, ethnography, and oral history, the researcher is attempting to resurrect the history, origin, and accumulation of Vaddera caste in the past. The researcher is an ICSSR fellow investigating Vaddera caste groups at Osmania University.

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## A REVIEW OF POVERTY AND EDUCATION OF ADOLESCENCE IN THE URBAN AREA OF COLOMBO, SRI LANKA

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### ABSTRACT

*The main intention of this article is to analyze the Poverty and Education of Adolescence in the Urban Area of Sri Lanka. This study has used literature review method and relevant literature have been analyzed based on descriptive analysis according to the purposes of the study. The purposive sampling method was used to select relevant literature. This study has been analyzed under some major parts namely Poverty and Education in Sri Lanka. This study shows the complete structure of the Poverty in Sri Lanka and its behavior.*

**KEY WORDS:** Education, Poverty, Adolescence, Urban, Area.

### I. INTRODUCTION

Education fosters personal development and self-fulfillment. It encourages the individual to develop his mental, physical, emotional and spiritual talents to the full. Understandably, the word Education derives from the Latin word e-ducere, which means to lead out. In advanced industrial societies education is provided by the state as a matter of right for all its citizens. Formal institutions, schools, colleges and universities are organized for this purpose. (M. Haralambos with R. M. Heald, 2011, P.172). The technical understanding in other words is to transmit the stored knowledge, values and skill from one generation to another. The Global publication of human rights and the act of child rights state that the education is a universal human need. This is also a very powerful human right including freedom and democracy. They are staffed by fulltime professional practitioners, teachers and lecturers. Attendance at schools is compulsory; it is upheld by legal sanctions. Education is provided free of charge, though ultimately it is paid for by the taxpayer. Although free compulsory state education is largely taken for granted today and regarded as a perfectly normal and natural state of affairs, it is important to remember that it is a very recent development in the history of man. In Britain it began in 1870 with the foster Education and in 1880 school attendance up to the age of ten was made compulsory. Not until 1918 was secondary education clearly defined as the state's responsibility. The Fisher Education Act of 1918 made school attendance compulsory up to the age of fourteen. In 1947, the minimum school leaving age was raised to fifteen, and today it stands at sixteen (Ibid). Sustainable human development is a must which can do major changes in the society. Therefore, every country and the international community get together in order to provide their younger generation for a qualitative and quantitative education.

These developments were accompanied by a steady expansion of higher education. Education is one of the major growth industries of the last hundred years. In small scale, non-literate societies, such as hunting and gathering bands, formal education, as outlined above, was unknown. Young people learned their lessons for life largely by joining in the daily round of the social group. Knowledge and skills were usually learned informally by imitating examples provided by adults. Though adults some time instructed the young, they did so as part of their everyday routines. Thus, boys accompanied their fathers on hunting trips, girls assisted their mothers to cook and sew. In more complex pre-industrial societies such as those of medieval Europe, specialized educational institutions slowly developed, along with the specialized role of teacher. However, they provided formal education only for small minority of the population such as future members of the clergy and the sons of the wealthy. Formal education for the masses was only provided after industrialization was well underway (Ibid).

The word education has a complex meaning in a broader sense. Further, Education is always on the development process with new adoptions in any country. (Reddy, 1979). Education for human beings and animals has a different meaning. That means, the human beings could be educated always while animals are being trained. French sociologist Emile Durkheim saw the major function of Education as the transmission of society's norms and values. He maintained that "Society can survive only if there exists among its members a sufficient degree of homogeneity; education perpetuates and reinforces this homogeneity by fixing in the child from the beginning the essential similarities which collective life demands". Durkheim argues that in complex industrial societies, the school serves a function which cannot be provided either by the family or peer groups. Further he says that Education teaches the individual



specific skills necessary for his future occupation. (M. Haralambos with R. M. Heald, 2011, P.175).

According to the “sustainable development” introduced in Brunt Land Report -1972 of United Nations and Millennium development goals suggested to start in 2000 up to the end of 2015 and its annexure, the younger generation should be provided with a meritocratic education because many issues faced by the present society can be solved through it. Researches done by many of the recognized international organizations including UNESCO, state that most of the children who are in the schooling age, have not received their primary education. Education is the basic foundation of a person’s life. Therefore, not providing proper education causes to bring bad results to children as well as to the whole society where they live. American sociologist Talcott Parsons argues that after primary socialization within the family, the school takes over as the focal socialization agency. School acts as a bridge between the family and society as a whole, preparing the child for his adult role. Parsons sees the educational system as an important mechanism for the selection of individuals for their future role in society. Thus schools, by testing and evaluating students, match their talents, skills and capacities to the jobs for which they are best suited. The school is therefore, seen as the major mechanism for role allocation (Ibid, P.176). Among them, the families in the third world countries who get low income are clearly visible. The children of families who live under the line of poverty such as the families who receive low income and live in urban areas are countered. According to the UNESCO report in 2016, 52% of the world population is urban population (8 billion). One billion of the world population belongs to the urban community who receive low income according to the same report and they live in slums. This slum population has a very low economy and their poverty has become their culture. Therefore, this community is the source of many social issues that are directly affected to the co-existence and the development of the human society. Socialists state that many deviant and delinquent behaviors such as prostitution, suicides, drug addiction, begging as a profession, under world criminality, family problems, child abuse etc. have been created by its community.

Use of Alcohol and other drugs among school children is a current global problem giving rise to many health hazards, psychosocial problems and reduced school performances, both in academic work and in sports. These problems are also seen in Sri Lanka and very few studies have been done to estimate their prevalence. Furthermore, no noteworthy actions have been taken to improve this situation. (National Dangerous drugs control Board, RESEARCH MONOGRAPH, 2006, P.146)

Therefore, the importance of the condition of urbanized slum communities has become a disturbance for the future development of a country’s society. This urbanized slum community who receives low income must be provided with permanent houses and fixed ways of finding income. But, most of those infrastructure facilities are short term projects. Hence, according to the researches the sustainable development of their

living conditions should be done by providing with their proper education.

At this stage, need to realize that various development steps have been taken towards sustainable education. In the first place, need to discuss the vast amount of resources provided on education. The highlighted fact is that in Sri Lanka, it is free education and not only that even government provides free provision of textbooks, uniforms and mid-day meals. It records that the literacy rate of Sri Lanka stands as 92% for adults and 97% for youths (Perera, 2012). This is a major drawback in schools located specially in the urban areas of Colombo. Thus, the literal meaning of school dropouts can be noted as **“A student who leaves the school before completing the education for any reason other than death or without transferring to another school”** (Perera, 2012).

## II. OBJECTIVES

The main objective of this study is to discover socio-economic factors that cause Adolescent belonging to low-income families to drop out of school in the urban areas of Sri Lanka and possible strategies towards Continuous Education.

This research work has three other particular specific objectives which directly involve in identifying the relevance of the main objective of this research work. The objective can be further classified into specific objectives. First to **identify the factors and the agencies that creates the reasons for school dropouts in the Urban area of Colombo**. This objective would lead the researcher to widen his thinking little more to observe whether any agencies such as personals and institutions have given wrong directions to children to terminate their schooling. **Second to explore the impact of the school dropouts to their families and to the society**. This objective would express the impacts and the weight of these children on the family and nation. These children may certainly not be exemplary to the family and to the nation. Their expected family life and service to the nation may not be satisfactory. **Third to identify the attitudes about the Continuous Education**. This objective would explain the different opinions about Education. The attitude about Education could vary from Parents, children and Teachers. The school dropouts would certainly talk positives and negatives of their school education.

## III. METHODOLOGY

This study is based on data from secondary sources; the data were collected using the qualitative research method. The qualitative research method was used to gain a better understanding of and provide reliable and descriptive analysis related to the research objectives. The literature review method was used for collecting data from relevant journal articles, research reports, textbooks and other academic works. The data that were collected represent valid details from valid documents. The data were critically analyzed according to the selected main themes in the study.



#### IV. POVERTY AND EDUCATION OF ADOLESCENCE

##### 4.1 Poverty conditions in Sri Lanka.

Understandably, the status of the poverty in any country do determine by comparing the monthly per capita expenditure of the official poverty line of that particular country. If the monthly real expenditure which means the per capita is less than the value of official poverty line, then any individual of that country could be considered as he or she is in poverty. As per

the records headcount of the poverty index for 2016 stood as 4.1 and it has decreased from 6.7 in 2012/13. Thus, overall long-term poverty index from 2002 to 2016 has shown a downward trend. Therefore, it records that in the population in 2016; approximately 843,913 individuals were in poverty. The survey done in 2012/13, records that it was 1.3 million were in poverty. This highlights 0.5 million declines compared to the year 2012/13 to 2016. In the year 2016 the total poor households were 3.1 percent and that was approximately 169,392 from the total households.

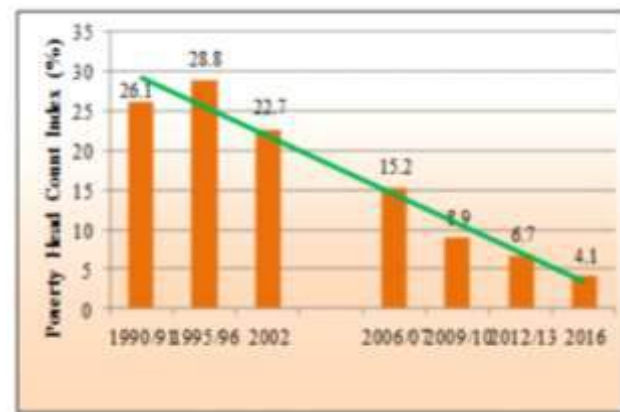
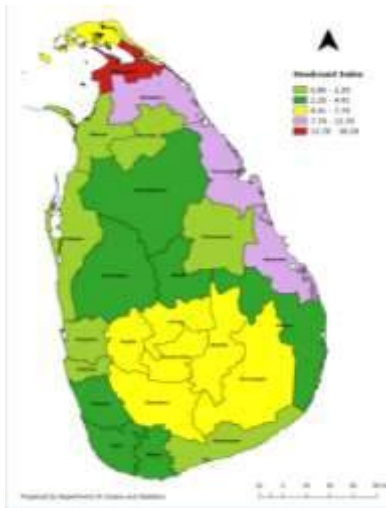


Figure 01: Distribution of Poverty Headcount index.

Figure 02: Poverty headcount index by survey period.

##### 4.2 Poverty Disparities.

Table 11: Poverty head count index 2016

Sector/ Province/ District	Poverty head count index	Number of poor population	Contribution to total poverty
Urban	1.9	67,649	8
Rural	4.3	693,956	82.2
Estate	8.8	82,308	9.8
Western	1.7	101,342	12
Central	5.4	142,044	16.8
Southern	3	74,769	8.9
Northern	7.7	83,834	9.9
Eastern	7.3	118,061	14
North Western	2.7	64,638	7.7
North Central	3.3	42,191	5
Uva	6.5	83,885	9.9
Sabaragamuwa	6.7	133,149	15.8
Colombo	0.9	19,796	2.3
Gampaha	2	45,827	5.4
Kalutara	2.9	35,719	4.2

Source: Poverty Gap Index (PGI), Monthly Shortfall and Contribution to total shortfall and Square Poverty Gap Index (SPGI) by sector, Province and District, 2016



The poverty disparities still exist in provinces and districts even though poverty has declined to a certain limit in the last few decades. The table 11 would prove these details. Thus, it shows that poverty in the estate sector is generally higher than those of urban and rural sectors. The highest percentage of 7.7 which represents 83,834 poor people in Northern Province and at provincial level the lowest poverty headcount percentage stands as 1.7 which represents 101,342 poor people in the Western province. When it comes to district level, the lowest poverty headcount is reported in Colombo while the highest reported from Kilinochchi district.

The highest number of indices according to the report, considering the geographical areas do not show large number of poor people. The table 01 shows for an example, Gampaha HCI as 2.0 and Kandy HCI as 5.5 and they indicate low poverty rate but number of poor people are high in these areas. Mullaitive shows high poverty rate (12.7%) and only 1.4% as nationwide due to their small population.

#### 4.3 Poverty Shortfall in Sri Lanka

Understandably, the common tool used to measure poverty is the headcount index. Yet, the real depth and the severity of poverty among the poor is not taken into consideration. It is an important fact to think about the depth and inequality among the poor for better reducing of the poverty. Keeping more weight to the poorer needy that comes below the poverty line the Squared Poverty Gap Index (SPGI) is used to measure poverty considering the degree of inequality among the poor people. Thus, a greater weight to the poorest individuals will be given since their poverty gap is larger than others and this is done when calculating SPGI by squaring the poverty Gap. It is a fact that in any country the percentage of the poor should be uplifted and thus, poverty shortfall is the amount of expenditure required for those are poor. Their expenditure should be upgraded to the value of poverty line to overcome this state. This criterion explains the depth of poverty and its core elements. Therefore, it is an important fact to reduce the existing poverty percentage. According to this survey, the average shortfall stands as Rs. 620 per month for a poor person and by and large Rs. 523.3 million per month is required 843,913 poor people to bring them out of poverty. The central province highlights the highest contribution to the total shortfall and Kandy is the highest among the districts while Manner District records lowest contribution to total shortfall.

#### 4.4 Simulation of Poverty in Sri Lanka

The consumption growth of individuals according to the **Figure 6** explains that it facilitates to cross the poverty line from 2016, 2012/13 and moreover 2009.110 explain by moving the distribution toward to the right by reducing the height of the peak of the graph. It also records that the survey data of 2016, the poor population in Sri Lanka was 843,913 (4.1%) as estimated. The **Figure 6** further explains that there is a high concentration of non-poor population beyond the poverty lines

and this particular group stays in a highly vulnerable situation. Even though if there is a small negative impact on their consumption, this can affect many of them to fall back in poverty and this may increase the poverty incidence. As an example, the poverty headcount index increases up to 6.1% if the value of poverty line is increased by 10% (from Rs. 4,166 to Rs. 4,582.6). This means understandably, number of people who are in poverty increases from 843,913 to 1,255,702. Supposedly, the poverty headcount index will be increased up to 4.5% (933,087 individuals) if real per capita monthly expenditure is decreased by Rs. 100.

#### 4.5 Impact of Social Protection Programs on Poverty.

In the year 2016, Household and Expenditure Survey done, explains that under the social assistance and social insurance, 13 social protection programmes were launched by the government. This explains the areas of social protection covered by Household Income and Expenditure Survey done in 2016. It shows that the simulation points of the poverty if social protection transfers were eliminated. This fact further indicates the total social protection transfer (sum of total social insurance and social assistance transfers) and this would reduce the poverty from 6.7% to 4.1%. It explains that 2.6% poor people above the poverty line according to the social protection transfer lifted. The pension scheme has been the most significant contributory factor for this change. When it comes to pension and its absence, poverty gap index would be increased to 1.6% and poverty headcount index would increase to 5.7%. Similarly, Poverty Severity index might be increased to 1.0. This result clearly manifest that the social protection programmes in Sri Lanka are progressing and this would be rigorously focused to reduce poverty in the country.

#### 4.6 Urban Poverty

This section of the study would present an overview of urban poverty in Sri Lanka with special reference to Colombo city. This particular study will express the key features of the urban poverty, and discuss the forces that affect the poverty situation in Colombo. It further explains the institutional issues which affect the addressing of the problem. This brief would discover issues and problem of urban poverty from a national context. The total focus will be on Colombo because it is the area where urban poverty is most prevalent. Understandably, one of the important factors to keep in mind when studying about urban poverty is that it has not been studied since independence. The poverty of rural estate sector had been studied in many occasions but poverty in the urban sector has been relatively neglected. Supposedly, the existing knowledge and policy on poverty are biased very much towards the rural and estate sectors. It is much considerable that only over the last two decades that urban poverty was taken into focus.



#### 4. 7 The Urban Sector in Sri Lanka.

When compared to many developing countries specially in south Asia, Sri Lanka is graded as low rates of urbanization. The urban growth rate of major cities, including Colombo in the early 1980s, was below 1%. It is recorded that since the mid-1980s, Colombo has experienced a speedy growth of suburban areas with the Colombo district. It experiences population growth of 31% between 1981 and 2002 and urban population stands over 60%. This is higher than other districts which had a growth rate of below 15%.

##### 4. 7. 1 Poverty in the Urban Sector.

The urban poverty from a national point of view realizes that it provides a very pleasant picture. By conceding 7.9%, the urban sector has the lowest rates of poverty in Sri Lanka. The national rate stands as 7.9% which is significantly lower. The National definition of poverty that explains its measurement, expenditure on food and non-food items is considered as the critical variables. Understandably, the Department of Census and statistics calculate the per month expenditure on food for the nation which includes sector that rural, urban and estate. The existing data shows the average per month expenditure in the urban household stand as Rs. 22,196.5. This is recognized as equal to the second highest expenditure of the country. In all these circumstances it highlights that money is the primary variable in all aspects of livelihood. These details show that in developing countries households were considered as above the poverty line but live in very poor-quality housing, and in crowded, unsanitary and insecure conditions with a severe lack of infrastructure and access to basic services. Therefore, it is understandable that, the special feature of urban poverty is while low income is the core of the study, the households with significant incomes not have access even to basic services and to secure living conditions. These urban poor many a times live in slum and shanty settlements and they are explained Under Served Settlements (USS). Thus, there are approximately 1614 such settlements within the geographical area of Colombo Municipal Council (CMC) in which it is recorded about 50% households. The residential units built on state or private lands and they are not owned by residents and these areas are USS comprises areas within the city of Colombo. Most of the time these residential areas have the common features while having a very high population density and it stands as approximately 820 persons four times the average of the city of Colombo. This is a congested housing with each block averaging 1.5 perches.

##### 4. 7. 2 Dimensions and Dynamics of Urban Poverty.

The poverty at the community level and household level could be summarized as follows; in terms of livelihood patterns, foreign employment, self-employment and enterprise are dominant forms of livelihoods while labour is the most common form of livelihood among poor households.

The foreign employment could be considered as one of the dominant forms of income generation to uplift the economic condition of households. The stable low paying and less stable

but higher earning income forms, such as enterprise, is a strategy used by households which maintain higher income levels. At the same time lack of stable income will affect supply of semi-skilled labour and low level of health and substance constrain the poor from moving out of poverty.

A different feature of well-established households has the tendency for women to stay at home while women of poor households engage in more labour forms of livelihood such as domestic work and unskilled manual labour.

The settlement of poor is a key feature and they should be well placed to access a wide range of services facilities like medical, education and transport facilities. Moreover, they should be given the access to wage labour and other sources of employment facilities such as self-self-employment. In giving out houses to these people who are in the poverty line, the following have to be considered very much. The size of housing units, lack of public space and they are some of the outthought of USS. It is much visible that these people face enormous problems when it come to the community life due to lack of space they have been unable to do funerals and weddings. This has limited the privacy of these people.

The defining variable for USS is the weakness in the availability of services and infrastructure. Understandably, economic dimension forms the core of poverty but access to services and infrastructure does not correspond to income levels of the households. In providing specific services the available facilities have to be considered much. By and large, domestic water sources, drainage of waste and surface water, toilets, electricity and roads can be identified as important needs. Evidently, among poor settlements it visible that dependence on public services is often higher but bit problematic since they live in illegal constructions. Thus, this is very much seen in the constructions of private toilets.

By and large this creates many problems since it leads to Pip blockages and sewerage overflows. This can lead to health-related problems. The drainage problems can rise many a times since these cottages are placed on marginal lands like marshes and canal reservations that are prone to flooding. Not only the drainage system even the roads to leading to settlements are often in poor condition.

It is observed that poor health conditions within the settlements are attributed to the proximity to stagnant canals, breeding ground for mosquitoes which would certainly bring diseases. This congestion, high population density, and proximity of the housing structures observe that they will facilitate and accelerate the spread of the disease.

Anyhow, the easy access to good quality health facilities lead sound life style and this is enjoyed by all residents of USS. Uses of drugs, alcohol is noticed as factors that upset the conditions of the urban poor. At this stage it is necessary to realize that addiction is often studies as a main cause of low wellbeing for individuals and households.

Any researcher would understand that housing and land rights are important needs of urban poverty. The key milestones



in upbringing the wellbeing are improvement in housing conditions and an expansion of living space. The living conditions of these people have to be improved in order to increase the social status in terms of prestige and dignity. Evidently, it has increased the ability of residents to gather services, such as electrification and provide opportunities for income generation as usual by renting out rooms or for home-based activities.

## V. CONCLUSION

In this review of study, it focusses to analyze the Poverty and Education of Adolescence in the Urban Area of Colombo, Sri Lanka. I have given more emphacies to the following themes; Poverty conditions in Sri Lanka, Poverty Disparities, Poverty Shortfall in Sri Lanka, Simulation of Poverty in Sri Lanka, Impact of Social Protection Programs on Poverty, Urban Poverty, The Urban Sector in Sri Lanka, Poverty in the Urban Sector, Dimensions and Dynamics of Urban Poverty. The contribution of the Government towards Education is much highlighted but still the mechanism has to be upgraded. When it comes to the Education performances of Students, it provides many differences when it compares with regions. Literacy rate in Sri Lanka in a way satisfactory but still it can be evaluated in different strategies. Existing problems in Education has been a topic for many years in Sri Lanka. Dropout conditions varies place to place and this critical in the Urban areas of Sri Lanka. The history of the dropout problem has been studied in number of occasions but the pathetic side of this issue is that the findings are not applied in the way possible due to various reasons. The dropouts' trends in Sri Lanka have been a much-debated theme for many years. Reasons for dropouts are visible but the mechanism to reduce this trend is delayed time to time. Therefore, the impact of this problem is vast.

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# A REVIEW ON SOCIAL BELIEFS ON HERBALISM AND TRADITIONAL HEALTH CARE PRACTICES IN INDIA

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## ABSTRACT

*Traditional Healing is the oldest kind of organised medicine, that is, a style of medicine that has an underlying philosophy and set of rules by which it is performed, and it has been around for thousands of years. It is the medicine from which all subsequent kinds of medicine sprang, including Chinese medicine, Graeco-Arabic medicine, and, of course, contemporary Western medicine as we know it. Traditional Healing was once an intrinsic aspect of semi-nomadic and agricultural tribal civilizations, and while archaeological evidence suggests otherwise, healing is still practised today.*

*The systematic review was done on literature on how traditional practises are carried out all over India with reference to the different papers published in different journals in the year 2012. A few studies also examined the practise of traditions and how they are going to be extinct because the skill was not carried out by their children and grandchildren.*

*The primary difficulty in India for herbal practises, as I saw, is that children and grandchildren are not continuing the profession, and that the land, which is fertile for growing several medicinal plants, is being lost due to deforestation. As the population grows, so should the health system; any health should be monitored and run by councils, who should keep track of herbal practises and provide certificates to trusts if they are interested in taking a course.*

**KEYWORDS:** *Ayurveda, herbalism, traditional practices, rural areas.*

## 1. INTRODUCTION

Traditional Healing is the oldest kind of organised medicine, that is, a style of medicine that has an underlying philosophy and set of rules by which it is performed, and it has been around for thousands of years. It is the medicine from which all subsequent kinds of medicine sprang, including Chinese medicine, Graeco-Arabic medicine, and, of course, contemporary Western medicine as we know it. Traditional Healing was once an intrinsic aspect of semi-nomadic and agricultural tribal civilizations, and while archaeological evidence suggests otherwise, healing is still practised today.

Although the first evidence of its existence goes back only to roughly 6000 B.C., its beginnings are most likely far older than that. The end of the latest Ice Age has been reached. However, there were still significant regional variations in the ideals and philosophy of the movement. Even if there are several essential parallels that result from the vast understanding of traditional healing, there are also many differences.

Natural laws and the concept of how these impact living things are shared by all traditional Healers, as is the understanding of how these influence living things. The traditional medical practitioner or traditional healer might be characterised as "someone who is regarded by the community as having expertise in traditional medicine or traditional healing."

He considers the community in which he lives to be capable of providing health care via the use of plant, animal, and mineral substances, as well as some additional approaches depending on the social, cultural, and religious backgrounds of the participants, as well as the dominant culture knowledge,

attitudes, and beliefs about physical, mental, and social well-being, as well as the causes of sickness and the prevention of disease Inclusion of people with disabilities into their communities". Traditional healers employed a variety of therapeutic formulae made from a variety of natural ingredients.

There are three types of animals: domestic, mineral, and vegetable. They have a great understanding of the medicinal and culinary uses of plants and herbs. For the purpose of nourishment, there are different types of healers who practise the traditional along with herbal healing practices. They still exist in India in every rural area, and although everybody uses the plants and animal extracts, they specialise in different areas of healing.

They are;

Herbalists.  
Prophets/faith healers  
Diviners.  
Traditional birth attendants  
Veterinary.  
bone setter.  
Acupuncturist.  
breathing treatment, etc. are practiced in different regions of India (Ramashankar; S. Deb and B.K. Sharma (2009).

## 2) OBJECTIVES

- To review the health care practices of the traditional healers and herbalist.
- To review about the literature on practice of traditional becoming extinct.



### 3) METHOD

A systematic search of the literature was conducted in PubMed, EBSCO (including Academic Search Complete, ERIC, Academic Source, and the Psychology and Behavioural Sciences Collection), Science Direct, Springer Link, Taylor & Francis, Wiley Online Library, Directory of Open Access Journals (DOAJ), google scholar, the search criterion was the descriptor "traditional health practices and herbalism in India."

### 4) FINDINGS

Recently, there has been a movement in the worldwide tendency away from synthetic medication and toward herbal therapy, which we are seeing in the United States. To put it another way, "Return to Nature. "Medicinal herbs have been used for thousands of years and are quite beneficial. It is regarded as a rich source of medicinal compounds for the prevention of many diseases around the globe. Maladies and afflictions Mother Nature has endowed our land with an immense bounty of resources. As a result, India is often referred to as "the Medicinal Garden of the World. "world. China, India, South America, Egypt, and other nations with ancient civilizations are among those to be mentioned here. We continue to use a variety of plant medicines to treat a variety of ailments. India has a distinct advantage in this aspect. A geographical location in the globe where a number of recognised indigenous systems of medicine, such as, for example, Ayurveda, Siddha, Unani, Homeopathy, Yoga, and Naturopathy are among the treatments that are being used. Health-care services for the general public. Herbal medications are unquestionably popular among both rural and urban people, and this is true in both countries. Community of India. One of the factors contributing to the popularity and acceptance of natural goods is the perception that all natural products are safe. The demand for plant-based pharmaceuticals, health goods, and cosmetics is increasing. Food supplements, cosmetics, and other related goods are growing increasingly popular in both developing and developed nations. For the reason that it is becoming more obvious that natural goods are non-toxic They are less likely to cause negative effects and are readily accessible at reasonable rates (Manish Gunjan et al.,2015)

Medical tourism became popular in the twenty-first century. a strategy for attracting people to herbal medicine and for educating them about it encourage international trade People have become more globalised as a result of globalisation. Look for improved therapy options. Several countries, including Japan, the United States, the United Kingdom, and European nations, have adopted the number of old persons is steadily increasing. at the same time Life expectancy has risen steadily throughout time, indicating that as a consequence, there is a higher demand for natural health care. strategies. India has the capability to carry out such plans. The number of medical tourists is projected to be at 1.27 million. From a variety of nations throughout the world, including the United Kingdom, the United States, and others India is visited by the United States, Canada, China, Bangladesh, and Sri Lanka. with the hopes of developing a better, safer herbal medicine treatment. Foreign currency profits are expected to reach roughly US\$1.8 billion, and the

market will react accordingly. Due to the visits of celebrities, the economy will expand to roughly US\$3.96 billion by 2015. There are 2.8 million medical tourists in the United States. This circumstance clearly demonstrates the value of Ayurveda and other Indian therapies, as well as their acceptance Around the globe, there are several medical systems. India's possibilities are recognised by such circumstances, which also suggest that there is a possibility of incorporating herbal medicinal the integration of systems/formulations into the current health-care system Medical tourism may also help to strengthen the economy. People will be encouraged by the country's economic situation. in the direction of India's ancient herbal medicine systems, there are 2,000 medications in India's Materia Medica. natural origins, as well as their medicinal properties are developed from traditional medical systems. Among There are 400 from mineral and animal sources, while the remainder are from other sources. Are derived from plants. The TKDL provides data on 500 Ayurveda, 500 Unani, and 200 Siddha treatments. 291 formulations are included, as well as information on each. Plants that are used in a variety of traditional dishes formulations. There are several prospects for growth (Saikat Sen Raja Chakraborty,2015)

### Challenges in Practicing the Traditional Practices and Herbalism

Herbal medications are released onto the market without any obligatory safety or toxicological testing to determine the drug's impact. In addition, many of these nations lack sufficient equipment to control herbal medicine production processes and quality standards. Regulatory status, evaluation of safety and effectiveness, quality control, safety monitoring, and limited or poor awareness regarding traditional, complementary, and alternative medicines are all challenges that many nations face. The Regulatory Status of Herbal Medicines presents a number of challenges. A dietary supplement, according to the definition, is an ingested product that includes a "dietary element" and is designed to complement the diet. Different vitamins, minerals, herbs, and other botanicals that the body needs may be included in the nutritional components of these products. Additional toxicity studies are typically not necessary under the DSHEA if the herb was on the market prior to 1994. The FDA has the burden of proof in this case, requiring the herbal medical product or "dietary component" to be hazardous or unsafe to use. In many countries, an additional key difficulty is that regulatory information on herbal medications is often not exchanged between regulatory bodies and safety monitoring or pharmacovigilance centres. Assessing Safety and Efficacy It faces a slew of obstacles. One cannot deny that the requirements for evaluating the safety and effectiveness of herbal medicines, as well as the research procedures, standards, and methodologies necessary, are much more difficult than those for conventional or orthodox pharmaceuticals. A single herbal medicine or medicinal plant might include hundreds of natural elements, and a combination herbal medical product can have many more. Single active ingredient analysis may be difficult in such a situation, particularly if the herbal product is a blend of two or more plants. Quality Control Issues with Herbal Medicines



The safety and effectiveness of herbal medicines are largely determined by the quality of the raw ingredients used in their manufacture. The quality of source or raw materials is determined by both intrinsic (genetic) and external elements such as environmental circumstances, excellent agriculture, and good medicinal plant gathering techniques, including plant selection and cultivation. The difficulty of conducting quality controls on herbal medicine raw materials is due to a mix of variables. Correct identification of medicinal plant species, specific storage, and unique cleaning processes for distinct materials are significant criteria for the quality control of beginning materials according to good manufacturing practise. The quality control of completed herbal therapeutic goods, particularly mixed herbal medicines, is a serious difficulty. As a result, typical quality control standards and methodologies for finished herbal medicines are much more difficult to implement than for conventional pharmaceuticals. The WHO continues to support the implementation of quality assurance and control methods such as National Quality Specification and Standards for Herbal Materials, GMP, labelling, and manufacturing licencing systems to assure the safety and effectiveness of herbal medicines. Concerns have been raised in recent years about the increased use of herbal or natural medications or products in developed countries. Furthermore, the reliance of many people in developing countries on plants as a major source of medicine, combined with lax regulation of herbal medicines in most countries and the occurrence of high-profile safety concerns, has raised awareness of the need to monitor safety and gain a better understanding of the potential harms as well as benefits associated with herbal medicine use. The use of the wrong species of plant, adulteration of herbal products, undeclared medicines, contamination, over dosage, misuse of herbal medicines by either healthcare providers or consumers, and the use of herbal medicines with other medicines are just a few of the factors that can cause adverse effects from herbal medicine consumption. Most makers of herbal medicines lack basic awareness of the significance of taxonomy, botany, and documentation, which creates unique obstacles during the identification and collecting of medicinal plants used in herbal treatments. It is vital to use the most commonly used binomial names for medicinal plants in order to avoid the confusion caused by common names. *Artemisia absinthium* L., for example, possesses an active narcotic component and has at least 11 common names. As a result, successful herbal medicine monitoring will need effective coordination among botanists, phytol chemists, pharmacologists, and other key stakeholders. Future Prospects Herbal medications and other herbal healthcare items are in high demand and have a fast-growing market in both emerging and established nations throughout the globe. In this context, worldwide acceptance and usage of herbal medicines and allied items is expected to continue to grow exponentially. Since the prior assumption that herbal medical products are "safe" because they are derived from "natural" sources, issues linked to adverse responses are becoming increasingly prominent, prevalent, and no longer arguable. As a result, worldwide regulatory rules on herbal medicines must be unified and tightened. Regulators now have to keep an eye on the flow of herbal

products and make sure they are safe and regulated. They also help herbal products get to clinical trial stages.

## 5. CONCLUSION

Traditional health care practises in India still exist, and many people prefer traditional medicine to allopathy. For example, when a person's bone breaks, a chiropractic or bone setter will massage the broken area and bandage the area for several weeks without using medicine, whereas if the person chooses allopathy, both medicine and bandage will be used.

However, my opinion is not to criticise allopathy medicine; both allopathy and Ayurveda and herbal medicine have their own identities; however, both fields should be mixed and treatment should be done; rigorous research should be done on both medicines to go forth in to the health system and cure permanently; data should be recorded and reactions of different plants should be researched; we simply switching to allopathy because it is fast cure but every disease requires research; however, we simply switching to allopathy because it is fast cure but every disease requires research;

The primary difficulty in India for herbal practises, as I saw, is that children and grandchildren are not continuing the profession, and that the land, which is fertile for growing several medicinal plants, is being lost due to deforestation. As the population grows, so should the health system; any health should be monitored and run by councils, who should keep track of herbal practises and provide certificates to trusts if they are interested in taking a course; however, India is currently developing Ayurveda, and the AYUSH has been established to monitor and control herbal practises; however, it should work at the ground level with many type of tradatonsal healers still exist.

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# CAUSES OF THE BEGGARY AND HOMELESSNESS, A STUDY BASED ON COMBINED HYDERABAD OF TELANGANA

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## ABSTRACT

*The beggars in Hyderabad are the subject of this research. Essentially, beggary denotes a situation in which one is unable to support oneself. Without a doubt, I can attest to the fact that Beggary was not a recent phenomenon; it was a prior culture founded on religion, culture, and history. Ethics. However, there was official begging that took place all over the world. When you, for example, I pay close attention to our society, particularly in India, where the poor are disproportionately represented. One of the castes was completely reliant on the caste culture. The culture's lone higher caste for the most part, they stayed on the outskirts of the hamlet. seven days of begging for money and rice particles. They still don't have access to nutritious meals. Beggary is consequently regarded as the most common form of poverty among beggars. A demeaning vocation in which beggars rely on charity from others Khan (2013) claims that the population of beggars is growing is the poorest of the poor who are still surviving because of one of the most fundamental needs, food. Among them are Children and beggars are the most food insecure and vulnerable to malnutrition. It's also argued that that beggars are the poorest of the poor They are emblems of inequity and a critical human rights concern that must be addressed urgently (Jain, 2017). The Indian Constitution has a number of laws and clauses designed to protect the rights of all Indian citizens. Despite the fact that India is a developing country, individuals still struggle to meet their basic needs for food, shelter, clothing, and other necessities.*

*The study took pace in the year 2021 at combined Hyderabad to know the status of the beggars and causes of beggars, the study falls under the quantitative method and descriptive type followed by the simple random sampling.*

*The conclusion showed that they are different causes of beggary the rigorous review of literature of secondary data I came to know that olden days they were only two reasons for beggary i.e. on the name god and other one caste wise begging. As the India is developing we see the different reasons of begging they are 1) poverty. 2) family disbranches 3) lost all family members and assets,4) diseases 5) lack of skills to work 6) globalization impact 7) Criminals who are not rehabilitated 8) Some choose for money 9) Child who lost both parents.10) cultural begging.*

**KEY WORDS:** *Begging, Beggars, poverty, causes of begging.*

**“Who knows whose stomach unless he enters the same situation”.**

## 1) INTRODUCTION

The beggars in Hyderabad are the subject of this research. Essentially, beggary denotes a situation in which one is unable to support oneself. Without a doubt, I can attest to the fact that Beggary was not a recent phenomenon; it was a prior culture founded on religion, culture, and history. Ethics. However, there was official begging that took place all over the world. When you, for example, I pay close attention to our society, particularly in India, where the poor are disproportionately represented. One of the castes was completely reliant on the caste culture. The culture's lone higher caste for the most part, they stayed on the outskirts of the hamlet. seven days of begging for money and rice particles The majority of folks offered rice. Particles instead of money, and Beggars were honored as well. People were also affected in the same way. The fact that it was the other way around was an honor.

In general, I believe religion played a part in promoting the movement. Beggars can be found all over India. People believed that if beggars were respected and honored, they would be respected and honored in return. In this way, the wellbeing of beggars is still supported indirectly today. In

India, beggars are revered. The existing belief has existed for a long time.

In a country like India, where the majority of the population is strongly divided into social and economic categories, the most deprived and disadvantaged sectors face different forms of subjection, including social, economic, and political subjugation. This constant exploitation and exclusion forced them into a position of greater vulnerability. They still don't have access to nutritious meals. Beggary is consequently regarded as the most common form of poverty among beggars. A demeaning vocation in which beggars rely on charity from others Khan (2013) claims that the population of beggars is growing.is the poorest of the poor who are still surviving because of one of the most fundamental needs, food. Among them are Children and beggars are the most food insecure and vulnerable to malnutrition. It's also argued that that beggars are the poorest of the poor They are emblems of inequity and a critical human rights concern that must be addressed urgently (Jain, 2017). The Indian Constitution has a number of laws and clauses designed to protect the rights of all Indian citizens. Despite the fact that India is a developing country, individuals still struggle to meet their basic needs for food, shelter, clothing, and other necessities.



## 2) OBJECTIVES

1. To investigate the socioeconomic factors that contribute to begging.
2. To determine the current cause of beggary,
3. To understand about the beggars' ideas for quitting this problem.

## 3) METHODOLOGY

The study was conducted by in year 2021, the Hyderabad city was selected to know the status of beggars and their problems day to day life, the total population of Hyderabad city consists of the 2500 beggars approx. the study falls under the quadrative method, the descriptive study

## 4) SAMPLING DESIGN

The accurate number is brought by the beggar eradication society Hyderabad. By the help government and non- government organizations I could fetch the data due to many beggars refused to reveal their identity. The study falls under quantitative methods. The simple random sampling was selected to collect accurate data from 2500 population the total sample size the total size is 299.

## 5) STATISTICAL DESIGN

The latest version of the SPSS used to draw the results a simple percentages drawn from the respective populations.

## 6) GEOGRAPHICAL LOCATION.

The investigator has chosen Hyderabad & Secunderabad. From these twin cities the surveyed areas are Abids, Addagutta, Afzalganj, Ananbhag, Balanagar, Boiguda, Charminar, Dhoolpet, Ecil, Hyderabad, Jammigadda, Kairthabad, Karmanghat, Kukatpally, Kushiaguda, Lakidikapool, Lalapet, LB nagar, Madina, Malkajgiri, Mehadipatnam, Musheerabad, Nagaram, Neredmet, Paradise, Punjagutta, Rampalli, Rasulpura.

## 7) RESULTS

**Socio Economic Status** The following **1.1 table** shows the distribution of beggars according to the areas at Hyderabad combined. The koti 0.7%, Abids had 1.7% Addagutta had 0.7%, The Afjalgunj percent 1.3%, Ananbhag 0.3%, Paradise area 0.3%, Balanagar area had 4.3%, Boiguda had 0.3%, Charminar had 3.3%, Dhoolpet had 0.3%, Ecil had 1.3%, Hyd 8.4% In. Nasan had 0.3%, Jammigadda had 0.3%, Kairthabad had 0.3%, Karmanghat 0.3%, Kukutpally had 13.4% Kushiaguda had 0.3%, Lakidikapool had 2.0%, Lalapet had 0.3, Lbnagar had 0.3%, Madina had 3.0%, Malkajgiri 0.3 Mehadipatnam had 10.0%, Musheerabad had 0.3%, Nagarm had 0.3% Neredmet had 0.7%, Panjagutta had 7.7%, Paradise had 8.7%, Punjagutta had 4.0%, Rampalli had 0.7%, Rasulpura had 0.7%, Sec-Bad had total of 19.1%. The following **table 1.2** shows how much a beggar can earn on daily, the one day income of beggars who said NO 98.0%, The daily who earn 200 are 0.3%, the daily who earn 250 are of 0.3%, the daily who earn 500 rupee are of 0.3%, the beggars who earn 1000 per day are 0.3%, The beggars who earn daily 1500 are 3.0%, The daily earning 3000 rupees showed 0.3%.

## Causes of Beggary

Due to physically challenged are Following table **1.3** the many categories of beggars that can be found in Hyderabad: The Able-Childs account for 3.0% percent, the Woman account for 17.1% percent, the men account for 29.8% percent, and the Unable-Handicapped-Physically or Mentally are responsible for 5.4 percent%. The elderly account for 43.5% percent of the population, men and the elderly account for 0.7% percent, and the physically or mentally disabled and the elderly account for 0.7% percent.

Due to the Drugs and alcohol, gamblers The following table showing the drugs and narcotics taken by beggars every day the respondents who are Smoking showed 2.3%. the respondents who are drinking showed 14.4% The respondents who are Gambling showed 3.3%, the respondents who showed Chewing showed 0.3%, The respondents who showed chewing Gutka are of 6.0% The respondents who take Pan-Masala daily showed 2.0% the respondents who showed chewing Tobacco showed 10.7% The respondents who take Narcotics daily showed 8.4% The respondents who said Nil are 2.3%, The respondents who said they take both 34.8% the respondents who take Any Three showed 11.4%, the respondents who take Any Four showed 4.0%.

Due to diseases the following table When asked if they suffer from any diseases, 91.6 percent of those who responded said they did not. The respondents who said they suffer from Tuberculosis were 0.3 percent, the respondents who said they suffer from Cancer were 6.0 percent, and the respondents who answered yes to other diseases of the questions were 2.0 percent.

Beggars ideas to quit their begging We live under constant threat of eviction are 83.3%, The 70 % beggars pointed out that No government schemes reaching them, The Beggars requested should be given opportunities to work who are neutral are 52.5%, the beggars who agreed to give the opportunities 43.5% and who strongly agreed are 3.3%, The local NGO are very helpful to us in fighting for our rights the beggars who were neutral constitutes of 83.6%, the beggars whoa agreed showed 11.0%.

## 8) SUGGESTIONS

There are several types of begging, as well as migration of begging and daily income, outside of Hyderabad, crowded places, sources of crowded places or programs, donor behavior, government assistance programs, and the assistance they receive when they are in a medical emergency, to name a few factors. All of these aspects were discussed in detail. Finally, when asked whether they wanted to return home, the vast majority of beggars said that they lacked basic comforts and that just 3 percent were eager to return home. When it comes to this sort of societal issue, the situation is a more concerning. The beggars responded by saying that they lack basic utilities, or that they are penniless, and that they do not even have a place to live. Some of them are fugitive beggars who are terrified to return to their homes. Rehabilitation and counselling should be implemented in conjunction with policymaking to put an end to this situation. This will not be eliminated in a single day; it may take years to do so.



## 9) CONCLUSION

### State wide Identification of beggars

The first step towards improving the situation of beggars is unquestionably the implementation of a comprehensive survey for the counting and enumeration of beggars across the nation. Despite the fact that a count of beggars is attempted to be established with the assistance of data, the information gathered during the Indian Census is insufficient and inadequate. There isn't a suitable in each nation, an estimate is produced of the number of beggars present. All we have are rudimentary tools. Estimates of the information relevant to beggars have been provided. There is a pressing need to undertake a comprehensive and complete study of all of the cities in the country. Nation in order to determine the proportion of the population comprised of beggars This survey will be helpful. First and foremost, we need to determine the magnitude of the crisis at hand. Once the percentage has been calculated, Once the number of beggars has been determined, the next step would be to identify the beggars. Identification of beggars would entail a breakdown of the begging population on the basis of race and ethnicity. On the basis of a variety of characteristics such as age, gender, disability, rural/urban location, full-time/part-time employment, and so on. This study would assist us in establishing which type of people constitutes the majority of the population. They account for the vast bulk of the begging population and are thus more susceptible. Additionally, categorization of The division of beggars into several groups reinforces the concept that a multi-pronged strategy is necessary. Necessary for resolving the problem as a result, not only are well done surveys required, but they must also be completed in a timely manner. Carried out on a regular basis Regular surveying will not only guarantee that the results are accurate, but it will also save time. However, no reliable information is available on the quantity of beggars or their operation. Moreover, that they are sufficiently covered by the beneficiary plans and programs designed just for them.

### Counselling if they are Consciousness

The response and emotions of the incumbents and participants in the programme have a significant impact on the success of any enterprise. For the sake of ensuring that the activities and initiatives undertaken to transform beggars into socially and professionally valuable members of society are successful, it is essential that the subjects, i.e. the beggars, carry out the tasks assigned to them by the community. A serious commitment to the activity both while it is taking place and after they have left the centers in order to do this, it is critical that convicts get appropriate psychological counselling. Done in order to stress upon them the relevance of a wage or self-employment-based existence Counselling may be combined with concepts from other disciplines to make it more successful. Mainstreaming and self-help are two important concepts. The term "mainstreaming" simply refers to the attempts to include everyone in the conversation. Beggars must be disengaged from the life of begging in order for them to appreciate the life of a worker Social inclusion is important. Initially, when beggars turn to alms for livelihood, they are referred to as "alms-seekers. "They must suffocate the

concepts of self-respect and self-worth in order to be effective. After Despite overcome this, they continue to labour in humiliating circumstances that are devoid of any benefits. Respect. This eventually leads to the development of certain inferiority complexes in them. as a result of this It is essential that beggars be given the chance to succeed in order to overcome their complexes. Provide certain rehabilitative services that should be provided in addition to mainstreaming services efforts. Efforts to mainstream can involve raising public awareness and securing financial resources. Fixed-rate incentives for a safe period of three to four years are available in the form of fixed deposits. Self-help This term refers to the creation of groups of beggars from inside the service centres or from the streets. Establishing and operating a business enterprise requires the formation and operation of commercial enterprises. As a result of this for this reason, the Service Centre or another party may give or arrange for initial financial funding. The actual correctional facility. This will guarantee that the actions done to remove beggars off the streets are successful. Some of the fruits of their plight do not go to waste.

### Designing Social Policy

Social policy has gotten more attention in recent decades is due to a change in the techniques used to provide welfare assistance. At the beginning of the nineteenth century, the bulk of the people was reliant on their families, the local community, and the government. Welfare organisations and charity are used to provide assistance to those in need. The Parish was in financial difficulty. Was charged with the obligation of providing an appropriate system of welfare assistance, and this was accomplished through Thea method of obtaining "Outdoor Relief" "Outdoor assistance" was a salary subsidy provided to employees in the outdoor industry.in order to assist people in surviving difficult times This is a charitable incentive provided by the parish for the impoverished. It was formerly thought to be a kind of deterrent for firms to hire people. It was thought to be true in the viewpoint of the employers, the Outdoor Relief programme served as a replacement for compensation. And forced them to pay lower salaries to its employees. It was also referred to as a moral quandary. People are discouraged from putting forth the effort and earning money. According to reports, outdoor respite was a thing. In addition, it is a contributing factor to population increase. All of these factors eventually resulted in even greater poor, according to sources, and have become something of a checklist that has to be followed. This issue must be addressed prior to establishing any kind of welfare dependence plan. Things, on the other hand, With the start of the Industrial Revolution, society experienced a significant transformation. The parishes' responsibilities for the poor, as defined under the Elizabethan Poor Law the Industrial Revolution had a significant impact on the rule of law. The State's Role in the Development of The need of promoting better social fairness has grown significantly throughout time. The degree to which Beginning in 1834, with the adoption of the Constitution, an increase in state responsibilities may be seen.



### Medical Support and Restoration

Beggars' emotional and physical well-being are often harmed as a result of living in destitution and poverty. Because they are impoverished, they are unable to pay for the medical check-ups and follow-ups that are expected of them. Given the significance of health vitality, it is important and critical to undertake ongoing, frequent, and effective health check-ups for people with diabetes. Those who are housed in Service/Correction facilities The medical aid provided should address both the physical and mental elements of the patient. Health. In addition to psychological and social rehabilitation procedures, although not exclusively so, it should contain Complete health examinations, instillation of life-saving skills, and instruction in comprehensive exercises Yoga, medications, and education of the mind and body are all beneficial for mental and physical well-being. First aid is administered in this situation.

### Bring Back Together

The prevention of negative impacts on the social, emotional, and psychological well-being of beggars is another

critical component of bringing about good change in the lives of beggars. In order to avoid a harmful influence on the environment, making a big impact on the lives of beggars is a very important step that may be made. An initiative to reconnect beggars with their families has been launched. At any case, whether the whole family is dwelling in the Service/Correction Centres or if they are residing elsewhere, this may be accomplished. Not dwelling in such a manner Alternatively, the whole family might be forced to live together in the same place. A Service/Correction Centre that would assure the provision of a friendly and welcoming environment. The beggars benefit from a welcoming atmosphere. In the second scenario, if the beggar's family is involved If a business is situated nearby, information may be communicated to the family so that they can make a payment. Visit the Centre on a daily basis and have a constant dialogue with the beggar as a result, it assures the both the existence of a stimulating atmosphere for the beggar and the persistence of the beggar's begging The bond between the family members that ensures the strengthening of family ties.

## 10) TABLES AND FIGURES

**Table 1.1**  
**Distribution according to the present areas in Hyderabad.**

	Present address	Frequency	Percent
1	Abids	5	1.7
2	Addagutta	2	.7
3	Afzalganj	4	1.3
4	Ananbhag	1	.3
5	Paradise	1	.3
6	Balanagar	13	4.3
7	Boiguda	1	.3
8	Charminar	10	3.3
9	Dhoolpet	1	.3
10	Ecil	4	1.3
11	Hyderabad	25	8.4
12	Jammigadda	1	.3
13	Kairthabad	1	.3
14	Karmanghat	1	.3
15	Kukatpally	40	13.4
16	Kushiaguda	1	.3
17	Lakidikapool	6	2.0
18	Lalapet	1	.3
19	Lbnagar	1	.3
20	Madina	9	3.0
21	Malkajgiri	6	2.0
22	Mehadipatnam	30	10.0
23	Musheerbad	1	.3
24	Nagarm	1	.3
25	Nerdmet	2	.7
26	Paradise	26	8.7
27	Punjagutta	12	4.0
28	Rampalli	2	.7
29	Rasulpura	2	.7
	Sec-Bad	57	19.1
	Total	299	100.0



**Table 1.2**  
**Distribution of population according to daily income**

Income	Frequency	Percent
0	293	98.0
200	1	.3
250	1	.3
500	1	.3
1000	1	.3
1500	1	.3
3000	1	.3
Total	299	100.0

**Table 1.3**  
**Distribution of Population According to Drugs, Smoking and Narcotics.**

	Bad habits	Frequency	Percent
1	Smoking	7	2.3
2	Drinking	43	14.4
3	Gambling	10	3.3
4	Chewing	1	.3
5	Gutka	18	6.0
6	Pan-Masala	6	2.0
7	Tobacco	32	10.7
8	Narcotics	25	8.4
9	Nil	7	2.3
10	Any Two	104	34.8
11	Any Three	34	11.4
12	Any Four	12	4.0
	Total	299	100.0

**Table 1.4**  
**Distribution of Population According to the Disease.**

SI	Disease	Frequency	Percent
1	No	274	91.6
2	Tuberculosis	1	.3
3	Cancer	18	6.0
4	Others	6	2.0
	Total	299	100.0

**Table 1.5**  
**Distribution of population according to of physically unable beggar.**

	Type of beggar	Frequency	Percent
1	Able-child	9	3.0
2	Woman	51	17.1
3	Man	89	29.8
4	Unable-Handicapped- Physically Or Mentally	16	5.4
5	Women plus old	130	43.5
6	Men plus Old	2	.7
7	Unable-Handicapped- Physically Or Mentally+Old	2	.7
	Total	299	100.0

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## CHIKUNGUNYA PRESENTING AS ACUTE ABDOMEN – A DIAGNOSTIC CONUNDRUM

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### ABSTRACT

Acute abdomen is one of the day-to-day occurrences in surgical casualty with cases ranging from mild acute pancreatitis to life-taking malefic perforation peritonitis. With impending progressive mortality associated with most of the cases, it demands urgent attention and apt management. The presentation may vary from a stable patient to a patient in hemodynamic instability requiring ICU and ventilator support. In addition to the usual causes of the acute abdomen which include trauma, inflammation, malignancy, and obstruction, medical illness also forms a significant bulk of cases presenting as masquerading acute abdomen. A true surgical abdomen usually warrants an exploratory laparotomy and thus clinicians have to perceive a high risk of suspicion to diagnose with a medical ailment as was our case.

**KEYWORDS:** - Acute abdomen, chikungunya, hepatosplenomegaly, Aedes aegypti

### INTRODUCTION

The acute abdomen is the most common entity that comes across a surgical casualty. It may be caused by inflammatory disorders, vascular occlusion, or obstruction. The causes diversify from perforated appendicitis, acute severe pancreatitis, ruptured sigmoid diverticulum, torsion testis, lacerated spleen, and many more [1]. Clinical presentation is usually multidimensional with signs of involvement in the form of guarding, rigidity, and a significant rebound. Medical causes for the same have been in the loop for a long time and usually are rare to present. Chikungunya is one of the mosquitoes borne viral disease that has been recognized globally as an emerging pathogen since Dec 2013. With an active outbreak in INDIA, a previously done study from all the affected populations didn't reveal even a single patient presenting with the acute abdomen [2]. Hereby we report the first casualty from INDIA with abdominal complaints as the primary ailment mimicking an acute abdomen and causing a surgical conundrum in terms of management.

### CASE PRESENTATION

A 25-year-old lady with no comorbidities presented as a case of the acute abdomen to our casualty with abdominal pain, vomiting, anorexia, and fever for 4 days. She had sudden onset of lower abdomen pain, pricking type, non-radiating,

non-migrating and not responding to analgesia. She had vomiting 4-5 episodes/day, within half an hour of consuming food, which was non-bilious, non-blood stained, and contained food particles. She also had an on-off high-grade fever, associated with chills-rigor and headache. She also had 2-3 episodes of loose stools with complete loss of appetite. Initially, she went to local GH where they suspected her of having acute appendicitis. On examination, she was febrile, lethargic, and dehydrated. She was pale and had tachycardia of 124 beats per minute with a borderline blood pressure of 100/60 mm of Hg. On per abdomen examination, there was severe tenderness in the right iliac fossa, with voluntary guarding, rigidity, and severe rebound. Other systemic examination was normal. Per rectal examination was unremarkable.

Patient had hemoglobin of 13.5 g/dl and leukocytosis of 19320 with no neutrophilic shift. Thrombocytopenia with a count of 94000 was present. The liver and renal function tests were abnormal. The bilirubin of the patient was increased at 3.5 and also had mild renal dysfunction with a creatinine of 1.4. Chest X-Ray was suggestive of mild bilateral costophrenic angle blunting with no other abnormalities. Usg-Abdomen was suggestive of mild fatty hepatomegaly with no IHBRD. There was evidence of cholelithiasis with no evidence of acute cholecystitis. In addition to that, there was focal probe tenderness with mild mesenteric inflammation and



an appendix of 8 mm caliber. There was no peri-appendiceal fluid or mass formation.

The patient initially was being managed as a case of acute abdomen with acute appendicitis as the foregoing diagnosis. The presence of typical lower abdominal pain with rebound and associated vomiting and anorexia matched up to the parameters on the Alvarado score which deemed the diagnosis probable. Initial USG had atypical findings in the form of hepatosplenomegaly but the malefic presentation swayed the diagnosis towards a surgical cause. The patient was started on IV antibiotics with ceftriaxone and metronidazole. Surgical management was planned and the patient was posted for open appendectomy. Due to the non-resolution of symptoms with analgesics and antibiotics, the patient's diagnosis was revisited and was investigated for other infective causes of the acute abdomen as ultrasound abdomen ruled most of the forms of surgical scenarios.

Sequential serial investigations showed an aggravated leukocytosis with an absence of neutrophilia. Serial blood cultures were negative. Peripheral smear was normal. Finally, on the febrile illness panel, the patient was found to be positive for chikungunya IGM ELISA which clinched the diagnosis. The patient was managed conservatively with pain killers and IV hydration. The patient symptomatically improved and was hence discharged from our side for further follow-up with the medical team.

## DISCUSSION

We report an atypical case of chikungunya presenting as acute abdomen to the surgical floor with a patient who was a locality of Pondicherry. Since the first description in medical literature in a patient of Tanzania in 1953, it was found to be autochthonous to West Africa. Nevertheless, by the advent of 2014, 88 countries reported cases of chikungunya which made it a pan-continental infection. The first reported case occurring in the temperate regions originated in Italy with the suspected index case incurring from India<sup>[3]</sup>. The *Aedes aegypti* has been recognized as the primary vector within the tropics and the temperate zones whereas the *Aedes albopictus* – a genetically mutated vector for transmission in the west<sup>[4]</sup>.

In the majority of the cases, a debilitating symmetrical polyarthralgia is the usual primary complaint associated with fever<sup>[5]</sup>. The usually affected joints would be the ankles, knee joints, metacarpophalangeal joints, metatarsal joints, shoulders, elbows, and wrist joints with nearly a third of these patients presenting with effusive arthritis<sup>[5]</sup>. Following a period of 1-3 days, there is a development of a diffuse maculopapular rash which usually spares the face. In eventuality, there can be multi-system involvement including neurological features (including encephalitis, seizures, and Guillain-Barre syndrome), cardiovascular features (including myocarditis, heart failure, and ischemic heart disease), renal features (including acute kidney injury), ocular features (including optic neuritis), as well as atypical skin eruptions, ulcerations, and bullae<sup>[6]</sup>.

In our case, the clinical course was stormy with a face value symptomatology of significant abdominal pain, anorexia, constipation, and thrombocytopenia which are atypical for chikungunya. In retrospect, there has not been a

single case reported in the Indian subcontinent with this eventuality of symptoms which makes it an extremely rare first reported case for this infection. The absence of the prima facie evidence of the infection in the form of rheumatic and dermatological involvement made the case a primary atypical case.

The differential of such a combination of symptoms mostly lies in the surgical domain in the form of acute appendicitis, mesenteric lymphadenitis, acute cholecystitis, acute pancreatitis, etc. which can all be excluded with an ultrasound abdomen. In the medical Eminem, the possible causes pan around multiple viruses including parvovirus B19, hepatitis B and C, rubella, dengue, and other alpha viruses, including Mayaro, O'nyong-nyong, Ross River, Barmah Forest, Sindbis, and Semliki Forest virus. In rare occurrences, non-infected seronegative arthropathies might cause a diagnostic conundrum but the presence of fever at the outset of this case ruled them out.

Clinical diagnosis is usually challenging in most cases as it mirrors a lot of other infective ailments. For the diagnosis of chikungunya, confirmation is required through detection of the IgM or IgG antibodies via ELISA. The IgM is usually detected in case of acute infection within a span of 2-6 days whereas the counterpart seropositivity with IgG can remain in the convalescent period and years' post-recovery<sup>[7]</sup>. An eventual gold standard investigation is RT-PCR which offers the highest sensitivity from serum, plasma, or cerebrospinal fluid- usually done in seronegative cases with high index suspicion<sup>[8]</sup>. In our case, the overall duration of symptomatology was well within a week which conferred a positive seropositive report with IgM ELISA for chikungunya and helped in the confirmation of this atypical acute abdomen case.

Most of the treatment is centered on symptomatic conservative management which includes intra venous fluid resuscitation, analgesics, antiemetic, and prophylactic antibiotics in the form of doxycycline for covering other suspected infective etiologies. The use of steroids has been advocated in cases of debilitating arthralgia although there are no proper guidelines established for it<sup>[4]</sup>. There have been studies linking the usage of chloroquine in mitigating the symptoms of the ailment as per in vitro studies but there is limited research on it<sup>[9]</sup>. In addition to this, various researches in the field of the use of viable monoclonal antibodies, antiviral therapies, and potential vaccinations are in progress<sup>[10]</sup>.

In our case, as the patient was initially treated in the lines of acute appendicitis, intravenous antibiotics were started and were posted for emergency laparotomy. As a part of symptomatic management, the patient received fluid resuscitation and pain management. Post the ultra-sonogram, the surgical plan was deferred and an acute febrile illness panel was sent which gave the seropositive report. Her acute kidney injury improved over time and she didn't go into any of the potential systemic complications. She symptomatically improved and was hence discharged with a medical follow-up.



## CONCLUSION

Acute abdomen is a mundane spectral case in a surgical casualty but it can be caused by rare etiologies such as medical infections. An immediate ultra-sonogram rules out the surgical causes which sways the diagnosis towards a medical causality. Although chikungunya has been an established ailment in the spectrum of tropical parasitology, its presentation in the form of an acute abdomen is extremely rare and has never been documented in the Indian subcontinent. Hereby clinicians need to keep a high risk of suspicion to diagnose such a medical conundrum and provide prompt treatment leading to alleviation of ominous fatality.

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# COVID19 AWARENESS AMONG THE RURAL MASS IN THE STATE OF TRIPURA, INDIA – AN EMPIRICAL ANALYSIS

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## ABSTRACT

The world has seen an unexpected and unforeseen health crisis, the deadliest of the century during the last year. Identified first in December 2019 in Wuhan of China, the deadly viral disease named Corona Virus Disease (COVID-19) has completely disrupted the normal life of the people of almost all the countries of the world. World Health Organization has no other alternative than declaring the corona virus outbreak as a public health emergency of international concern (PHEIC) on 30 January 2020 and later as a Pandemic on 11 March 2020. As there is no vaccine to protect against this COVID-19, adopting safety measures can only reduce the chances of getting infected. Awareness, precautions and testing are the only saviours. India with around 98.5 lakhs people already infected by this virus is second in the world with death toll reaching 1.42 lakhs. Tripura, the tiny north eastern state of India is also facing the shock. In this background, the present study aims at investigating the awareness level of the village people at Tripura and to assess the crisis and challenges they have confronted during the lockdown period.

**KEY WORDS:** COVID-19, pandemic, awareness, strategic-capacity

## I. INTRODUCTION

The world, during the last year, has seen an unexpected and unforeseen health crisis, the deadliest of the century. Priority of all the affected nations is to check the spread of the viral disease named Corona Virus Disease (COVID-19) putting all other regular concerns to a halt. The frontline warriors, scientists, researchers and many others across the globe are fighting to have a hold over this virus and to save the people by inventing suitable vaccine. It is rightly said that since World War II, the world has never seen such a global crisis affecting each and every human being, inflicting pain on the prince and pauper alike. 'This is not really comparable to World War II which also brought untold economic misery to the world. This is because the crisis which followed World War II was the destruction of production facilities all over Western Europe which required massive infusion of American aid in the form of Marshall Plan. In case of COVID-19, just like the Great Depression, all the production units have not suffered any damage but they are locked down. As a result jobs were lost and people have a sudden loss of their income, causing a major drop of demand' (Raychaudhuri, 2020).

Corona Virus Disease (COVID-19) that was first identified in December 2019 in Wuhan of China has spread rapidly all over the world in almost all countries. World Health Organization (WHO) has declared the corona virus

outbreak 2019-2020 as a public health emergency of international concern (PHEIC) on 30 January 2020 and later as a Pandemic on 11 March 2020. WHO has prepared guidelines to fight corona virus by introducing eight pillars of support: a) country level coordination, planning and monitoring, b) risk communication and community engagement, c) surveillance, rapid response teams and case investigations, d) points of entry, e) national laboratories, f) infection prevention and control, g) case management, h) operational support and logistics. (World Health Organisation, 2020)

In an effort to mitigate the outbreak of COVID-19, many countries have imposed drastic lockdown, movement control or 'shelter in place' orders on their residents. The effectiveness of these mitigation measures is highly dependent on cooperation and compliance of all members of society. 'The knowledge, attitudes and practices people hold toward the disease play an integral role in determining a society's readiness to accept behavioural change measures from health authorities' (Azlan A.A. *et al*, 2020). India is no exception. Nation-wide lockdown was declared from midnight of 25<sup>th</sup> March 2020, as a preventive measure against the spread of COVID-19 pandemic. Later depending on the intensity of crisis and demand of the situation, this lockdown is followed by phase-wise unlock measures.



India, the second most populated country of the world, already passed through unpleasant phase of COVID-19 and is in the second place in the world in terms of total affected. Though there was a slight decline during the later days, but during the post Durga Puja & Navaratri period the daily affected graph is showing upward trend.

Tripura, the small sylvian hilly state in the north-eastern wing of India, could manage to keep herself free from the grasp of COVID-19 quite successfully in the beginning of the pandemic by implementing necessary precautionary and preventive measures. But the scenario changed after the stranded people started to come back from other states and countries. In such a situation, at present the most essential and pertinent steps are to fight against the virus and to adopt the probable measures to stay away from the virus. In this background, the present study aims at investigating the awareness level of the rural people of Tripura and to assess the crisis and challenges they have confronted during the lockdown period.

## II. SIGNIFICANCE OF THE STUDY

The unprecedented outbreak of pandemic of COVID-19 has caused an international crisis at various levels ranging from human's psychology to economic scenario. The COVID-19 has affected 213 countries and territories and 2 international conveyances. Since proper preventive and curative measures in the form of a vaccine or medication are currently unavailable or are still under research in lab throughout the world, the remedies devised to stop the spread of this virus are self-isolating, preventing public gatherings, closing educational institutions, closing borders and even measures reaching to complete lockdown to prevent the possible transmission of the virus.

The most general symptoms of COVID-19 are fever, dry cough, breathlessness, tiredness along with aches & pains, nasal congestion, sore throat or even diarrhoea. However, people may also get affected with no signs of these symptoms. People all over the country are instructed to strictly adhere to precautionary measures against COVID-19 as per the recommendations of World Health Organisation, Government of India and the US Centres for Disease Control and Prevention. The measures include a) washing hands regularly with soap and water, or with handrub (sanitizer) with at least 60% alcohol, b) restrict touching of face, mouth, eyes & nose to prevent contamination, c) wearing of mask compulsorily, d) covering face with a bent elbow or tissue when one coughs or sneezes, e) practicing social distancing of at least 1 metre away from other people, f) avoiding handshakes and hugs while greeting people, g) avoiding non-essential travel, h) disinfecting surfaces and things that are frequently touched, i) taking special care for children below 10 years, senior citizens & people suffering from other illness, etc. People's awareness on these precautions undoubtedly will assist to speed up the process of 'flattening the curve' (Herfurth H., 2020).

Therefore, more emphasis on public awareness needs to be implemented in order to be ready to stand against the pandemic. In this present study, awareness, attitude and practice survey is undertaken among the villagers at Tripura and the level of awareness and the knowledge are assessed regarding the prevention of COVID-19. In spite of initial

stagnation in the number of COVID-19 positive cases in Tripura due to imposition of strict restrictions, it is quite alarming that the number of confirmed cases has gone up at a rapid rate. This is due to mass positive cases in few BSF camps and also returning back of the state residents from different parts of India and abroad. With regard to the number of confirmed positive cases in the state, the statistics shows that in Tripura there is an upward growth from 3 positive cases on 1<sup>st</sup> May 2020 to 423 on 1<sup>st</sup> June 2020 and further to 33,012 on 11<sup>th</sup> December 2020 (midnight) with 355 active cases. The figure has gone up to 46,096 on 23<sup>rd</sup> May 2021 with a death toll of 460 when the state is trying to resist the second wave of Covid-19 and at a later stage on 1<sup>st</sup> November 2021, the number of affected people rose to 84,468 with a death toll of 813 people

(source: <https://www.covid19india.org/>).

The significance of this study is that this research tried to assess the level of awareness and knowledge of the villagers at Tripura about COVID-19 outbreak and the methods that should be followed in order to counter this virus and to set up recommendations which could be beneficial for the people in particular and the state in general. In this regard, it is important to assess the knowledge, attitudes and behaviour of the public towards this prevalent infectious disease. Hence, such studies provide baseline data for the prevention and control of this type of pandemic through which estimation of the impact of previous preventive efforts were made by the government in this regard.

## III. OBJECTIVES OF THE STUDY

The objectives of this study are

1. To explore the awareness levels of people in the villages regarding COVID-19,
2. To investigate the ways taken up by the residents to withstand various challenges posed by COVID-19

## IV. REVIEW OF RELEVANT LITERATURE

India reported its first COVID-19 case on January 30, 2020 and numbers began to rise from late March 2020, however at a low rate, which may be attributed to several government policies including stopping all international flights and implementing a nation-wide lockdown at an early stage of the pandemic. By early April 2020, India started facing threat of a serious outbreak 'due to deep challenges in practicing social distancing and access to water and soap for handwashing, with densely populated urban areas and a highly mobile population in some states' (Acharya R. et al., 2020). The lockdown announced by the government and later allowing some relaxations triggered 'rapid migrations from the cities to rural areas in some parts of the country among rising fears of fast spread of infections. The extension of the initial lockdown period poses further challenges to the already distressed population and to ensuring strict compliance with social distancing guidelines' (Acharya R. et al., 2020).

The results of a survey study on COVID-19 awareness assessment amongst Indian population revealed that a considerable percentage of individuals learned about the pandemic through social media and news and were aware of the mode of spread of the virus and also steps to be taken to prevent it from spreading. But considerable percentage of



people was also not fully aware regarding the age groups this virus will be affecting (Pandey S. *et al.*, 2020).

In a study in Malayasia on awareness & knowledge on COVID-19, it is found that most participants knew that people who had contact with an infected person should be immediately isolated for a period of 14 days (99.1%). Even so, there was noticeable confusion among participants regarding transmission of the virus. Only 43.3% of participants answered correctly when asked if the virus was airborne and just 35.7% answered correctly when asked if eating and touching wild animals could result in infection. Knowledge scores were significantly different across genders, age groups, regions, occupation groups and income categories. The wearing of face masks was found to be significantly associated with gender, age group, region, occupation and income group. The findings suggest that Malaysians have an acceptable level of knowledge on COVID-19 and are generally positive in their outlook on overcoming the pandemic (Azlan A.A. *et al.*, 2020).

## V. DATA SOURCES & METHODOLOGY

The study is based on primary data. The universe of the study constitutes three Gram Panchayets (G.P.), *i.e.*,

Anandanagar G.P., Paschim Anandanagar G.P. and Maloynagar G.P., located at a radius of around ten kilometres with Agartala, the state capital at the centre. The study is based on the empirical survey of the respondents in these panchayets. The unit of study is the 400 adult individuals through the use of random sampling method. Respondents are interviewed through structured questionnaire. The primary data was analysed with the help of statistical tool SPSS 23.0. Simple percentage distribution and cross tabulation are used for analysing the data. Apart from the above techniques, two indices have been constructed namely, Awareness Index and Strategic Capacity Index.

**Awareness index:** To assess the awareness level of COVID 19 a composite index has been constructed on the basis of the domains namely possible ways of spreading COVID 19, clinical symptoms of COVID 19 and preventive ways of COVID 19. Apart from this, few questions asked were i) who are the more prone to corona virus, ii) do you think that a person without any symptom may also carry this virus, iii) do you think that COVID 19 is treatable iv) how many days of isolation are needed? The following weights has been given to different variables under different domains.

Ways of Spreading	Weight
Cough droplets	Yes=3, No=0
Through water	Yes=0, No=1
Through air	Yes=0, No=1
Quarantine areas	Yes=1, No=0
Handshaking	Yes=1, No=0
Public gathering	Yes=1, No=0
Hugging	Yes=1, No=0
Sharing food items	Yes=1, No=0
Sharing clothes	Yes=1, No=0
<b>Symptoms</b>	
Fever	Yes=1, No=0
Fatigue	Yes=1, No=0
Cough	Yes=1, No=0
Body ache	Yes=1, No=0
Breathlessness	Yes=1, No=0
<b>Preventive ways</b>	
No contact with the infected person	Yes=1, No=0
No contact with the person who has recent travel history	Yes=1, No=0
Wearing mask	Yes=3, No=0
Washing hands with soaps/handwash/hand sanitizer	Yes=3, No=0
Maintaining distance	Yes=1, No=0
Avoid crowding place	Yes=1, No=0
<b>Vulnerable group</b>	
Children	Yes=1, No=0
Older	Yes=1, No=0
People with chronic illness	Yes=1, No=0
<b>Covid 19 is treatable</b>	Yes=1, No=0
<b>Isolation Days</b>	14 days or more=1, less than 14=0



The weights are given arbitrarily keeping in mind the importance of the variables. The scores are then categorized into three categories low (less than 17), medium (17-22) and high (23 or more).

**Strategic Capacity Index:** To assess the strategic capacity a capacity index (weighted sum) has been constructed with the domain preventive ways of COVID 19. The weights are given arbitrarily keeping in mind the importance of the variables. The scores are then categorized into two categories low (less than 6) and high (6 or more).

Preventive ways	Weight
No contact with the infected person	Yes=1, No=0
No contact with the person who has recent travel history	Yes=1, No=0
Wearing Musk	Yes=3, No=0
Washing hands with soaps/handwash/hand sanitizer	Yes=3, No=0
Maintaining Distance	Yes=1, No=0
Avoid crowding Place	Yes=1, No=0

## VI. FINDINGS & DISCUSSION

### 1. Awareness levels of people in the villages

In order to attain the specific objectives of the study, considering the non-response rate as 10 percent, 450 villagers with 150 villagers from each village was targeted. Finally, 136 villagers from Anandanagar village, 144 villagers from Paschim Anandanagar village and 120 villagers from

Maloyanagar village have been interviewed. 400 villagers were interviewed through structured questionnaire from three gram panchayets.

In all the three gram panchayets, percentage of male respondents is higher compared to females (Table 1). The respondents are mostly above the age of 35 years.

**Table 1: Gender, Age & Caste classifications of respondents of three gram panchayets (in percentages)**

Background Characteristics	Anandanagar	Paschim Anandanagar	Maloyanagar
<i>Gender of the Respondent</i>			
Male	70.6	66.7	53.3
Female	29.4	33.3	46.7
<i>Age of the Respondent</i>			
35 or less	17.6	0.0	20.0
More than 35	82.4	100.0	80.0
<i>Caste of the Respondent</i>			
General	47.1	72.2	60.0
SC/ST	52.9	27.8	40.0

Source: Compiled by researchers from primary data

In Anandanagar panchayets, 52.9 percent of the respondents are from Scheduled Caste (SC) & Scheduled

Tribe (ST) caste. In the other two panchayets, respondents are mostly comprised of General category people.

**Table 2: Household size and Family type of the respondents (in percentages)**

Background Characteristics	Anandanagar	Paschim Anandanagar	Maloyanagar
<i>Household Size</i>			
5 or less	70.6	66.7	73.3
more than 5	29.4	33.3	26.7
<i>Family Type</i>			
Joint	35.3	38.9	46.7
Nuclear	64.7	61.1	53.3

Source: Compiled by researchers from primary data



The household size of more than 66 percent of the respondents (Table 2). The families are also mostly nuclear. in all the three villages is less than or equal to five members

**Table 3: Highest level of Education and Occupation of the respondents (in percentages)**

Background Characteristics	Anandanagar	Paschim Anandanagar	Malohnagar
<i>Household's highest level of Education</i>			
Illiterate	11.8	5.6	0.0
Primary	11.8	16.7	13.3
Up to Secondary	23.5	27.8	40.0
Above Secondary	53.9	50.0	46.7
<i>Occupation of the Respondent</i>			
Unemployed	23.5	22.2	40.0
Government Service	11.8	11.1	20.0
Business	22.1	25.6	12.2
Others	42.6	41.1	27.8

Source: Compiled by researchers from primary data

It was perceived that rather than educational qualification of the respondents, the highest point of education attained by any family member would be more effective in analysing the awareness level of the family members (Table 3). Around 50 percent of the respondent's family members are found to have completed their study more than Secondary level. It was also found that out of this, a significant number of them have acquired graduation and post-graduate degrees. But on the other hand, it was disheartening to found few of the families are illiterate in the study area.

With regard to the occupation of the respondents, it was found that majority of the respondents *i.e.* 40 percent of them were unemployment in Malohnagar, 23.5 percent in Anandanagar and another 22.2 percent in Paschim Anandanagar. This was followed by 20 percent of the

respondents who were into the government service at Malohnagar, 11.8 percent at Anandanagar and 11.1 at Paschim Anandanagar. Business as an occupation of the respondents constituted 12.2 percent of the respondents at Malohnagar, 22.1 percent at Anandanagar and 25.6 percent at Paschim Anandanagar. The remaining 27.8 percent of respondents' occupation at Malohnagar comes under any other occupation which includes farming, daily wage earner, petty traders, *etc.* to mention some. Percentage of respondents engaged in such activities is found to be 42.6 and 41.1 in Anandanagar and Paschim Anandanagar respectively.

As mentioned earlier, the respondents were interviewed on COVID-19 through structured questionnaire. 100 percent of the respondents answered in positive when asked whether they have heard about COVID-19.

**Table 4: Sources of hearing about COVID-19 (in percentages)**

Source	Anandanagar	Paschim Anandanagar	Malohnagar	Three panchayets
News Paper	41.2	38.9	40.0	40.0
TV	52.9	61.1	40.0	40.0
Family members, friends	17.6	5.6	20.0	14.0
Social Media	17.6	22.2	20.0	20.0
Govt. awareness Programme	Nil	Nil	13.3	4.0

Source: Compiled by researchers from primary data

Around forty percent of the respondents of all villages taken together revealed that they had learnt about the virus from newspapers and television channels. In each panchayet most people learnt about the virus from television channels. Interestingly, when at present people are too active in social media, yet only 17.6 percent, 22.2 percent and 20.0 percent of the respondents from Anandanagar, Paschim Anandanagar and Malohnagar respectively had learnt about

this virus from social media like WhatsApp, facebook, *etc.* No one in two panchayets expressed government awareness programmes as source of hearing about COVID-19 (Table 4).

Knowledge about sources of infection (Table 5) was considered important parameter to know about the awareness of the people to stay safe. It is found that people did not have the information on all the probable sources of infection.

**Table 5: Awareness about sources of infection (in percentages)**

Source	Anandanagar	Paschim Anandanagar	Malohnagar	All
Cough Droplets	76.5	88.9	53.3	74
Through Water	11.8	22.2	6.7	14
Through Air	Nil	Nil	6.7	2
Quarantine Areas	Nil	Nil	Nil	Nil
Handshaking	70.6	66.7	73.3	70
Public Gathering	64.7	55.6	46.7	56
Hugging	29.4	27.8	13.3	24
Sharing Food Items	5.9	27.8	6.7	14
Sharing Clothes	5.9	22.2	13.3	14
Others	5.9	Nil	Nil	2

Source: Compiled by researchers from primary data

All the respondents taken together, more than 70 percent knew that cough droplets and handshaking can spread the viral infection. 56 percent respondent had revealed that they knew about public gatherings is a source of infection. 76.5 percent of the respondents of Anandanagar G.P., 88.9 percent of the respondents of Paschim Anandanagar G.P. and only 53.3 percent of Malohnagar G.P. were found to have the knowledge that cough droplets can spread the infection. But it

is quite disappointing that the other crucial infection sources like hugging, free movement in quarantine areas, sharing food items, sharing clothes, etc. are not mentioned by the respondents to that extent.

Respondents were asked about the symptoms that could indicate a person to be COVID-19 infected. Table 6 shows the outcome.

**Table 6: Awareness about symptoms of infection (in percentages)**

	Anandanagar	Paschim Anandanagar	Malohnagar	All
Fever	88.2	88.9	80.0	86
Fatigue	23.5	38.9	13.3	26
Cough	76.5	94.4	60.0	78
Body Ache	5.9	44.4	13.3	22
Breathlessness	52.9	38.9	66.7	52

Source: Compiled by researchers from primary data

86 percent of total respondents expressed that fever is an important symptom, whereas 78 percent indicated cough as a symptom. 52 percent knew about symptom of breathlessness. Very few respondents had information that

fatigueness and body aches are also vital symptoms of infection. A significant portion of respondents pointed out that they are hearing these symptoms for the first time.

**Table 7: Awareness Index of COVID-19**

Awareness level			
Panchayet	Low	Medium	High
Anandanagar	41.2	41.2	17.6
Paschim Anandanagar	16.7	61.1	22.2
Malohnagar	33.3	60.0	6.7
All	30.0	54.0	16.0

Source: Compiled by researchers from primary data

To investigate the awareness level of COVID-19 among the respondents (Table 7) the *Awareness Index* was used. It was found that as much as 22.2 percent of the respondents from Paschim Anandanagar were very much aware about the pandemic of COVID-19. 17.6 percent of Anandanagar's respondents have quite a high knowledge of

the virus, whereas only 6.7 percent of the respondents at Malohnagar are found to be some extent aware of this deadly infectious virus.



**2. Ways adopted by the respondents to withstand various challenges posed by COVID-19**

The *second objective* was to investigate the ways taken up by the residents to withstand various challenges posed by COVID-19. Staying away from and fighting with COVID-19 is really a challenge. World Health Organization (WHO, 2020) issued some ‘Advice for public’ to protect oneself and others from the spread of Corona in line of which Ministry of Health & Family Affairs, Government of India also issued certain preventive measures (Ministry of Health & Family Welfare, 2020). In addition to that Government of

India introduced *Aarogya Setu* app, a tracking app to spread awareness of COVID-19 and to connect essential COVID-19 - related health services to the people of India. Now, the question is how far the people of study areas are practicing these instructions in order to withstand the challenges posed by COVID-19.

Though the incidence of COVID-19, at the time of the survey, was lower compared to other parts of the state of Tripura, yet respondents and their families are found to practice the instructions to a large extent as put forward by WHO and Government of India.

**Table 8: Strategies adopted to withstand challenges from COVID-19 (in percentages)**

Measures	Anandanagar	Paschim Anandanagar	Maloyanagar	All
No contact with the infected person	35.3	33.3	20.0	30.0
No contact with the person who has recent travel history	17.6	50.0	33.3	34.0
Wearing Mask	47.1	50.0	53.3	50.0
Washing hands/face with soaps/handwash/hand sanitizer	52.9	38.0	60.9	50.0
Maintaining Distance	47.1	55.6	53.3	52.0
Avoid crowding Place	23.5	33.3	26.7	28.0

Source: Compiled by researchers from primary data

The respondents were found to adopt the strategies as declared by the Ministry of Health (Table 8). Only about 50 percent of the respondents in all the panchayets taken together were wearing masks and washing hands/face regularly with soaps/handwash/hand sanitizer. This was quite contradictory to their awareness level as reported by them. Respondents were of the opinion that avoiding crowded places and maintaining social distance are essential, but sometimes they could not manage to abide by these instructions as they have to come out of their home for work or for purchasing goods from the market. They were not engaged in those types of work that they can perform staying at home. They had to take risk, but before entering home they wash their clothes with soap, take bath and keeps shoes/sandals outside. People did not get in contact with infected person or who has travel history as they are quarantined for fourteen days by the administration and health department.

However, it was found that people have misconception regarding asymptomatic infected person. They had no idea that such infected person can carry and spread corona virus. Only 29.4 percent respondents in Anandanagar, 27.8 percent in Paschim Anandanagar and 33.3 percent in Maloyanagar revealed that they know about such carrier.

A big challenge for all the parents is to keep their children and elderly members of their family in the confines of their homes, thereby ensuring that they do not infect themselves or others with the virus. There is clear instruction from the government and medical research bodies to keep the children below 10 years and aged people above 65-years strictly inside their home. In addition, those people who are already suffering from high blood pressure, diabetes or lung-related diseases are asked to keep themselves confined within their residence. In this context, an enquiry was made from the respondents that whether they are protecting their children, aged and ill people of their families.

**Table 9: Protecting vulnerable group members (in percentage)**

Vulnerable Groups	Anandanagar	Paschim Anandanagar	Maloyanagar	All panchayets
Children	76.5	77.8	73.3	76
Older	94.1	83.3	73.3	84
Person with Chronic illness	17.6	38.9	13.3	24

Source: Compiled by researchers from primary data

From table 9, it can be seen that 76 percent of the total respondents took certain steps to protect their children. With regard to the care of the older people, 84 percent of the respondents admitted that yes, they were very much aware of this. Another 24 percent of the respondents have reported that they were well versed with information with regard to taking

proper care and attention with full social support to the persons with chronic illness.

The next attempt was to know from the respondents the strategic capacity with regard to withstand the challenges of COVID-19. For this very purpose, a *Strategic Capacity*



Index was formulated and the details of the same have already been discussed in Methodology.

**Table 10: Proportion of High Strategic capacity with covid 19 (only two categories high and low)**

Village	Percentage
Anandanagar	29.4
Paschim Anandanagar	22.2
Malohnagar	20.0
All panchayets	24.0

Source: Compiled by researchers from primary data

Table 10 reveals the high strategic capacity to deal with COVID-19. Here for this it can be seen that Anandanagar Panchayet has the highest strategic capacity of 29.4 percent of the respondents. This was followed by Paschim Anandanagar Panchayet and Malohnagar Panchayet constituting 22.2 percent and 20.0 percent of the respondents respectively. And when it comes to all the three panchayets, the high strategic capacity recorded at 24.0 percent.

## VII. CONCLUDING REMARKS

On the basis of the empirical research undertaken out of 400 respondents in three village panchayets at Tripura, most of the respondents had a good knowledge with regard to COVID-19. It is the duty of all the villagers to stand together to fight against this deadly virus and to break the chain. It has, therefore, become necessary for every member of the society to be aware of the serious harm the virus is posing to mankind. It is evident from this investigation that the threat of this virus was well-known by the villagers, but unfortunately few of the respondents in spite of having the knowledge of this pandemic were still reluctant to follow the healthy habits like putting on the mask, hand hygiene, social distancing, etc. Hence, this is high time to wake up and take appropriate action. The step should envisage not only how to keep oneself safe but also to resist the spread of this virus. If appropriate steps are not taken in this regard or if it is delayed, then it will be too costly, challenging and late to save mankind. This micro-level empirical study could be set as an example in this direction which is the need of the hour.

**Limitation of the study:** As the study is undertaken during lockdown period strictly maintaining government regulations, all sections of people could not be reached. There is also a possibility of respondents expressing socially desirable responses, very much in the line as expected from them.

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## LIFESTYLE OF THE TRIBALS IN INDIA

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### ABSTRACT

*In India, tribal communities have been residing since the past and even in the present existence there are tribal groups throughout the country. Tribal groups are the people that are normally isolated and dwell in forests and hilly areas, the educational levels are low amongst them and they are engaged in various kinds of jobs such as selling products, some migrate to the other regions to work as agricultural laborers and so forth. This research paper focuses upon the lifestyle of the tribals, and the outside world, education of the tribal groups and nutrition programming for tribal children. These areas provide the information that how tribals lead their daily lives and how globalization, technological advancements, educational institutions and rules, policies and norms implemented by the government and other authorities have influenced the lives of the tribal people.*

**KEYWORDS:** *Tribal Groups, Globalization, Education, Nutrition, Lifestyle, Communities*

### INTRODUCTION

The Tribes in India were occupied by groups of nomadic people, who survived on the basis of hunting and the gathering of wild fruits, tubers, and edible roots. The objects such as bows and arrows, a dagger, an axe, a digging stick, some pots and baskets, and a few tattered rags constitute most the belongings of the tribal people. Their dwellings are normally made of a thatched hut in one of the minor arrangements where they reside during the monsoon rains and during the winter season. But during the summer seasons, tribal societies divide up and individual family groups set a camp in the open, under overhanging rocks or in temporary leaf-shelters.

Tribals are normally nuclear families, consisting of a man, his wife, and their unmarried children. For all practical purposes, husband and wife are associates with equal rights, they have the similar rights in making decisions, and this equality of status means that the family may live with either the husband's or the wife's tribal group. Each such group holds hereditary rights to acquisition of land, and within its boundaries its members are granted rights to hunt and collect edible roots and tubers. The tribal groups are characterized by a strong sense of independence and personal freedom. No tribal group, in any part of the country feels bound to any particular region, and they possess the ability to transfer from one group to another; the men and women are free to select their companions with whom they desire to be part of their day to day lives. Marriage rules are based on the exogamy of patrilineal clans; as long as they examine the rules of clan exogamy young people have the right to choose their own life partners. Spouses can disconnect from each other without any formal procedures, but the kidnap of a

woman who is still living with her husband is condemned of as morally wrong.

Tribal communities reside in different kinds of ecological and geo-climatic conditions ranging from plains and forests to hills and inaccessible areas; the social, economic and educational development states amongst the tribal groups vary in accordance with the areas, regions, their way of life and occupations that they carry out. While some tribal communities have implemented a normal way of life, they are very simple in their living and are even secluded from the other groups of people.

The tribal population of India constitutes around 8.6 percent of the total population of the country which is greater than any other country in the world. The total tribal population in India is 104,281,034; amongst this, the rural population is 93,819,162 while the urban population is 10,461,872. The tribal population is growing along with the Indian population but its rate is lower as compared to that of the total population. The total population of India from 1951 to 2011 has increased by 849.46 million; the tribal population from 1951 to 2011 has augmented by 85.1 million. The percentage of tribal population to total population has increased only 3.31 percent from 1951 to 2011. The forest area absorbs an important place in the existence of the tribal groups as well as the economy of the country. The tribal way of life is very much influenced by the forests areas right from their birth to death. It is ironic that the tribal groups of India, who are considered to be the poorest groups, are dwelling in the areas where the richest natural resources are found. Past history of the country illustrates that, tribal groups have been derived to the places due to the trade, industry and cost-effective concerns of different governing groups (B.Ezhilarasu, 2014).



## EFFECT OF GLOBALIZATION ON TRIBALS

The effect of globalization is the strongest on the tribal groups, the reason being they are very simple and have no voice: (B.Ezhilarasu, 2014).

1. Native population throughout the world live upon the impacts of the expansion of globalization; they dwell in the last perfect regions, where resources are still plentiful and rich, such as forests, minerals, water, and genetic diversity. All the resources are intensely sought by worldwide corporations; they are attempting to eliminate the long-established societies from their areas.
2. New progressions in technology, the reorientation toward export-led development, and the main areas of satisfying global financial markets are all driving forces in the extinction of countless number of native communities which are positioned in their path.
3. Traditional sovereignty over the hunting and gathering rights of the tribals has been a question of concern as there has been development of new global economic agreements.
4. Agreements regarding new trades, agreements, constructions and investments have permitted the extraction of natural resources, has forced the native dwellers to move out of their dwellings and areas. The construction of big dams, pipelines, mines, roads, energy developments, military invasions have resulted in extinction of the tribal communities.
5. Tribal groups largely depend upon the biological diversity, the knowledge and the information regarding their dependence and how to effectively make use of biodiversity in a commercial way has generated global rules on the patenting of generic resources.
6. The tribals are regarded as the most isolated and secluded groups of population; international trade, decisions made regarding the export development strategies and rules regarding investment are not discussed with them and the native communities. National governments make the decisions without consulting them.

## TRIBES AND THE OUTSIDE WORLD

Though Indian tribes have their own areas and spaces where the tribal communities reside, this prevents them from being secluded; they and their neighbouring communities are mutually dependent and have had long term communications for dealings, as a result of which their social and cultural aspects have often been a subject matter of exterior pressures. Even those communities that are now remote, for instance in the Andaman and Nicobar Islands, were not so in the past.

## EDUCATION OF THE TRIBAL GROUPS

As it has been understood regarding the tribal communities that they reside in secluded areas, in forests and hills; they are normally isolated and do not render any kind of participation in the outside world. They look out towards

conducting some business or work in order to earn money, they are normally engaged in minority jobs such as agricultural laborers or sell products such as ornaments, medicines or toys. The level of education amongst the tribals is low, they do not recognize the significance of education and even if their children attend schools, they normally drop out at an early stage before adequately honing their educational skills.

There are 573 tribal communities in India with diverse socio cultural lives that are at various stages and levels of socio-economic development. Most of the tribal areas lack the basic infrastructure such as roads, transport, communication facilities, electricity, medical facilities and so forth. The literacy skills amongst the tribals are low or absent, and a significant number of tribal children are outside the education system. There has to be formulation of norms, rules, procedures and policies regarding the system of education not only amongst the tribals but also amongst other groups of the population. The national and the provincial governments of India have distinguished the special features of the tribal groups and they have adopted the approaches and norms that are essential for the tribal groups. There has been establishment of community schools in accordance with the norms and policies. The village community has been granted the power and authority to recruit the teachers, formulate rules and regulations regarding the admission of students and pedagogical methods and teaching and instructional strategies have been adopted within the school systems (K.Sujatha, 2000). These schools have enabled the isolated tribal communities to recognize the significance of education and make them realize that education is extremely imperative for an individual to enable him to enhance his future life prospects.

## CONCLUSION

The tribal communities in India are stated to be very simple in their living; they lead an uncomplicated and a Straightforward life; they reside in forests and hilly areas, their dwellings are normally thatched huts and they are dependent upon the forests to look out for edible roots and fruits to meet their nutritional requirements. The men are normally hunters who hunt in order to meet their day to day food requirements. The educational and the literacy levels amongst the tribal groups are extremely low; they do not recognize the significance of education and do not believe in sending their children to schools. There has been spread of the significance of education amongst the tribals by establishing of community schools but when the tribal children attend school, they do not depict any kind of enthusiasm in acquiring the knowledge and the concepts; hence the consequence is early drop out.

The tribal people believe in making money to earn their living, they are transferable and migrate from one region to another in search for jobs or work; they work as agricultural labourers, sell products for other products such as food and in the present existence, they sell products for money. The tribal people possess efficient knowledge regarding the treatment of illnesses, supernatural powers or how natural products are utilized in cure and treatment of illnesses, disease, infections or any other problems. Tribal people are dwelling in remote areas though they are communicative in nature for the purpose of



earning a living; on the other hand, they are not able to raise their voice if they are being invaded by the external groups for the acquisition of resources.

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# INFLUENCE OF BIG-FIVE PERSONALITY TRAITS ON PERCEIVED ACADEMIC STRESS AND COPING STYLES AMONG EMERGING ADULTS

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## ABSTRACT

*Emerging adults may face a lot of stress while trying to maintain their academics in college. The methods they choose to cope with academic stress may vary and can depend upon their personality traits. Recent studies on personality, stress and coping were reviewed and further research on this topic was necessary. This study examined the relation between the big-five personality traits, perceived academic stress, and the coping mechanisms used by emerging adults. The data collected from 203 college students through snowball sampling technique was analyzed using a correlational research design. We found that the personality traits of emerging adults had a high influence on the perceived academic stress and the coping style they adopt to handle the stress. At last, suggestions based on the findings were discussed.*

**KEYWORDS:** Academic Workload, Coping, Big-five Personality Traits, Education

## INTRODUCTION

Emerging adulthood is a period of transition from adolescence to young adulthood, where students mature and start preparing for their careers. This is the time when students engage in understanding the realities of life in a better way rather than how they did it previously. Emerging adults studying in colleges may face a lot of stress while trying to maintain their academics. Academic workloads were found to be a significant predictor of stress appraisal (Mahtab & Javed, 2020) which was found to affect the emotional well-being of students (Clabaugh et al., 2021). When under stress, the students in the age group (18 to 25) may not be able to seek professional help due to lack of knowledge of the consequences that academic stress can bring about. As perceived stress influences the life satisfaction of the individuals (Lee et al., 2016), stress can sometimes become a grave reality that can even affect one's career life.

The academic stress experienced by each student and the way by which they respond to each stressor is influenced by the various personality traits they possess (Shokri et al., 2007). As a classroom consists of students with different personality traits, the coping techniques they tend to adopt with each stressor may also be different. Coping techniques refers to the behavioural and cognitive tactics used to deal with stressful situations, conditions, and demands. Early studies found out that personality traits have an influence not only on the academic stress experienced by students but also

on the style they choose to cope with the stress (de la Fuente et al., 2020; Shokri et al., 2007). Understanding the influence of personality on perceived academic stress and coping can help us to formulate intervention methods that can help students to deal with these academic stresses. This, in turn, may help students with different personality traits to reduce their stress levels. Thus the present study tries to find out the relationship between these variables.

## LITERATURE REVIEW

A study conducted by Nechita et al. (2015) on university students in Craiova to understand the association of personality with academic performance found that positive and negative correlation exists between factors of personality and academic performance of students. The study concluded that conscientiousness had a positive influence whereas extraversion had a negative influence on the academic achievement of students. Students who scored higher on the neuroticism scale were doing academically better than students who appeared to be less neurotic. No correlation was found between agreeableness and academic performance. Women were found to be more agreeable and emotionally unstable when compared to men. Stress had a positive correlation with neuroticism and openness to experience.

Sukumar & Kanagarathinam (2017) investigated the relationship between personality traits and academic stress and coping techniques adopted by adolescents and revealed that



personality factors had a significant relationship with academic stress. The enhancement of personality traits may help in increasing the capability to manage stress and may lead to better academic performance.

Sivailango et al. (2020) examined the relationship between personality, coping methods, and quality of life among South Indian undergraduate medical students. Males scored more on the extraversion scale and females on the neuroticism scale. Females adopted better coping strategies than males. Extraversion was directly correlated with problem-focused and emotion-focused engagement coping strategy whereas neuroticism had an inverse correlation with emotion-focused disengagement coping strategy.

Sahu & Jha (2020) investigated the relationship among academic stress, personality, locale and gender on tribal and non-tribal school students in Chhattisgarh. Although in non-tribal school students, a positive relation between neuroticism and academic stress was observed, a negative relation between extraversion and academic stress was observed. Academic stress was common among them and had a negative effect on their academic performance.

Aina & Wijayati (2019) studied graduate students from Malang State University to know the relation between academic stress and coping techniques. Student worries were one of the main causes of academic stress. Many concerns may arise if they were not handled correctly by the corresponding authorities. Sometimes academic stress can also make students perform better when compared to situations without stress. Yet the study implied that it was quite important to understand the academic stress of students and the methods they adopt to cope with stressors. Further research to understand the stressors of academic stress and the technique used by students to manage academic stress was suggested.

Chai & Low (2015) studied University students in Malaysia to find the relation among personality, coping mechanisms and psychological stress. The study revealed that the personality factors were associated with the coping strategies used by students and not with the psychological stress experienced by them. There was a significant correlation between psychological stress and coping mechanisms used by the students. Psychological stress levels were positively correlated with avoidant and socially supported coping techniques. The coping strategies used regularly by students are positive reinterpretation, growth, planning, and acceptance based on the coping inventory. Understanding the coping mechanisms used by the students can help in the prediction of the level of psychological stress faced by them. Further research on finding the relationship between personality and level of psychological stress and coping strategies was proposed.

## OBJECTIVES

1. To explore the relationship between personality traits and perceived academic stress among emerging adults
2. To find out the coping styles used by emerging adults in relation to their personality

## HYPOTHESES

1. There is a significant relation between personality traits with perceived academic stress
2. There is a significant relation between personality traits and coping styles

## METHODOLOGY

This study is intended to find the relation between personality, perceived academic stress and coping strategies. 203 college students including both males and females from different states (Karnataka, Delhi, Tamil Nadu, Telangana and Kerala) were asked to complete the questionnaire. The samples were collected using convenience sampling method. The data collection was administered using Google Forms. Pearson bivariate correlation was found using SPSS - 28.0.1.1(14).

The survey was conducted based on the consent taken from the participating students. The students were allowed to complete the survey based on their leisure time. Opportunity for asking any doubts during the survey was provided. The first sheet of the survey was intended to collect socio-demographic details like age and gender. The second, third, and fourth sheets of the survey consisted of questions about their personality, perceived academic stress and coping strategies questionnaires. They were given instructions on how to respond to each statement. The respondents were thanked for their participation after completing the survey. The collected data was analyzed for drawing conclusions based on the aim of the study.

Gosling et al. (2003) had developed a ten-item personality inventory (TIPI), a quick way to examine the big-five personality traits i.e., extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Each of the five personality traits had two elements on the TIPI. Two desirable descriptors were present in the positive statement, while two undesirable descriptors were present in the negative statement. The ten statements were scored based on a seven-point Likert scale. The TIPI exhibited test-retest reliability of 0.72 after six weeks.

The academic stress of college students was measured using the Perception Academic Stress scale (Bedewy & Gabriel, 2015). The questionnaire contained 28 items based on four factors which are pressure to perform, workload and examination perceptions, self-perceptions, and time constraints. A five-point Likert scale was employed to score the items. This scale has internal consistency reliability of 0.70.

Lin & Chen (2010) developed stress coping style inventory that was used to evaluate the coping strategies utilized by students while they were stressed. Four components that were included in this scale are active emotional coping, passive emotional coping, active problem coping, and passive problem coping style. It was scored using a five-point Likert scale. This tool had a Cronbach alpha of 0.83.

## RESULTS AND DISCUSSION

The collected data was analyzed based on the formulated objective and hypothesis. The scores of big-five



personality traits perceived academic stress, and coping styles were assessed using the Pearson bivariate correlation method. The findings have been presented in the respective tables.

The relationship between personality traits and factors of perceived academic stress is shown in Table 1. The extraversion personality factor was positively and significantly related to pressures to perform ( $r = .248^{**}$ ), workload perceptions ( $r = .153^*$ ), and academic self-perception factors ( $r = .200^{**}$ ). Openness to experience had a positive and significant relation with pressure to perform ( $r = .193^{**}$ ) and academic self-perception ( $r = .261^{**}$ ), whereas agreeableness had a positive and significant relationship with academic self-perception ( $r = .238^{**}$ ). Personality traits which include conscientiousness and emotional stability were found to be positively and significantly correlated with all four components of academic stress, viz. pressure to perform ( $r = .143^*$ ;  $r = .436^{**}$ ), perceptions of workload ( $r = .159^*$ ;  $r = .287^{**}$ ), academic self-perceptions ( $r = .303^{**}$ ;  $r = .499^{**}$ ) and time restraints ( $r = .140^*$ ;  $r = .297^{**}$ ). Thus, an alternative hypothesis that "There is a significant relation between personality traits and perceived academic stress", was accepted in terms of conscientiousness and emotional stability. Agreeableness had a positive but insignificant correlation with pressures to perform, perceptions of workload and time restraints factors of academic stress. Openness to experience traits of personality had a positive and insignificant correlation with two factors of academic stress, viz. perceptions of workload and time restraints.

We can see in Table 2 that extraversion, agreeableness, conscientiousness, emotional stability and openness to experience were negatively and significantly correlated with passive emotional coping strategy ( $r = -.200^{**}$ ;  $r = -.207^{**}$ ;  $r = -.360^{**}$ ;  $r = -.501^{**}$ ;  $r = -.344^{**}$ ) whereas there was a positive significant correlation with active emotional ( $r = .264^{**}$ ;  $r = .160^*$ ;  $r = .150^*$ ;  $r = .392^{**}$ ;  $r = .254^{**}$ ) and active problem coping styles ( $r = .167^*$ ;  $r = .153^*$ ;  $r = .235^{**}$ ;  $r = .316^{**}$ ;  $r = .240^{**}$ ). Agreeableness and conscientiousness was negatively and significantly correlated with passive problem coping style ( $r = -.184^{**}$ ;  $r = -.213^{**}$ ). Extraversion, emotional stability and openness to experience was negatively correlated to passive problem coping but the results were not significant. Thus, an alternative hypothesis that "There is a significant relation between personality traits and coping styles" was accepted in terms of active emotional, passive emotional and active problem coping styles.

As the relation between personality traits, perceived academic stress and coping styles were examined in this study, a positive and significant relationship was found between all personality traits with most factors of perceived academic stress. Extraversion and openness to experience had a significant positive correlation with certain factors of academic stress which was not consistent with the results in the study conducted by Ghoshal & Banerjee (2021), where they found no relationship between extraversion, openness and academic stress. Conscientiousness and emotional stability had a positive relationship with all factors of perceived academic stress which was supported by the research conducted by Meyer Stamp (2016). Openness to experience

seems to be a negative predictor of primary stress appraisal, but conscientiousness was found to be a positive predictor of secondary stress appraisal; extraversion was found to be a negative predictor (Pollak et al., 2020). Agreeableness had a significant correlation with a factor of perceived academic stress which is somewhat consistent with the results of the study conducted by Xin et al. (2017) where they found no significant relation between agreeableness and acute stress response. A positive significant correlation was found between extraversion, openness to experience, agreeableness, conscientiousness and emotional stability with active emotional and active problem coping styles. All personality traits were having significant negative correlation with passive emotional coping. Agreeableness and conscientiousness were having significant negative correlation with passive problem coping style. Task-oriented coping was positively associated with extraversion, openness to experience, agreeableness, and conscientiousness in a study done by Leszko et al. (2020), but negatively related with neuroticism; extraversion and neuroticism were found to be negatively associated with avoidance coping while neuroticism was found to be positively related to emotion-focused coping mechanism.

There were few limitations to this study which must be taken into consideration while interpreting the results. As self-reported data cannot be precise there is a chance of variation in personality traits, perceived academic stress and coping styles with the actual values. Students may not be ready to report the excessive amounts of stress they were experiencing and mechanisms they use to cope with those stressors. This study analyzed the relation of personality with coping and perceived academic stress. The participants in this study were mostly from different states in India, so there can be an influence of culture and the educational system. Intervention studies based on these findings can help students to cope with stressful situations in a better way.

## SUGGESTIONS

1. As extraverted, conscientious, and emotionally stable individuals were found to have a significant positive correlation with all the factors of perceived academic stress. It is recommended that the entire parent and teaching community must take utmost care in assigning academic tasks to them.
2. Individuals who adopt passive emotional coping styles were found to have a negative correlation with their personality traits whereas active emotional coping styles had a positive correlation with their personality traits. Individuals who face excessive academic stress are suggested to try out active rather than passive coping techniques to deal with it.

## CONCLUSION

After an in-depth study of the relation of personality traits with perceived academic stress and coping styles, it was found that a significant relationship exists between these variables in emerging adults. Personality had an impact on the way by which students perceived the level of academic stress. The coping strategies they adapt to cope with stressful situation was found to be based on the personality traits they



possessed. Hence, there is a need for teachers and health professionals to manage the academic stress of students based on their personality trait which can in turn help them achieve

good academic performances. The improvement in coping strategies can help them in increasing their ability to solve academic problems and handle them well.

**Table 1**

PERCEIVED ACADEMIC STRESS					
PERSONALITY TRAITS		Pressures to Perform	Perceptions of Workload	Academic Self-Perception	Time Restraints
	Extraversion	0.248**	0.153*	0.200**	0.135
	Agreeableness	0.105	0.127	0.238**	0.126
	Conscientiousness	0.143*	0.159*	0.303**	0.140*
	Emotional Stability	0.436**	0.287**	0.499**	0.297**
	Openness to Experience	0.193**	0.130	0.261**	0.092
	**Correlation is significant at the 0.01 level (2-tailed)				
*Correlation is significant at the the 0.05 level (2-tailed)					

**Table 2**

COPING STYLE					
PERSONALITY TRAITS		Active Emotional	Passive Emotional	Active Problem	Passive Problem
	Extraversion	0.264**	-0.200**	0.167*	-0.028
	Agreeableness	0.160*	-0.207**	0.153*	-0.184**
	Conscientiousness	0.150*	-0.360**	0.235**	-0.213**
	Emotional Stability	0.392**	-0.501**	0.316**	-0.111
	Openness to Experience	0.254**	-0.344**	0.240**	-0.131
	**Correlation is significant at the 0.01 level (2-tailed)				
*Correlation is significant at the the 0.05 level (2-tailed)					

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# AN EMPIRICAL STUDY ON QUALITY OF LIFE AMONG RURAL WOMEN AT HANAMKONDA DISTRICT, TELANGANA STATE

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## ABSTRACT

*QoL is a notion that has been frequently utilized in health care, despite being a difficult concept to describe (Somarriba Arechavala et al., 2015). In recent years, it has been extended to cover the broader population's objective and subjective well-being. Well-being is usually measured objectively. Relates to objective life circumstances like housing. Subjective well-being, on the other hand, may relate to a sense of fulfilment in one's life (Meditinos et al., 2014). According to Somarriba Arechavala et al. (2015), This is a part of study conducted in the year 2018 among the rural women about the health practices i.e. how they take precautionary methods to avoid the disease burden or disorder, do they have any resource information on that or they have any general awareness on the health practices.*

*The study was falls under qualitative method and descriptive type, the universe was selected as Mandal/taluk in that women from Twelve different villages, the Mandal/taluk consists of 12 villages, from those villages the consistent sample technique was applied to select my sample size, around 315 women were selected for the study the standard questionnaire was opted for study.*

*The quality of life depends on how much joyfully they spent every day with availability of resources and satisfaction of life, the women who spent their life the quality of life. Sleep, friends, money, contentment, sex, ability to work, energy to work, how pleased with your own life, enough money for health care, and the list goes on, the low Qol spent by women contributes to 21(6.7%), the moderate Qol spent by rural women is 285(90.5%), the high Qol life spent by rural women is 9(2.9).*

**KEYWORDS:** *Quality of life, Rural areas, subjective wellbeing, objective wellbeing.*

## 1) INTRODUCTION

QoL is a notion that has been frequently utilized in health care, despite being a difficult concept to describe (Somarriba Arechavala et al., 2015). In recent years, it has been extended to cover the broader population's objective and subjective well-being. Well-being is usually measured objectively. Relates to objective life circumstances like housing. Subjective well-being, on the other hand, may relate to a sense of fulfilment in one's life (Meditinos et al., 2014). According to Somarriba Arechavala et al. (2015),

QoL as the result of complex interactions between a number of objective and subjective factors: objective External circumstances of an economic, sociopolitical, environmental, and cultural nature are referred to as factors. Individuals' judgments of their own lives and pleasure are referred to as subjective factors. Greece, Latvia, Hungary, and Lithuania are just a few of the nations that are participating. Have observed the most significant decreases in QoL (Somarriba Arechavala et al., 2015). Citizens' quality of life is closely related to their socioeconomic level. The severe economic downturn in Greece, it had a significant impact on people's lives. In a recent study in Greece, researchers looked at quality of life. The impact of income, education, cohabitation, and parenthood on QoL was significant, while Participants who were jobless were the worst hit (Mechili et al., 2015).

The Organization for Economic Cooperation and Development (OECD) has made the greatest contributions. In Greece, there is a high level of data quality. The OECD publishes studies on housing, income, employment, and community. Education, the environment, civic involvement, health, life happiness, safety, and work-life balance are all important factors to consider. Not Surprisingly, Greeks were less satisfied with their lifestyles, scoring 4.8 on a scale of one to ten.1–10. (OECD, 2015). The present study conducted by standard questionnaire to measure the health practices and Quality of life (QOL100).

## 2) OBJECTIVES

- 1) To understand the socio economic status effecting the Qol.
- 2) To determine the current status of the Qol among the women
- 3) To understand about the factors effecting Qol.

## 3) METHODOLOGY

The study was conducted by in year 2018 at remote rural area about access the quality of life and health care lead by rural women the study falls under the quantitative method, a descriptive study



#### 4) SAMPLING DESIGN

The whole Mandal/taluk was selected at Hanamkonda district which is in Telangana state, they are about 12 villages in the Mandal called bheemadevrapally, the universe is Bheemadevrapally Mandal/taluk and the sample size selected is 315.

#### 5) STATISTICAL DESIGN

The latest version of the SPSS used to draw the results a simple percentages drawn from the respective populations.

#### 6) GEOGRAPHICAL LOCATION

The research was carried out at Bheemadevrapally Mandal, which is located in Telangana's Hanamkonda district. The Mulkanoor cooperative society is a well-known institution in the Mandal. The Mandal employs a large number of individuals from this region. There is also a women's cooperative. Mulkanoor Dairy Farm the dairy farm they operate. This cooperative is farmer-friendly, offering low-interest loans and pesticides. The co-operative also promotes farming families' well-being by offering loans for study abroad as well as scholarships and education. They have their own college as well. The co-operative also offers an eye care clinic for elderly farmers. Overall, it meets all of the needs of the farmers in the aforementioned locations. It satisfies all of the needs of the farmers in the region above.

#### 7) FINDINGS

The above table 1.1 illustrate about the respondents that, how satisfied are you with their health the respondents who Very dissatisfied are 8(2.5%), the respondents who are Dissatisfied are 65(20.6%), the respondents who Neither satisfied nor dissatisfied 149(47.3%), the respondents who Satisfied 93 (29.5%), the women who are Very satisfied showed 0.0%.

The table 1.2 illustrate about the physical pain stopping women from doing daily works, the women who responded as Not at all are 5(1.6%), the women said A little are 158(50.2%), the women who responded as a moderate amount 114(36.2%), the women who responded as Very much 34 (10.8%) the women who responded as an extreme amount are 4(1.3%).

The table 1.3 illustrate that about the women spending on medical bills daily the women who said Not at all are 9(2.9%), the women who said a little 127(40.3%), the women who said moderate amount 119(37.8%), the women who said Very much 49(15.6%), women who need an extreme amount 11 (3.5%).

The table 1.4 illustrate about the daily life spent with joy or happily the women who responded as Not at all 15(4.8%), the women who said a little 108(34.3%), women who said moderate amount 92(29.2%), women who said Very much 92(29.2%), women who said an extreme amount are 8(2.5%).

The table 1.5 showing the status of women that to what extent they feel the life meaning full The women who said Not at all 8(2.5%), the women who said little 89(28.3%), the women who said moderate amount are 106(33.7%), the women who said Very much 94 (29.8%), the women who said an extreme amount 18(5.7%).

The table 1.6 When asked that How well they are able to concentrate, the women who responded as Not at all 13(4.1%), the women who responded as a little 103(32.7%), the women who responded as a moderate amount 115 (36.5%), the women who said Very much 75 (23.8%), the women who responded as Extremely are 9(2.9%).

The table 1.7 When asked How safe do you feel in your daily life the women who respondent not at all are 10(3.2%), the women who respondent as little 87(27.6%), the women who said a moderate amount 100 (31.7%), the women who said Very much 103(32.7%), women who said Extremely are 15 (4.8%).

The table 1.8 When asked about the How healthy is your physical environment, the women who responded as Not at all are 10(3.2%), the women who said a little 76(24.1%), the women who said a moderate amount 123 (39.0%), the women who said Very much 100 (31.7%), the women who said Extremely are 6(1.9%).

The table 1.9 When asked about Do you have enough energy for everyday life, the women who responded Not at all 4(1.3%), the women who said a little 98(31.1%), the women who said Moderately are 164 (52.1%), the women who said Mostly 44(14.0%) the women said Completely 5(1.6%).

The table 1.10 When asked Are you able to accept your bodily appearance the women responded Not at all 7(2.2%), the women who responded as a little 71 (22.5%), the women who said Moderately 152(48.3%), the women who said Mostly 75(23.8%), the women who responded as Completely are 10 (3.2%).

The table 1.11 illustrate about How much enough money to meet their daily needs, the women who said Not at all 13 (4.1%), the women who said a little 107 (34.0%), the women who said Moderately are 170 (54.0%), the women who said Mostly 24 (7.6%), the women said completely 1(0.3%).

The table 1.12 Women who responded about How available to you is the information that you need in your day-to-day life, the women who said Not at all are 23(7.3%), the women who said a little 142 (45.1%), the women who said Moderately are 119(37.8%) the women who said Mostly are 28 (8.9%), the women who said Completely are 3 (1.0%).

The table 1.13 To what extent do you have the opportunity for leisure activities, the women who responded as not at all 11(3.5%), the women who said a little 89 (28.3%), the women who said moderately 152(48.3%), the women who said mostly 58(18.4%), the women who said Completely 5(1.6%).

The table 1.14 explains about How well are they able to get around, women who said Very poor 13(4.1%), the women who said Poor 74(23.5%), women who responded Neither poor nor good 182(57.8%), the women who said who responded Good 45(14.3%), the women who said Very good 1(0.3%).



The table 1.15 illustrate How satisfied are you with your sleep the women respondent as Very dissatisfied 3(1.0%), the women are Dissatisfied 50 (15.9%), the women Neither satisfied nor dissatisfied 150 (47.6%), the women who are Satisfied 100(31.7%), the women who are Very satisfied 12(3.8%).

The table 1.16 illustrate How satisfied are you with your ability to perform your daily living activities, the women who are Very dissatisfied 4(1.3%), the women who are Dissatisfied are 51 (16.2%), the women who Neither satisfied nor dissatisfied 168(53.3%), the women are Satisfied are 88 (27.9%), women who are Very satisfied 4(1.3%).

The table 1.17 who illustrate how satisfied are you with your capacity for work, the women who are Very dissatisfied 9(2.9%), women who are Dissatisfied 57(18.1%), the women who are Neither satisfied nor dissatisfied 172(54.6%), the women who are Satisfied 73(23.2%), Very satisfied 4(1.3%).

The table 1.18 women who responded for How satisfied are you with yourself, the women responded as Very dissatisfied are 7 (2.2%), the women who are Dissatisfied are 45(14.3%), the women are Neither satisfied nor dissatisfied 146 (46.3%), the women are Satisfied 99(31.4%), the women who are Very satisfied 18(5.7%).

The table 1.19 illustrate that How women are satisfied with their personal relationships, the women are Very dissatisfied are 12(3.8%), the women who are Dissatisfied 45(14.3%), the women who are Neither satisfied nor dissatisfied 155 (49.2%), the women who are Satisfied 95 (30.2%). the women who are very satisfied 8 (2.5%).

The table 1.18 explains the status of women about How satisfied are you with your sex life, the women who said Very dissatisfied are 15 (4.8%), the women who are Dissatisfied are 52 (16.5%), the women are Neither satisfied nor dissatisfied are 136(43.2%), the women who are Satisfied are 93 (29.5%), the women who are Very satisfied 19(6.0%).

The table 1.19 illustrate How often satisfied with the support they get from your friends, the women who said they are Very dissatisfied 42(13.3%), the women who are Dissatisfied 56 (17.8%), the women who are Neither satisfied nor dissatisfied 139(44.1%), the women who are Satisfied 70(22.2%), the women Very satisfied 8(2.5%).

The table 1.20 women when asked about How satisfied are you with the conditions of your living place, the women who are Very dissatisfied 11(3.5%), the women who are Dissatisfied are 31(9.8%) the women who Neither satisfied nor dissatisfied 169(53.7%), the women who are Satisfied 99(31.4%), the women who are Very satisfied 5(1.6%).

The table 1.21 Women are responded How satisfied are you with your access to health services the women who are Very dissatisfied 15(4.8%), the women who are Dissatisfied 55(17.5%), the women who are Neither satisfied nor dissatisfied 175 (55.6%), the women who are Satisfied 68 (21.6%), women who are Very satisfied 2(0.6%).

The table 1.22 women who responded that How satisfied are you with your transport, the women conveyed that they are Very dissatisfied are 6 (1.9%), the women who are Dissatisfied are 39(12.4%), the women who are neither satisfied nor dissatisfied 165 (52.4%), the women who are Satisfied 94(29.8%), the women who are Very satisfied 11(3.5%)22.

The below 1.23 table illustrate about How often do women have negative feelings such as blue mood, despair, anxiety, depression, the women who responded as Never 18 (5.7%), the women expressed as Seldom 166(52.7%), the women who expressed Quite often 114(36.2%), the women who expressed as Very often 14(4.4%), the women who expressed as Always 3(1.0%).

## 8) SUGGESTIONS

Quality of life is defined by the World Health Organization as “an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.”

Quality of life is a concept including multiple aspects of people’s lives, such as:

- I. Health.
- II. Material comforts.
- III. Personal safety.
- IV. Relationships
- V. Learning.
- VI. Creative expression.
- VII. Opportunity to help and encourage others.
- VIII. Participation in public affairs.
- IX. Socializing.
- X. Leisure.

Factors that influence the quality of life.

Examples of factors that can impact a person’s QoL include:

- I. Disease.
- II. Injury.
- III. Impairment.
- IV. Health perceptions.
- V. Health care and treatments.
- VI. Culture change.
- VII. Social change.
- VIII. Lack of Education.
- IX. Low socio-economic background.



#### X. Policy.

Whatever the situation be like people should have confidence on them and our health care system which is increasing day by day, person need to concentrate on the work and his life and should live life satisfactory, whichever the class creed he belongs to this reduces the diseases burden on the person, it doesn't impact his family too.

## 9) CONCLUSIONS

### Happiness Model

The PERMA Model represents the five core elements of happiness and well-being. PERMA basically stands for Positive Emotion, Engagement, Relationships, Meaning, and Accomplishments. American psychologist and educator (Seligman, Martin E. P. 2002) designed the PERMA Model. As a psychology practitioner, Seligman understands how natural it is for individuals to continuously seek for what makes them happy, regardless of their age, orientation, and status in life.

### POSITIVE EMOTION

Positive emotion is about feeling good and is obviously the most direct path to being happy. When one feels good, one feels positive. However, such positive emotion doesn't just stop at someone flashing a great smile because that is something anyone can do or, sadly, fake. Positive emotion goes beyond that and may even involve acceptance of the past regardless of how bad it was and anticipating positively what the future holds. However, such emotion does not necessarily mean that the person should be happy 100% of the time because that is impossible. But trying to achieve a positive emotion greatly affects many other aspects of life, such as the other elements found in the PERMA model. The words pleasure and enjoyment are easily associated with happiness but are mistakenly understood to be equal and the same. Pleasure, according to the model, refers to one's physical needs being satisfied such as food, shelter, water, clothing, and safety. Enjoyment, on the other hand, is the satisfaction and fulfillment derived from doing something such as painting, cross-stitching, or exploring a car's engine. When enjoyment is achieved, happiness tags along, too.

### Engagement

The second element in the PERMA Model is Engagement, which refers to something that an individual can get engrossed with or absorbed in. Almost everybody has experienced getting lost in a book or living in "one's own world" because of something so engaging. It is actually a very positive thing for a person's intelligence, emotions, and skills, which is why a child who is busy putting together different Lego parts or Billing blocks should be allowed to do so and let be Doing something that engages an individual also brings happiness even if it has nothing to do at all with one's work or if it is deemed by others as silly. For example, a woman in her mid-30's who loves to play the violin can do so, and while engaged in doing it can momentarily leave the present and live in the music.

### Relationships

Relationships are the third element of happiness and well-being, according to the PERMA model. As human beings, it is our natural desire to want to be connected and be part of a group such as a clique, school organization, or a circle. We were wired to not just want but need love, affection, attention, and interaction. It is why people need to create relationships with family, co-workers, friends, and peers, because it is from these groups that we are able to receive emotional support when things get rough. A simple yet clear example of the need for belongingness and interaction is when high school girls go together to the comfort room even if only one actually needs to use it.

### Meaning

Many people wonder why many celebrities who live in multi-million-dollar mansions and go on monthly vacations to the Maldives and the Caribbean end up taking their own lives. What they do not understand is that there is so much more to life than just money and material possessions. Above it all, what makes a person want to live is the meaning they find in their lives. Parents with young children understand how important they are in their children's lives and so they work hard to provide for their families. A beautiful lady, though unmarried, is happy because she takes care of her aging parents. These things are worth more than any amount of money and meaning keeps people happy and persistent.

### Accomplishments

Finally, the fifth PERMA model element is accomplishments. We all take pride in something we've done or accomplished. It is these accomplishments that strengthen our self-esteem and our confidence that we are worth something. When we achieve something, we feel good and want to do more and become more. It can be seen even in very young children. For instance, a little girl learns to use the spoon and fork when eating and when she knows how proud her mother is upon learning this, the child continues to use her spoon and fork. She also seeks new things to learn that are more challenging than what she can already do, such as pouring water into her glass or putting her toys back in the cupboard. In short, these accomplishments drive individuals to achieve more and make them feel good.



## 10) TABLES AND FIGURES

**Table 1.1 The Below Table Showing the Distribution According to Economic Status.**

		F	%
How would you rate your quality of life	Very poor	13	4.1%
	Poor	56	17.8%
	Neither poor nor good	178	56.5%
	Good	67	21.3%
	Very good	1	0.3%
	Total	315	100.0%

**Table 1.2 The Table Showing Distribution of Respondents According Satisfaction of Health.**

		F	%
To what extent do you feel that physical pain prevents you from doing what you need to do?	Not at all	5	1.6%
	A little	158	50.2%
	A moderate amount	114	36.2%
	Very much	34	10.8%
	An extreme amount	4	1.3%
	Total	315	100.0%

**Table 1.3 The table showing the distribution of respondents according to physical pain preventing the doing work.**

		F	%
How satisfied are you with your health	Very dissatisfied	8	2.5%
	Dissatisfied	65	20.6%
	Neither satisfied nor dissatisfied	149	47.3%
	Satisfied	93	29.5%
	Very satisfied	0	0.0%
	Total	315	100.0%

**Table 1.4 The Distribution of Respondents According to the Medical Spending's Daily.**

		F	%
How much do you need any medical treatment to function in your daily life?	Not at all	9	2.9%
	A little	127	40.3%
	A moderate amount	119	37.8%
	Very much	49	15.6%
	An extreme amount	11	3.5%
	Total	315	100.0%

**Table 1.5 The Distribution of Respondents According to How Much You Spend Your Life Daily Happy.**

		F	%
How much do you enjoy life	Not at all	15	4.8%
	A little	108	34.3%
	A moderate amount	92	29.2%
	Very much	92	29.2%
	An extreme amount	8	2.5%
	Total	315	100.0%

**Table 1.6 The distribution of respondents according to how they feel the life meaning full.**

		F	%
To what extent do you feel your life to be meaningful?	Not at all	8	2.5%
	A little	89	28.3%
	A moderate amount	106	33.7%
	Very much	94	29.8%
	An extreme amount	18	5.7%
	Total	315	100.0%



**Table 1.7 The Distribution of Respondents According to How Able To Concentrate On Their Work.**

How well are you able to concentrate	Not at all	13	4.1%
	A little	103	32.7%
	A moderate amount	115	36.5%
	Very much	75	23.8%
	Extremely	9	2.9%
	Total	315	100.0%

**Table 1.8 The Distribution of Respondents According to How Safe Do They Feel In Your Daily Life.**

How safe do you feel in your daily life	Not at all	10	3.2%
	A little	87	27.6%
	A moderate amount	100	31.7%
	Very much	103	32.7%
	Extremely	15	4.8%
	Total	315	100.0%

**Table 1.9 The distribution of respondents according to how healthy is their physical environment.**

How healthy is your physical environment?	Not at all	10	3.2%
	A little	76	24.1%
	A moderate amount	123	39.0%
	Very much	100	31.7%
	Extremely	6	1.9%
	Total	315	100.0%

**Table 1.10 The Distribution of Respondents According to the Enough Energy for daily life.**

Do you have enough energy for everyday life?	Not at all	4	1.3%
	A little	98	31.1%
	Moderately	164	52.1%
	Mostly	44	14.0%
	Completely	5	1.6%
	Total	315	100.0%

**Table 1.11 The Distribution of Respondents According to how able to accept the body appearance.**

Are you able to accept your bodily appearance?	Not at all	7	2.2%
	A little	71	22.5%
	Moderately	152	48.3%
	Mostly	75	23.8%
	Completely	10	3.2%
	Total	315	100.0%

**Table 1.12 The distribution of respondents according to enough money to meet their daily needs.**

Have you enough money to meet your needs?	Not at all	13	4.1%
	A little	107	34.0%
	Moderately	170	54.0%
	Mostly	24	7.6%
	Completely	1	0.3%
	Total	315	100.0%



**Table 1.13 The distribution of respondents according to information they need in daily life.**

How available to you is the information that you need in your day-to-day life?	Not at all	23	7.3%
	A little	142	45.1%
	Moderately	119	37.8%
	Mostly	28	8.9%
	Completely	3	1.0%
	Total	315	100.0%

**Table 1.14 The distribution of respondents according to what extent do you have the opportunity for leisure activities.**

To what extent do you have the opportunity for leisure activities?	Not at all	11	3.5%
	A little	89	28.3%
	Moderately	152	48.3%
	Mostly	58	18.4%
	Completely	5	1.6%
	Total	315	100.0%

**Table 1.15 The distribution of respondents according to How well are you able to get around?**

How well are you able to get around	Very poor	13	4.1%
	Poor	74	23.5%
	Neither poor nor good	182	57.8%
	Good	45	14.3%
	Very good	1	0.3%
	Total	315	100.0%

**Table 1.16 The distribution of respondents according to How satisfied are you with your sleep?**

How satisfied are you with your sleep	Very dissatisfied	3	1.0%
	Dissatisfied	50	15.9%
	Neither satisfied nor dissatisfied	150	47.6%
	Satisfied	100	31.7%
	Very satisfied	12	3.8%
	Total	315	100.0%

**Table 1.17 The distribution of respondents according to How satisfied are you with your ability to perform your daily living activities?**

How satisfied are you with your ability to perform your daily living activities?	Very dissatisfied	4	1.3%
	Dissatisfied	51	16.2%
	Neither satisfied nor dissatisfied	168	53.3%
	Satisfied	88	27.9%
	Very satisfied	4	1.3%
	Total	315	100.0%

**Table 1.18 The distribution of respondents according to How satisfied are you with your capacity for work?**

How satisfied are you with your capacity for work?	Very dissatisfied	9	2.9%
	Dissatisfied	57	18.1%
	Neither satisfied nor dissatisfied	172	54.6%
	Satisfied	73	23.2%
	Very satisfied	4	1.3%
	Total	315	100.0%



**Table 1.19 The distribution of respondents according to How satisfied are you with yourself?**

How satisfied are you with yourself	Very dissatisfied	7	2.2%
	Dissatisfied	45	14.3%
	Neither satisfied nor dissatisfied	146	46.3%
	Satisfied	99	31.4%
	Very satisfied	18	5.7%
	Total	315	100.0%

**Table 1.20 The distribution of respondents according to How satisfied are you with your personal relationships?**

How satisfied are you with your personal relationships?	Very dissatisfied	12	3.8%
	Dissatisfied	45	14.3%
	Neither satisfied nor dissatisfied	155	49.2%
	Satisfied	95	30.2%
	Very satisfied	8	2.5%
	Total	315	100.0%

**Table 1.21 The distribution of respondents according to How satisfied are you with your sex life?**

How satisfied are you with your sex life?	Very dissatisfied	15	4.8%
	Dissatisfied	52	16.5%
	Neither satisfied nor dissatisfied	136	43.2%
	Satisfied	93	29.5%
	Very satisfied	19	6.0%
	Total	315	100.0%

**Table 1.22 The distribution of respondents according to How satisfied are you with the support you get from your friends?**

How satisfied are you with the support you get from your friends?	Very dissatisfied	42	13.3%
	Dissatisfied	56	17.8%
	Neither satisfied nor dissatisfied	139	44.1%
	Satisfied	70	22.2%
	Very satisfied	8	2.5%
	Total	315	100.0%

**Table 1.23 The distribution of respondents according to How satisfied How satisfied are you with the conditions of your living place?**

How satisfied are you with the conditions of your living place?	Very dissatisfied	11	3.5%
	Dissatisfied	31	9.8%
	Neither satisfied nor dissatisfied	169	53.7%
	Satisfied	99	31.4%
	Very satisfied	5	1.6%
	Total	315	100.0%

**Table 1.24 The distribution of respondents according to How satisfied are you with your access to health services.**

How satisfied are you with your access to health services?	Very dissatisfied	15	4.8%
	Dissatisfied	55	17.5%
	Neither satisfied nor dissatisfied	175	55.6%
	Satisfied	68	21.6%
	Very satisfied	2	0.6%
	Total	315	100.0%



**Table 1.25 The distribution of respondents according to How satisfied are you with your transport?**

How satisfied are you with your transport?	Very dissatisfied	6	1.9%
	Dissatisfied	39	12.4%
	Neither satisfied nor dissatisfied	165	52.4%
	Satisfied	94	29.8%
	Very satisfied	11	3.5%
	Total	315	100.0%

**Table 1.26 The distribution of respondents according to How often do you have negative feelings such as blue mood, despair, anxiety, depression?**

How often do you have negative feelings such as blue mood, despair, anxiety, depression	Never	18	5.7%
	Seldom	166	52.7%
	Quite often	114	36.2%
	Very often	14	4.4%
	Always	3	1.0%
	Total	315	100.0%

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# SPLENIC TRAUMA- SAVAGE VS SALVAGE AN UPDATE ON THE NON-OPERATIVE MANAGEMENT OF HIGH GRADE SPLENIC TRAUMA

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## ABSTRACT

The spleen is one of the most frequently injured intra-abdominal organs in blunt abdominal trauma. Since the first documented case report of a splenic trauma in 1902, for over 7 decades – surgical management has been the gospel. Only over the past 3-4 decades with the overwhelming mortality accompanying post splenectomy in the form of OPSI, have the medical dictums finally started to search reason in other non-surgical approaches. With the advent of modern imaging technology with non-invasive tests and our increasing knowledge of the immunological functions of the spleen in the human body has actually paved the pathway for the development of norms for splenic salvage. Non-operative management has showed a decrease in overall mortality and morbidity although it bears with itself its own repercussions. This update studies the existing literature and delves into solving the practical dilemma that accompanies the management of splenic trauma

**KEYWORDS:** Splenic trauma, NOMSI, Splenectomy, OPSI,

## INTRODUCTION

Trauma has been the leading cause of quietus since ages especially in the younger majority<sup>[1]</sup>. Out of all the emergencies that present to the casualty, abdominal trauma accounts for around 15% of the cases and spleen is the most commonly affected solid organ<sup>[2]</sup>. Since 1970, NOMSI (non-operative management of splenic injury) has been upcoming into practice with a multitude of research being done digressing its aspects. In true veracity, most of the existing literature stills stagger towards a surgical management with extreme restraints for a non-operative management. The vapidly associated with such an approach in spite of coveted evidence favouring NOMSI in terms of reducing mortality and morbidity is absolute banality. Here in we present a case of advanced grade 5 splenic trauma with initial destabilization which was decided to be taken for conservative management and the possible aptitudes which made the approach a striking success.

## CASE PRESENTATION

A 14-year-old boy presented with alleged history of a head on collision with a two-wheeler and sustained head injury. He had loss of consciousness for a period of 30 min with multiple grade 1 brush abrasions over the abdomen, knee

and hand. He had a history of left sided ear bleed following injury. Patient was admitted as a case of road traffic accident with blunt trauma abdomen with head injury and was evaluate with directivity. There was no history of seizure, vomiting, hearing or vision abnormalities. There were no complaints of breathing difficulty or chest pain. He had no complaints of decreased urine output or haematuria. Patient vitals were stable with full GCS. Cardio-respiratory examination was normal. On per abdominal examination– mild non tender abdominal distension was present with normal bowel sounds on auscultation. Per rectal examination was normal with no active bleed or injuries.

Patient was evaluated primarily with chest and abdominal x-rays which showed no obvious abnormality for which patient was immediately taken up for NCCT brain and abdomen following eFAST detecting hemoperitoneum.

On NCCT abdomen he was found to have grade 5 splenic injury and then CT angiogram was done which showed devascularisation of 75% of the splenic parenchyma mostly on the posterior region with transected posterior splenic artery pedicle and partially intact anterior pedicle with no active extravasation.- Multiple lacerations of depth (> 3cm) noted within the spleen with multiple sub capsular and intra parenchymal non-enhancing hypo densities (HU ~40) s/o -



hematomas, without obvious extra-capsular or peri-splenic hematoma with minimal hyper dense ascites (HU ~60) - s/o hemoperitoneum noted - f/s/o AAST Grade - V splenic injury

Patient was initially given adequate hemo-resuscitation and given his stable blood parameters and inactive radiological abdomen-was closely monitored with titrating hemograms from four times a day to once alternate day and was planned to administer conservative management. Repeat USG abdomen was repeated which initially showed increase in the size of heterogeneous collection compared to previous USG. CT angiogram was repeated on a later date which showed healing, recovered splenic laceration with a resolving hematoma with increased enhancement of spleen. Patient improved symptomatically and was henceforth discharged with advice of strict restricted immobility for the next 3 months with fortnightly follow up with USG abdomen to see for the status of the hematoma.

## DISCUSSION

Spleen is the most commonly injured organ in a case of blunt trauma abdomen. Studies show that out of all cases of abdominal trauma presenting to an emergency casualty, 13% of the cases are reported to have an intra-abdominal organ injury and spleen takes up 60% of the prevalence in this paradigm. Reports from the last decade, showed a trend of splenectomy with anyone above the grade of 2 in the AAST scale with hemodynamic stability. Since the 1970's, the treatment of any blunt splenic trauma has grown from a monochromic surgical approach for near about every patient to a more stratified conservative approach being applied for hemodynamically stable patient. Furthermore, the overwhelming evidence regarding the accompanying morbidity that comes with a splenectomy in the form of OPSI<sup>[3]</sup>. This has led medical professionals from all over the world to give a thought towards the risk benefit ratio of this approach and has enshrined upon more conservative practices whenever viable.

The first case of a blunt trauma injury to the spleen in the form of a splenic rupture was published by Eisendrath in 1902. Since then, decades have seen, surgical treatment being done to prevent a catastrophic exsanguination with a post op mortality rate peaking around 40% in comparison to that associated with cases taken up with non-surgical management soaring up to 90%<sup>[4]</sup>. But as time passed, medical research and its advances regarding the understanding of the immune function of the spleen in preventing deadly infections from capsulated organisms through the monocytic—phagocytic system which was well identified with the overwhelming incidence of post op sepsis and mortality seen post splenectomy with rates going up to 90%. In addition to all, a missed splenic injury has been deemed the most common cause of preventable death after a blunt trauma abdomen. Because of a wide diversity in how a case of splenic trauma presents to the casualty- vivid awareness about the full extent of various presentations and their relative importance is paramount in the diagnosis and management of all forms of blunt splenic injuries.

## Assessment of Splenic Trauma

Spleen being the most common organ to be affected in a case of blunt trauma abdomen- a high degree of clinical suspicion has to be kept. As soon as, a splenic trauma is anticipated, evaluation is done to know the relative status of the spleen in order to take a decision regarding the surgical vs non-surgical management for the patient. In practicality, the investigation of choice is a CECT Abdomen with CT angiogram if required in a hemodynamically stable patient. It has contributed to the possibility of a non-operative management for such patients over the years. Some series studies in the earlier part of this century have shown the non-operative management increasing from 11 to 70% for the same degree of injury<sup>[5, 6]</sup>.

The most commonly used scale for assessing the severity and degree of splenic injury was established by the American Association for the Surgery of Trauma (AAST)<sup>[7, 8]</sup>. In medical literature, evidence suggests the most frequent forms of splenic injury being grade 2 and 3 followed by grade 1, 4 and 5. Once radiological and clinical assessment is done with, the management of the patient virtually sways on the basis of the clinical stability of the patient, presence of associated intra-abdominal injuries, the ability of the medical centre in providing stringent monitoring in case a non-surgical approach is decided upon and finally the availability of an emergency operation theatre for immediate operative therapy in case the case deteriorates.

## Non Operative Management

The advent of this form of management dawned with increased understanding regarding the immunologic functions of the organ. Preserving the function of the spleen was observed to serve a graded vitality regarding post op sepsis, OPSI, requirements for blood transfusions, therapeutic laparotomy, overall reduced hospital stay, lower hospital costs and decreased stress on the patient as a whole.

A patient being decided on a non-operative management would require immediate ICU admissions followed by vital stabilization with adequate fluid resuscitation. A low in admission haemoglobin warrants blood transfusions but can be held off in the absence of radiological evidence of active exsanguination and unstable dropping haematocrit. Depending on the radiological features in the earlier scan, patient can be taken in for intervention procedures such as angioembolization. Although debatable evidence exists, patient should be put on restricted mobility status with relative positional physiotherapy to reduce complications following a sedentary course like deep vein thrombus, pulmonary atelectasis, bed sores etc.

## CRITERIA FOR NOMSI

The standard criteria established as a consensus for NOMSI are<sup>[9, 10]</sup>:

1. Hemodynamic homeostasis / readily stabilizable.
2. Absence of abdominal signs as guarding, rebound and rigidity.
3. Requirement of blood transfusions  $\leq 4$  units;
4. No history of loss of consciousness following trauma
5. Age of the patient must be less than 55 years.
6. Radiologically documented splenic trauma.



In cases as such, after proper assortment, a patient could be surgically triaged to be taken for a particular line of management with the above-mentioned criteria being the barricade for such an attempt. Approach with caution should be taken as cases near borderline could sway in either direction necessitating emergency reversal of the plan of management.

### ASSESSMENT PARAMETERS FOR NOMSI

According to Longo, Uranus and Sartorelli<sup>[3, 11]</sup> whose research added on to the said predictive parameters for a successful NOMSI included: -

1. Hemodynamically stable/ readily stabilizable;
2. Blood transfusions < 4 units;
3. Age < 55 years;
4. Early resolution of splenic abnormalities
5. Obvious on radiological investigations with no features of hematoma expansion on subsequent scans.
6. No lack of consciousness/ no brain injuries;
7. No associated intra- or retroperitoneal
8. Injuries that would require surgical intervention;
9. No rebound or guarding;
10. Complete recovery of bowel movements.

It has been theorized that any hemoperitoneum present as a result of blunt trauma abdomen secondary to injury to any intraabdominal solid organ is supposed to get absorbed into the vascular moiety by the 5<sup>th</sup> day. Any evidence of blood beyond that could actually suggest a missed injury or a possible herald of a rebleed<sup>[12]</sup>. In spite of all the prodigal inclination of the recent times towards NOMSI, there have been documented evidences where catastrophic failure of the said therapy has complicated the management of a patient of trauma and more even decreased the chances of survival for the given set of patients. Thereby to segregate the conditions that can be given a trial of NOMSI and to be aware as to when to intervene surgically is of utmost importance.

### CONTRAINDICATIONS TO NOMSI

The relative contraindications for NOMSI<sup>[11, 13, 14]</sup> which are basically criteria for a more cautious approach while assessing and establishing the adequate modality of treatment: -

1. Multisystem trauma increases the chances of failure of a conservative approach.
2. Severe brain damage upscale chances of failure of NOMSI.
3. Concurrent lesion interfering with the splenic lesion and possibly requiring surgical intervention
4. Age>55 years.
5. Diseased spleen.

In terms of absolute medical contraindication for a NOMSI approach, are represented by a single modality which is Hemodynamic instability.

### ADVANTAGES OF NOMSI

The benefits of NOMSI<sup>[15, 16, 17]</sup> are:

1. Low morbidity and mortality; splenic preservation leads to lower early infections in adults.
2. Avoidance of a non-therapeutic laparotomy and no immediate/late complications that usually accompany

a laparotomy.

3. Minimal Blood Transfusions.
4. Reduction in the overall in hospital stay.
5. Immunological homeostasis and prevention of OPSI.

### DISADVANTAGES OF NOMSI

The potential drawbacks of NOMSI would include: -

1. Overlooked injuries
2. Unpredictable time period for a second potential rebleeding
3. Low splenic conservation rate following surgery after unsuccessful NOMSI.
4. A surgeon on call 24/7 and permanent clinical monitoring
5. Debates about the time period necessary for a complete recovery

It has been postulated that in case of a delayed surgical exploration, there is an increased risk for haemorrhagic exsanguination, major vascular requirements in terms of blood transfusions, heightened chances of refractory shock and increased chances of death. In 90% of cases the failure of NOM is evident in the first 50 hours from the initial insult. With respect to this vehement disability, Velmahos<sup>[18]</sup> identified 4 independent risk factors for an unsuccessful NOMSI: -

1. High splenic Injury Severity Score.
2. Hemoperitoneum of over 300 ml.
3. Positive eFAST.
4. Necessary blood transfusions at regular interval to meet a constant required haemoglobin status

Statistically calculated rate of failure of NOMSI swore to 96% when all 4 factors are present. The complications associated with such a modality remains to be late onset intra-abdominal exsanguinations, delayed splenic rupture, splenic artery pseudo aneurysms, intra-parenchymal cysts and splenic abscess formation with a combined incidence of around 7.5%.

### CRITERIA FOR IMMEDIATE SURGICAL MANAGEMENT

In the background of all this information, Meyers<sup>[19]</sup>, Uranus<sup>[20]</sup> and Wisner<sup>[21]</sup> pinpointed the following criteria for mandatory emergency surgery in order to further decrease therapeutic dilemma

1. Persistent hemodynamic instability (despite aggressive fluid resuscitation).
2. Early recurrent hypotensive events (after adequate resuscitation).
3. Macroscopically positive diagnostic peritoneal lavage (in association with the previous criteria).

The guidelines given by the Eastern Association for the Surgery of Trauma (EAST) clearly denies any contradiction of a conservative approach in patients with grade 4 and 5 injury if hemodynamically stable<sup>[22, 23]</sup> but vast medical research review has shown a linear relationship between the severity of the splenic injury and the rates of failures of non-operative modality applied to such cases. According to the existing evidence, failure rates have been determined at 4.8% for grade 1 to overwhelming 75% for grade 5.



In the case reported, although patient was requiring high volumes of transfusions with parametrically unstable hemodynamic at the beginning, young age, availability of round the clock care and an emergency operation theatre for laparotomy in case of an exsanguination heeded the management towards a conservative approach. Patient was looked upon and monitored with utmost vigilance and after a daunting period of 20 days patient finally walked out of the hospital without an incision on the abdomen. In addition to this, tertiary centres being able to supply with ample resources for vigilance can opt for NOMSI with some risk as it is considerably less morbid for the patient. Although the literature might be tilted a bit towards the operative approach but for the sake of the patient and the quality of life that is conferred to him post splenectomy, a non-surgical approach should always be given a trial in the presence of the slightest window for observation.

## CONCLUSION

A grade 5 splenic injury usually makes a surgical treatment redundant and previous near total literature is in support of that. But with this case report, we herald the fact that with appropriate medical perspicacity and strict monitoring of clinical admonitions- a case of grade 5 splenic trauma can be treated conservatively. In view of the prevailing perils of splenectomy and the overwhelming morbidity that accompanies the procedure in the form of OPSI; recent dictum warrants therapeutic adaptation into a more conservative approach whenever and wherever possible versus a surgical ministrations.

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# CERTIFICATIONS CALIBRATE THE CALIBRE OF THE STUDENTS

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## ABSTRACT

*We aspire to be a teacher, a scholar, a scientist or even an ardent learner, whatever our aspiration might be, we usually keep watching conference presentations, attending workshops, reading news, and journal articles in order to craft our art, in other words, which we describe as the development of language teaching and promotion of language acquisition. But for a student, the means of learning a second language are manifold and all he/she needs to acquire is their serious engagement with rapt attention both inside and outside the classroom. As learning language is a natural process, first one needs to be surrounded by the language to acquire and develop any unknown language. But it's equally noticeable that a few technical tools working based on Artificial Intelligence would also help the students learn a second language (English) better in due course of learning. Transcending the traditional and old-fashioned techniques that don't intrigue students' learning any longer, Our paper proposes various language development techniques and technical tools that help students acquire the second language quicker and better and subsequently develop it to the maximum extent with utmost accuracy. It also discusses various internationally acclaimed certifications like Business English Certificate (BEC) conducted by Cambridge English, Global English Testing Services (GETS HE), by Qualifications and Assessments and International and such certifications for improving the second language that helps students become proficient in the second language and competent in the workplace.*

**KEYWORDS:** Student engagement techniques, Transcendental, ardent learner, BEC, GETS HE, Technical tools

## INTRODUCTION

“Enjoy living in the moment but remember that learning English will prepare you for the future”, a well-known statement that makes a lot of sense. We know pretty well that the English language is part and parcel of our life, in other words, a passport that takes us anywhere across the globe. We must be cognizant of four core skills i.e. Listening, Speaking, Reading and Writing for the acquisition and development of any language, for that matter English is no exception to it and we have known the significance of English in all walks of life. English is the only language that remains a deciding factor of everyone's career in many non-native English-speaking countries. But the people who speak the language are considered to be the owners of that language. Even the applicants or aspirants of any employment would write the languages they speak as the languages known to them in their Curriculum Vitae, Resume or Bio-Data. Therefore Speaking English is of paramount importance across the globe. Above all, Speaking is a skill like the other three skills can be acquired and mastered.

Earlier Grammar Translation Method was popular in colonial era for teaching and learning English but it left the

learners with mother tongue influence. Due to this method, the learner of English language thinks inadvertently of translating his/her thoughts from mother tongue to English language and it lacks originality. Therefore Direct Method gained its popularity as it allows the learners of English language to think about it while speaking and it makes the speech natural. This way many other methods of Teaching Learning English came into existence. Despite the utilization of all these methods, Speaking English hasn't been easy for many students/learners of the English language even today. Transcending the traditional and old-fashioned techniques that don't intrigue teachers' teaching and students' learning any longer, Our paper proposes various language development techniques and technical tools that help students acquire the second language quicker and better and subsequently develop it to the maximum extent with utmost accuracy. It also discusses various internationally acclaimed certifications like Business English Certificate (BEC) conducted by Cambridge English, Global English Testing Services (GETS HE), by Qualifications and Assessments and International and such certifications for improving the second language that helps students become proficient in the second language and



competent in the workplace. Our Paper would also analyze various issues and barriers of speaking English language Apart from listening, reading and writing it as well and subsequently propose the possible remedial measures and solutions by explaining the interdependence of Listening, Speaking, Reading and Writing. It also discusses various internationally acclaimed certifications that help hone one's four core skills Listening, Speaking, Reading and Writing.

At the outset it is well known to us that it's the way we speak that matters and that determines our altitude. In other words, "our words are our ambassadors; they program us for either success or failure". If we are able to speak English well, we can seize the opportunities aplenty. But there are a few barriers that put the skids under the learners of English language such as shyness, hesitation, lack of confidence, social milieu, mother tongue influence and dominance, lack of proper foundation and no necessity of learning it, as the local language serves the purpose of livelihood. Major factors can be motivation, confidence and Listening inability. Speaking English isn't a cakewalk for everyone but a bad listener can never be a good speaker. The more we listen, the better we can speak. Here I would remind you of Mark Twain's golden words "If we were meant to speak more than listen, we would have two mouths and one ear. Therefore one has to listen more to speak better. Unless Listening ability is inculcated among learners, it's no picnic for them to respond, so that they cannot speak. However language learners are considered almost the speakers of that language and recognized as such by the way they speak. Even Mahatma Gandhi felt shy of speaking in front of others and he did mention it in his "Shyness my shield" extracted from his auto- biography titled "My experiments with Truth". It reminds us of a great statement "The greatest prison people live in is the fear of what other people think". Students/Learners with this attitude generally hesitate to speak in front of others. To the best of our knowledge there are three solid reasons that prevent one from speaking English well.

1. Having content but being unable to express it
2. Speaking something inadvertently
3. Doubting whether the speech is understandable to the listeners or not.

This way the learner of English language feels it difficult to speak without hesitation, repetition and deviation. The reasons can be a learner's poor foundation or social background or unfavourable learning environment or such like.

Before going further, let's know what Communication is and the barriers to improving all four core skills Listening, Speaking, Reading and Writing. Communication is a two-way process in which the sender sends a message, and the receiver gets the message and gives feedback in return. Therefore communication involves four elements: Sender, Receiver, feedback and channel of communication. It is of two types: Oral communication and written communication.

## ORAL COMMUNICATION

Oral communication is a process of verbally transmitting information and ideas from one to the other, and it's of speaking form. Oral Communication can be done face-to-face or over the telephone. It can also be discussions or presentations that happen at business meetings, classrooms and even speeches. Speaking effectively isn't everyone's cup of tea. People who keep practicing speaking as a skill can speak effectively. Oral communication is generally supported by body language, which we call non-verbal communication. Body Language completes one's communication.

## WRITTEN COMMUNICATION

Written Communication is a process of sending or receiving information in the form of writing. Unlike oral communication, it needs more attention, as once written communication is done, it can't be retrieved. Writing makes one an exact man, whereas reading makes a full man, and conference a ready man.

But learners of Second Language usually face some barriers to speaking and listening more than reading and writing.

## BARRIERS TO LISTENING

- Being inattentively
- Interrupting without listening properly
- Forming judgment before understanding what is being said
- Feeling nervous and anxious
- Excessive talking or interrupting
- No interest in listening, etc.

Therefore the listeners should be active enough to understand what is being said without interrupting, without forming insensible judgements, without being defensive or offensive and without talking unnecessarily. As mentioned before, to speak more effectively, one has to listen more, but listening alone can't make one an effective speaker, because there are barriers to speaking as well as aforementioned."The greatest prison people live in is the fear of what other people think". Learners with this attitude generally hesitate to speak in front of others.

## CERTIFICATION COURSES

We aspire to be a teacher, a scholar, a scientist or even an ardent learner, whatever our aspiration might be, we usually keep watching conference presentations, attending workshops, reading news, and journal articles in order to craft our art, in other words, which we describe as the development of language teaching and promotion of language acquisition. But for a student, the means of learning a second language are manifold and all he/she needs to acquire is their serious engagement with rapt attention both inside and outside the classroom. As learning a language is a natural process, first up one needs to be surrounded by the language to acquire and develop any unknown language. But it's equally noticeable that a few technical tools working based on Artificial Intelligence would



also help the students learn the Second language (English) better in due course of learning. Certain Technical tools would help students acquire and develop the Second Language by engaging them both inside and outside the classroom. Technical tools like Orai, a speech coach that helps develop learners' speaking skills with instant feedback, Voice thread which improves learners' ability to discuss and describe situations. Apart from them, there are few more technical tools like Padlet which is an application to create an online bulletin board that you can use to display information for any topic. There are many other tools like Grammarly, Ginger, Expresso, ZenPen and such tools used for improving Writing Skill. A few websites that improve reading are Snap & Read Universal, Newsela, Immersion Reading, Inspiration and such like. For developing Listening, there are a few applications like Lyrics Training, Accent Rosie, TeachVid, Listen and Write, SpeakPipe and many such available.

All the applications just aforementioned would promptly give feedback to the learners/students after their performance and also show their level of understanding, acquiring and developing the Second Language English. These applications would engage students in learning English even outside the classroom. This helps understand the levels of students and moreover these apps test every learner genuinely, so that every learner gets engaged everywhere. Some students generally tend to get scared of speaking English in the presence of their teachers. These technical tools would help this kind of student gain access to acquire the Second Language quicker and better with utmost accuracy as well, which even some teachers are devoid of.

Apart from the technical tools proposed above, it's equally important for the students/learners to take certain internationally acclaimed certifications because of its assessment procedure. When it comes to the assessment procedure, there is a lot of difference between Classroom assessment and assessment in internationally acclaimed certifications like BEC and GETS HE and such.

Classroom assessment is an integral part of teaching and learning. It recognises the diversity of learners inside the classroom. It's an ongoing process of identifying, gathering, organizing and interpreting information about what learners know and can do. But these certifications make assessment more realistic and more reliable. The content is tested based on everyday's work and business tasks and is designed to develop students' business/professional English skills and it also helps them get Practical Language skills.

Basically, in Education institutions, BEC/GETS-HE like many other popular certifications attracts students and enhances their career prospects and also boosts their employability and adds value to their courses by offering the exam as part of their studies. It helps excel in business-related studies with proven English language skills. The exams use real work-related tasks and activities for practical use in the workplace. The Speaking test is face to face to create a more realistic test of communicating successfully in study and work. It provides the

most reliable reflection of students' language skills covering all wide varieties of English (e.g. British English, American English). Tests in BEC/GETS-HE help develop cross-cultural communication skills and overall development of the students. It has an impact on confidence levels through international certification. It also introduces unfamiliar situations and helps stimulate creative thinking and analysis." It also helps students show higher education institutions they are serious about their studies and future career and have the work-focused English language skills they need to do well on their course and also helps claim that they are comfortable operating in an international environment. This means the students can develop their English to the level required for their chosen course of study or career.

Today the whole world looks forward to hiring people with good communication skills, in particular, speaking skills. Despite the barriers of speaking English to most of the learners in educational institutes, there are many practices that would help learners overcome the fear of speaking. The fear of speaking may take away one's opportunities. To overcome it, one has to go through certain proven activities such as Group Discussions, Debates, Presentations, Mock interviews, Self-introduction sessions, JAM (Just A Minute) sessions and Role plays and their subsequent assessment procedures in three modes i.e. Self-assessment, Peer-assessment and Mentor's assessment would certainly help learners exude their confidence and thus make them effective and efficient speakers even in public as well. As these practices are vastly optimized everywhere, in particular, the institute I'm working with, they can be suggested and recommended to the learners of English language. Apart from these activities, learners of English language are instructed to go through some international assessments that are aligned to CEFR (Common European Framework of Reference for Languages), so that learners can know their ability and status on all four skills Listening, Speaking, Reading and Writing. There are a few certification programs such as Business English Certificate (BEC) conducted by Cambridge English, Global English Testing Services (GETS) conducted by QAI (Qualifications and Assessments International), Pearson's Mepro, Cambridge's Empower, Aptis by British Council, STEP from The Hindu Group, English Evaluation Matrix and such like are done on CEFR. These certifications would allow the learners to get genuinely assessed and evaluated, so that they can know where they are and can also showcase their certifications that speak volumes about them. These certifications would also multiply the learners' opportunities and ease their fear in pursuit of their employment, as the aspirants of employment can stake their claim as suitable candidates. This way the difficulty of acquiring and developing the Second Language (English) gradually eases, so that the students can learn English effectively and grab the opportunities available across the globe. Accordingly teachers can transcend their teaching by optimizing the technical tools and these certifications better both for developing their skill of teaching



English and also for allowing students to develop their Second Language, English.

## CONCLUSION

This is our endeavor to improve the standards and proficiency of the students' language skills by applying aforementioned tools and techniques. The certification courses mentioned in our paper would actually enable the students to be more expressive both in written and spoken forms of discourse in a cohesive and logical way. Thus the students are recommended to take up the certification courses as these would act as a touchstone to calibrate their calibre and bring validity to the skills acquired and enhance their chances of taking them to the threshold of the employer and get an opportunity to prove their communicative competence.

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# ANTHROPOMETRIC PARAMETER COMPARISON BETWEEN AUTISTIC AND NORMAL HEALTHY CHILDREN

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## ABSTRACT

**Aim:** The aim of this study was to assess and compare the differences in anthropometric measures between autistic and healthy children. The differences in anthropometric measures between autistic males and females were also assessed and compare.

**Method:** Purposive/deliberate or snowball sampling method was used due to limited availability of autism centers and obtain-ability of the consent of caregivers, parent and directors of these centers. This study was carried out in autism centers, primary and secondary schools across Port Harcourt, Rivers State, Nigeria with a total number of 100 subjects (children and adolescents); 50 normal healthy subjects (comprised of 37 males and 13 females) and 50 subjects with autism (comprised of 37 males and 13 females) within the ages of 5 to 18 years. The measured parameters include; height, weight, body mass index (BMI), craniofacial circumference (CFC) and Mid-Upper Arm Circumference (MUAC). The data collected was analyzed using descriptive statistics and independent sample T-test with p-value at 0.05.

**Result:** A statistical difference in BMI and MUAC between normal and autistic female children was obtained (t-value = -4.390 and -9.875 and at p-value = 0.012 and 0.001 respectively), no statistical difference in CFC between normal and autistic female children with a t-value of 0.544 at a p-value of 0.615. Also, there was a statistical difference in BMI and MUAC between normal and autistic female adolescents (t-value = 3.361 and -2.965 and at p-value = 0.003 and 0.008 respectively). There were significant differences in both parameters at  $p < 0.05$  significance level whilst there was no significant differences in the craniofacial circumference (CFC). This is the same for the female adolescents with autism. In comparison of mean differences in body mass index (BMI), mid-upper arm circumference (MUAC) and craniofacial circumference (CFC) of male and female children with autism, there was a significant difference in MUAC between male and female children with autism with a t-value of -2.597 at p-values of 0.02 respectively and for male and female adolescents with autism, there was a significant difference in BMI between male and female children with autism with a t-value of -2.136 at p-values of 0.041 respectively.

**Conclusion:** The increase in fat component which is more predominant in females is a factor responsible for the increase in MUAC and BMI in the study, due to increased carbohydrate and fat intake as well as sedentary life style. The craniofacial circumference and its variance significantly increased especially in male adolescents, suggesting the relative overgrowth of the brain in a substantial percentage of adolescents in Port Harcourt with autism.

**KEYWORDS:** Autism, Mid Upper Arm Circumference, Craniofacial Circumference, Children, Adolescents

## INTRODUCTION

Autism is the fastest rising developmental disorder in the world today. The centers for disease control released that the incidence of autism is rising at about 12% each year. The lack of successful therapy, etiological heterogeneity, and the increasing incidence make autism one of the most challenging neuro-developmental disorders. Autism is a developmental disorder characterized by difficulties with social interaction and communication, and by restricted and repetitive behavior [1]. Parents often notice signs during the first three years of their child's life [2]. These signs often develop gradually, though

some autistic children experience regression in their communication and social skills after reaching developmental milestones at a normal pace [3]. Autism is associated with a combination of genetic and environmental factors [4]. Risk factors during pregnancy include certain infections, such as rubella, toxins including valproic acid, alcohol, cocaine, pesticides, lead, and air pollution, fetal growth restriction, and autoimmune diseases [5]. Autism affects information processing in the brain and how nerve cells and their synapses connect and organize; how this occurs is not well understood [6]. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5)



combines forms of the condition, including Asperger syndrome and pervasive developmental disorder not otherwise specified (PDD-NOS) into the diagnosis of autism spectrum disorder (ASD) [7]. No treatment has been proven to cure ASD, but several interventions have been shown to reduce symptoms and improve the ability of people with ASD to function and participate independently in the community [8]. Behavioral, psychological, education, and/or skill-building interventions may be used to assist people with ASD to learn life skills necessary for living independently, as well as other social, communication, and language skills. Therapy also aims to reduce challenging behaviors and build upon strengths. Some autistic adults are unable to live independently [9]. An autistic culture has developed, with some individuals seeking a cure and others believing autism should be accepted as a difference to be accommodated instead of cured [10].

Globally, autism is estimated to affect 24.8 million people as of 2015. In the 2000s, the number of people with autism worldwide was estimated at 1–2 per 1,000 people [11]. In the developed countries, about 1.5% of children are diagnosed with ASD as of 2017 [12], from 0.7% in 2000 in the United States. It is diagnosed four-to-five times more often in males than females. The number of people diagnosed has increased dramatically since the 1960s, which may be partly due to changes in diagnostic practice [11]. The question of whether actual rates have increased is unresolved.

## MATERIALS AND METHOD

This study was carried out in autism centers, primary and secondary schools across Port Harcourt, Rivers State, Nigeria with a total number of 100 subjects (children and adolescents); 50 normal healthy subjects (comprised of 37 males and 13 females) and 50 subjects with autism (comprised of 37 males and 13 females) within the ages of 5 to 18 years.

For the children subjects:

- The children with autism comprised of 15 males and 2 females;
- The normal healthy children comprised of 8 males and 4 females.

For the adolescent subjects:

- The adolescents with autism comprised of 22 males and 11 females;
- The normal healthy adolescents comprised of 29 males and 9 females.

**Materials Used:** The materials used for carrying out this study were a measuring tape, which was used for measuring the height, mid-upper arm circumference and craniofacial circumference; and a weighing balance or weight scale, which was used for measuring weight as the name implies.

**Data Collection:** The method of data collection was a type of sampling technique known as purposive/ deliberate or snowball sampling. Snowball sampling is a sampling technique that is based on recommendation from different sources. It is called a purposive/ deliberate sampling method because of the limited

availability of autism centers and obtain-ability of the consent of caregivers, parent and directors of these centers.

## CRITERIA FOR DATA COLLECTION

### Inclusive criteria

The following were the criterions for the selection of the student subjects:

- All the subjects were within the age range (5 to 18 years);
- The subjects were selected from autism centers across Port Harcourt;
- The selected subjects must be children and adolescents with autism and autism spectrum disorders only;
- The subjects were healthy free, of congenital abnormalities and defects.

### Exclusive criteria

The following criterions lead to the exclusion of some subjects:

- Subjects below the age of 5 and above 18 years;
- Subjects from centers outside Port Harcourt district;
- Subjects with other disorders such as Down Syndrome, Cerebral Palsy, etc.;
- Subjects with congenital abnormalities such as malformation of the face, bone structure etc.

**Parameters Measured:** The following are the parameters that were measured:

- **Craniofacial circumference (CFC):** Known as Head Circumference, is an important measurement as it is closely related to brain size. It is used with other measurements to detect other conditions.
- **Weight:** This is one of the most important measurements in nutritional assessment. It is an important variable used in equations predicting macronutrient and fluid requirements and a variable index in acute malnutrition.
- **Height:** This measurement is important for calculating certain indices such as height-for-age, weight-for-height, body mass index (BMI), and the creatinine height index and for estimating basal energy expenditure.
- **Body Mass Index (BMI):** BMI (a weight-for-height measurement) can also be used to determine nutritional status and is calculated by dividing weight in kilograms by the square of height in meters ( $\text{kg}/\text{m}^2$ ). It can be influenced by age, gender and race.
- **Mid-Upper Arm Circumference (MUAC):** The arm contains both subcutaneous fat and muscle; therefore, a decrease in MUAC (also referred to as mid arm circumference MAC) may reflect either a reduction in muscle mass, subcutaneous tissue of both. It is a simple, low-cost, objective method of assessing nutritional status. It can also be obtained quickly and non-invasively and can provide a more accurate assessment of nutritional status

### Method of Data Analysis

The data collected was analyzed using descriptive statistics and independent sample T-test with p-value at 0.05.



**RESULTS**

**Table 1: Descriptive characteristics of the Age of the study population**

Group Statistics	N (%)	Age (years) Mean ± SD
<b>Male Children</b>		
Normal	8 (34.8)	6.88±1.46
Autism	15 (65.2)	7.20±1.37
<b>Female Children</b>		
Normal	4 (66.7)	7.50±1.29
Autism	2 (33.3)	9.00±0.00
<b>Male Adolescents</b>		
Normal	29 (56.9)	14.31±2.57
Autism	22 (43.1)	14.45±3.05
<b>Female Adolescents</b>		
Normal	9 (45.0)	14.44±2.65
Autism	11 (55.0)	13.73±2.45

This table shows the mean age differences of the children and adolescents used in this study. The mean age for male Autistic children was 7.20±1.37years and that of normal male children was 6.88±1.4years, while the mean age of female autistic children was 9.00±0.00years and that of the normal female children was 7.5±1.29years respectively. The mean age of

normal male adolescents was 14.31±2.57years and the mean age of male adolescents with autism was 14.45±3.05 while the mean age of the female adolescent was 13.73±2.45years and that of the normal female adolescents was 14.44±2.65years respectively.

**Table 2: Mean differences in body mass index (BMI), mid-upper arm circumference (MUAC) and craniofacial circumference (CFC) of normal and male children with autism (aged 5 to 9 years)**

Group	Parameters	N	Mean ± SD	t-value	p-value	Inference
Normal	BMI (kg/m <sup>2</sup> )	8	16.69±4.71	-0.617	0.544	NS
Autism		15	17.76±3.57			
Normal	MUAC (cm)	8	18.50±4.50	-1.274	0.216	NS
Autism		15	20.40±2.69			
Normal	CFC (cm)	8	53.13±1.89	0.557	0.583	NS
Autism		15	52.80±0.94			

This table represents the mean differences in BMI, MUAC and CFC of normal male children and male children with autism. In the terms of BMI, our result showed that the mean BMI of male children with autism was 17.76±3.57kg/m<sup>2</sup> was relatively higher than that of the normal male children with a mean value of 16.69± 4.71kg/m<sup>2</sup>. In terms of the MUAC, the study showed the

mean value of MUAC of autistic male children was relatively higher with a value of 20.40±2.69cm while normal was male children had mean value of 18.50±4.50cm. The mean craniofacial circumference (CFC), of autistic children was 52.80±0.94cm while mean of normal children was 52.80±0.94cm.

**Table 3: Mean differences in body mass index (BMI), mid-upper arm circumference (MUAC) and craniofacial circumference (CFC) of normal and female children with autism (aged 5 to 9 years)**

Group	Parameters	N	Mean ± SD	t-value	p-value	Inference
Normal	BMI (kg/m <sup>2</sup> )	4	16.00±1.91	-4.390	<b>0.012</b>	<b>S</b>
Autism		2	22.47±0.81			
Normal	MUAC (cm)	4	17.50±1.00	-9.875	<b>0.001</b>	<b>S</b>
Autism		2	25.50±0.70			
Normal	CFC (cm)	4	53.00±1.15	0.544	0.615	NS
Autism		2	52.50±0.70			



This table represents the mean differences in BMI, MUAC and CFC of normal female children and female children with autism. The mean BMI of female children with autism was  $22.47 \pm 0.81 \text{ kg/m}^2$  and is relatively higher than that of the normal female children that was  $16.00 \pm 1.91 \text{ kg/m}^2$ . The MUAC female

children with autism had a high mean value of  $25.50 \pm 0.70 \text{ cm}$  than that of the normal female children with mean value of  $17.50 \pm 1.00 \text{ cm}$ . The CFC of autistic female children  $52.50 \pm 0.70 \text{ cm}$  and normal female children was  $53.00 \pm 1.15 \text{ cm}$ .

**Table 4: Mean differences in body mass index (BMI), mid-upper arm circumference (MUAC) and craniofacial circumference (CFC) of normal and female adolescents with autism (aged 10 to 18 years).**

Group	Parameters	N	Mean $\pm$ SD	t-value	p-value	Inference
Normal	BMI ( $\text{kg/m}^2$ )	9	18.85 $\pm$ 1.89	3.361	<b>0.003</b>	S
Autism		11	23.00 $\pm$ 3.27			
Normal	MUAC (cm)	9	22.56 $\pm$ 2.92	-2.965	<b>0.008</b>	S
Autism		11	26.00 $\pm$ 2.28			
Normal	CFC (cm)	9	54.33 $\pm$ 2.00	1.360	0.191	NS
Autism		11	53.27 $\pm$ 1.49			

Table 4 shows the mean differences in BMI, MUAC and CFC of normal female adolescents and female adolescents with autism. In the terms of BMI, findings revealed that the mean BMI of female adolescents with autism ( $23.00 \pm 3.27 \text{ kg/m}^2$ ) was relatively higher than that of the normal female adolescents ( $18.85 \pm 1.89 \text{ kg/m}^2$ ). In terms of the MUAC, findings revealed

also that the mean MUAC of female adolescents with autism ( $26.00 \pm 2.28 \text{ cm}$ ) was relatively higher than that of the normal female adolescents ( $22.56 \pm 2.92 \text{ cm}$ ). Also, in the terms of the CFC, findings revealed that the mean CFC of normal female adolescents ( $54.33 \pm 2.00 \text{ cm}$ ) was relatively higher than that of female adolescents with autism ( $53.27 \pm 1.49$ ).

**Table 5: Mean differences in body mass index (BMI), mid-upper arm circumference (MUAC) and craniofacial circumference (CFC) of normal and male adolescents with autism (aged 10 to 18 years).**

Group	Parameters	N	Mean $\pm$ SD	t-value	p-value	Inference
Normal	BMI ( $\text{kg/m}^2$ )	29	19.68 $\pm$ 3.09	-1.453	0.153	NS
Autism		22	20.84 $\pm$ 2.43			
Normal	MUAC (cm)	29	24.10 $\pm$ 4.02	-1.984	0.053	NS
Autism		22	26.22 $\pm$ 3.44			
Normal	CFC (cm)	29	54.72 $\pm$ 1.85	-0.005	0.996	NS
Autism		22	54.73 $\pm$ 2.41			

Table 5 shows the mean differences in BMI, MUAC and CFC of normal male adolescents and male adolescents with autism. In the terms of BMI, findings revealed that the mean BMI of male adolescents with autism ( $20.84 \pm 2.43 \text{ kg/m}^2$ ) was relatively higher than that of the normal male adolescents ( $19.68 \pm 3.09 \text{ kg/m}^2$ ). In terms of the MUAC, findings revealed

also that the mean MUAC of male adolescents with autism ( $26.22 \pm 3.44 \text{ cm}$ ) was relatively higher than that of the normal male adolescents ( $24.10 \pm 4.02 \text{ cm}$ ). Also, in the terms of the CFC, findings revealed that the mean CFC of normal male adolescents ( $54.72 \pm 1.85 \text{ cm}$ ) was relatively the same as than that of male adolescents with autism ( $54.73 \pm 2.41 \text{ cm}$ ).



**Table 6: Mean differences in body mass index (BMI), mid-upper arm circumference (MUAC) and craniofacial circumference (CFC) of male and female children with autism (aged 5 to 9 years)**

Group	Parameters	N	Mean ± SD	t-value	p-value	Inference
Male	BMI (kg/m <sup>2</sup> )	15	17.76±3.57	-1.806	0.091	NS
Female		2	22.46±0.81			
Male	MUAC (cm)	15	20.40±2.69	-2.597	<b>0.02</b>	<b>S</b>
Female		2	25.50±0.71			
Male	CFC (cm)	15	52.80±0.94	0.430	0.673	NS
Female		2	52.50±0.71			

Table 6 shows the mean differences in BMI, MUAC and CFC of male and female children with autism. In the terms of BMI, findings revealed that the mean BMI of female children with autism (22.46±0.81kg/m<sup>2</sup>) was relatively higher than that of the male children with autism (17.76±3.57kg/m<sup>2</sup>). In terms of the MUAC, findings revealed also that the mean MUAC of female

children with autism (25.50±0.71cm) was relatively higher than that of the male children with autism (20.40±2.69cm). Also, in the terms of the CFC, findings revealed that the mean CFC for female children with autism (52.50±0.71cm) was relatively the same as that of male children with autism (52.80±0.94cm).

**Table 7: Mean differences in body mass index (BMI), mid-upper arm circumference (MUAC) and craniofacial circumference (CFC) of male and female adolescents with autism (aged 10 to 18 years)**

Group	Parameters	N	Mean ± SD	t-value	p-value	Inference
Male	BMI (kg/m <sup>2</sup> )	22	20.84±2.43	-2.136	<b>0.041</b>	<b>S</b>
Female		11	23.00±3.27			
Male	MUAC (cm)	22	26.22±3.45	0.197	0.845	NS
Female		11	26.00±2.28			
Male	CFC (cm)	22	54.73±2.41	1.824	0.078	NS
Female		11	53.27±1.49			

Table 7 shows the mean differences in BMI, MUAC and CFC of male and female adolescents with autism. In the terms of BMI, findings revealed that the mean BMI of female adolescents with autism (23.00±3.27kg/m<sup>2</sup>) was relatively higher than that of the male adolescents with autism (20.84±2.43kg/m<sup>2</sup>). In terms of the MUAC, findings revealed also that the mean MUAC of female adolescents with autism (26.00±2.28cm) was relatively the same as that of the male adolescents with autism (26.22±3.45cm). Also, in the terms of the CFC, findings revealed that the mean CFC for male adolescents with autism (54.73±2.41cm) was relatively higher than that of male adolescents with autism (53.27±1.49cm).

of the autism centers especially) refused to give their consent to allow researcher carry out studies in their institutes. This was also the reason behind the mean age value of the normal female adolescents being relatively higher than that of the female adolescents with autism. Another prominent reason for the normal children being relatively higher was because, in the 2000s, the number of people with autism worldwide was estimated at 1–2 per 1,000 people as according to Newschaffer *et al.* [11].

The mean age of male adolescents with autism and normal male adolescents was relatively the same and this is because autism shows a striking male bias in prevalence, with approximately 4 affected males for every 1 affected female. It was observed that the BMI for the children/adolescents with autism was relatively higher than that of normal healthy children. There was no statistical difference in BMI, MUAC and CFC between normal and autistic male children with a t-value of -0.617, -1.272 and 0.557 respectively and at a p-value of 0.544, 0.216 and 0.583 respectively (Table 2). Although a statistical difference in BMI

## DISCUSSION

The age of the male and female children with autism is relatively higher than that of the normal male and female children. This was due to the sampling method (purposive/deliberate sampling) used by the researcher in carrying out the study as many institutions (both of learning and



and MUAC between normal and autistic female children was obtained (t-value = -4.390 and -9.875 and at p-value = 0.012 and 0.001 respectively), no statistical difference in CFC between normal and autistic female children with a t-value of 0.544 at a p-value of 0.615 (Table 3). Also, there was a statistical difference in BMI and MUAC between normal and autistic female adolescents (t-value = 3.361 and -2.965 and at p-value = 0.003 and 0.008 respectively), no statistical difference in CFC between normal and autistic female adolescents with a t-value of 1.360 at a p-value of 0.191 (Table 4). There was no statistical difference in BMI, MUAC and CFC between normal and autistic male adolescents with a t-value of -1.453, -1.984 and -0.005 at a p-value of 0.153, 0.053 and 0.996 respectively (Table 5).

According to Anderson *et al.* [13], young people are frequently recommended to participate in leisure activities including play, sports, hobbies, and social activities, children and adolescents with autism tend to spend time in passive play and maladaptive behaviors and they are less likely to spontaneously participate in organized leisure activities such as sports as such, they are expected to have a high BMI compared to normal children/adolescents. But the findings of this study do agree with the statement by Anderson *et al.* [13] as BMI for female autistic children/adolescent was significant when compared with normal children/adolescents. In contrast, it is not in agreement with the results of this study for male autistic children/adolescent when compare with normal children/adolescents. Thus can be due to the fact that male children/adolescents tend to involve in playful activities compared to female children/adolescents. Pan [14] said in his study that social and behavioral impairments in ASD can limit children opportunity to participate in physical activity and recreation programs that eventually end to their inactivity, also Curtin *et al.* [15] opined that physical inactivity predisposes children with ASD to several comorbid conditions such as overweight and obesity. This study is slightly in conformity with these statements as this study revealed a significant difference in BMI among female autistic children/adolescents when compared with normal.

Although there were relative differences in the BMI, MUAC and CFC, there was no significant difference at  $p < 0.05$  significance level for the male children with autism. Due to the relatively higher values of the body mass index (BMI) and mid upper arm circumference (MUAC) of the female children with autism, as a physical inactivity due to social impairments, there were significant differences in both parameters at  $p < 0.05$  significance level whilst there was no significant differences in the craniofacial circumference (CFC). This is the same for the female adolescents with autism. Also, there were relative differences in the BMI, MUAC and CFC, there was no significant difference at  $p < 0.05$  significance level for the male adolescents with autism. There were relatively higher values in the MUAC and BMI respectively of the female children and adolescents indicating significant differences at  $p < 0.05$  significance level. This was because of the increase in fat

component which is more predominant in females and is the factor responsible for the increase in MUAC and BMI in the study, due to increased carbohydrate and fat intake as well as sedentary life style. The researcher also gathered from parents that most times due to the social impairments of children and adolescents with autism, they lack self-esteem and prefer solitary confinements to social interactions leading to this sedentary life cause overweight most times or obesity.

Furthermore, in comparison of mean differences in body mass index (BMI), mid-upper arm circumference (MUAC) and craniofacial circumference (CFC) of male and female children with autism, there was no statistical difference in BMI and CFC between male and female children with autism with a t-value of -0.1806 and 0.430 at p-values of 0.091 and 0.673 respectively; while there was a significant difference in MUAC between male and female children with autism with a t-value of -2.597 at p-values of 0.02 respectively. According to the study by Sheetal and Sunil [16] that did a comparison study of anthropometric measurements between autistic children and normal healthy children revealed that there was no significant difference in MUAC between male and female autistic children (t-value = 0.428 at p-value = 0.505). This is not in conformity with the findings of this study. Also, study by Sheetal and Sunil [16], showed that the mean weight of the autistic children ( $50.97 \pm 13.8 \text{ kg}$ ) was found to be greater than the controls ( $44.21 \pm 5.3 \text{ kg}$ ) which was found to be statistically significant ( $p = 0.001$ ). Although weight was not presented in the result of this present study, it is a parameter for assessing BMI. The tendencies observed from this study agrees with that of Sheetal and Sunil [16] who stated that the weight of autistic children is greater than the healthy group of children whereas there was no significant difference between the weight of males and females of the autistic group of children. So, because of the tendency of the autistic children to gain unhealthy weight, associated factors should be kept in mind while approaching a case of autism and an individualized treatment plan should be formulated for gaining maximum effectiveness, this is strongly proved by the significance in BMI obtained from this study. Finally, in comparison of mean differences in body mass index (BMI), mid-upper arm circumference (MUAC) and craniofacial circumference (CFC) of male and female adolescents with autism, there was no statistical difference in MUAC and CFC between male and female children with autism with a t-value of -0.197 and 1.824 at p-values of 0.845 and 0.078 respectively; while there was a significant difference in BMI between male and female children with autism with a t-value of -2.136 at p-values of 0.041 respectively

## CONCLUSION

Body mass index and mid-upper arm circumference increased because of a significant increase in subcutaneous fat thickness in female adolescents with autism. This tendency with a probable decrease in muscle mass was more evident in male or in older children, likely resulting from sedentary lifestyle and food selectivity. The craniofacial circumference and its variance



significantly increased especially in male adolescents, suggesting the relative overgrowth of the brain in a substantial percentage of adolescents in Port Harcourt with autism. As a result of autistic children and adolescent (especially females) proclivity for gaining unhealthy weight, relevant issues should be considered when approaching a case of autism, and a tailored treatment plan should be devised for maximum success.

## RECOMMENDATIONS

It is recommended that Centers for autism should be more open to students and researchers that to enable them carry out study on autism and awareness should be created on the need for providing these children with the adequate resources for their training.

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## INSURGENCY IN THE 1990s: THE CASE OF TRIPURA

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### ABSTRACT

Since its merger with the Indian Union in 1949, Tripura, a tiny north-eastern Indian state, has seen an increase in insurgent activities led by its educated tribal middle class. During the post-merger era, the newly formed educated tribal middle class felt disgruntled with the government's anti-tribal policies and actions. The new Indian Constitution of 1950 did not include a provision for Tripura's tribal areas to have their own autonomous district. The Tripura Land Revenue and Land Reform Act of 1960 made no provision for Maharaja Bir Bikram Kishore's "tribal reserve." Bengali was designated as the official language of Tripura by the Official Language Act of 1962. These are the major reasons that led to the genesis of many tribal-centric insurgent groups. During the period covered by this study, the 1990s, many insurgent groups, such as the NLFT, ATTF, and others, launched various activities challenging state authorities to meet their demands or risk overthrowing the state administration. In this paper, I tried to provide a picture of insurgent activities that happened in Tripura during the period under this study.

**KEYWORDS:** *Insurgency, NLFT, Autonomous, Tribal, Reserve*

### INTRODUCTION

The terms terrorism, separatism, secessionism, and insurgency are frequently used to describe a situation in which violent civil clashes erupt either against the established political regime or against the dominant class or group, with a variety of demands including separate sovereign status, regional autonomy within the State, ethnic, cultural, or religious independence, and so on. The term 'terrorism' describes a situation in which disgruntled sections turn to violence against the State, which is seen as an institutional representation of majoritarianism. Terrorists may also target members of the general population. Terrorist acts are carried out to put fear or to reveal the group's true goals. Separatism, on the other hand, is a desire for a distinct, but not always independent political life and administration.

Both terrorism and separatism are not the same thing as secessionism. It is a formal statement of intent to exist as an independent political entity. Insurgency is the tactic used in every case. As a result, the term "insurgency" will be used to describe violent movements by people to achieve any of the goals listed above, such as establishing a separate administrative entity under the same sovereign authority

The Tripura insurgency was an armed confrontation between India and multiple separatist rebel groups inside the state of Tripura. During the period covered by this paper, an increased insurgency and a wave of violence interrupted civic life and communications, as well as the closure of many educational and financial institutions, posing a danger to the government's power.

An examination of insurgency in Tripura shows that it happened due to a number of factors, including demographic pressures, cultural deprivation, poverty, land alienation and eviction, unemployment, and underdevelopment, among

others. An acute sense of inequality among group members, the establishment of a powerful elitist leadership, political competition and manipulation, governmental policies and acts, and easy access to external backing are all adequate circumstances.

### MAJOR INSURGENT ORGANIZATIONS

#### NLFT (National Liberation Front of Tripura)

It is assumed that it was founded in April 1989. Its first violent activity took place in December 1991, the name of that operation was 'Operation Genesis'. The major leaders of NLFT were Dhananjay Reang, Ananda Reang, Nitya Debbarma, and others. It was founded after B K Hrankawl surrendered and TNV was destabilized.

#### Demands of NLFT

1. Form a separate nation with Tripura.
2. Safeguarding and Propagating tribal culture.
3. Christianity to be the religion of the State.
4. To support a political party called IPFT etc these are the major demands of NLFT.

Types of activities carried out by NLFT

1. Kidnapping for extorting money.
  2. Looting banks and Bazaars for Money.
  3. Attacking security personnel and looting their arms
  4. Export illegal goods for earning money.
  5. Attacking and burning villages.
  6. Propagation of Baptist Church.
  7. End of TSR (Tripura State Rifles) etc.
- Tripura Resurrection Army (TRA)

In 1992 tension arises over the question of who will lead NLFT, Tripuri or Reangs. As the tension rises an attempt was also made to kill Dhananjay Reang. In 1993 Dhananjay



Reang founded TRA. This organization does not have any specific demands.

**Other Groups** are Tripura Tribal Volunteers Force (TTVF), National Militia Force (NMF), Ahimsa Bharat Suraksha Force (ABSF), Tripura National Force (TNF), Social Democratic Front of Tripura (SDFT), All Tripura Volunteers Force (ATVC), Tripura Liberation Organization (TLO), Bru National Liberation Front (BNLF), Tripura Tribal Youth Force (TTYF). These are minor organizations compared to TNV, NLFT, and TRA and they did not have any specific demands.

## ACTIVITIES OF INSURGENTS

### Kidnapping: A Recurrent Event

In the later part of the 1990s kidnapping was established as a lucrative business for insurgent groups. They found this as the shortest way of making a large amount of money within a short period of term. The growing kidnapping trade has added a new dimension to the womb of terrorism in this terror-ridden state. Terrorism in the state, which is more than two decades old, has gradually turned into a trade, which has become clear from the record of terrorism in the state in the last few years. According to the State Police's various intelligence sources and information published in newspapers and magazines at different times, the abduction trade of so-called enemies in the state has been on the rise since 1993. Where 96 people were abducted from across the state in 1993, it has increased fivefold in the last seven years to 480 in 1999 and to 484 by August 2000.

Surprisingly, not only the lower-level officials of schools, blocks, banks, panchayats, rural development-related government offices but also the senior officials of the administration have to pay tribute for fear of abduction of these so-called terrorists. That is why government officials have stopped visiting remote rural areas for fear of being abducted. The rising cases of abduction had seriously affected the lives of common people.

### Attacks on Security Personnel

There were frequent incidents of ambush between insurgents and armed forces. It seems a daily business of insurgents to challenge armed forces staying in remote areas for protecting civilians.

### Major incidents

1992-On 22nd May Nepali Tilla Police outpost in Fatikray ATTF attacked, killed three police constables, and looted arms, on 8th October ATTF attacked Ganganagar Police Station, Killed four Constables, and left six wounded.

1993-On 8th July TTF attacked BSF Jawans at Karamcherra in Nalkata, one constable and looted arms, on 2nd October again BSF Jawans were attacked Karamcherra, Nalkata, one Jawan was killed and three jawans were wounded.

1994-On 16th March CRPF Jawans were attacked at Choilengta near Manughat, one jawan was killed, on 8th December CRPF jawans were attacked in Ganganagar, one constable was killed and seven jawans were wounded.

1995- On 7th June at Anandabazar near Kanchanpur CRPF Jawans were attacked who were escorting a government official, two CRPF Jawans and Two Police constables were killed, on 10th July at Jalefa 4 CRPF Jawan was killed, on 28th July, at Jayram Para in Jirania four Police Personnel were killed, on 14th September three CRPF jawans were killed at Chechua-Bampur Road, on 2nd October two CRPF Jawans were killed in Harinchara, Ambasa.

1996- On 21st January six CRPF Jawans were killed in Hezamara, on 8th April in Gabardi six CRPF Jawans were killed, on 30th July two BSF Jawans were killed by NLFT, on 23rd September at Belchara, Khowai four Indian Army personnel were killed, on 7th November at Raisyabari, seven BSF Jawans were killed using Land Mines.

1997-On 4th January two Assam Rifles Jawans were killed in Champling, on 7th May 18 CRPF Persons were killed at Chelagang, Natunbazar, on 10th June in Chawmanu seven territorial army personnel were killed.

1998-On 12th February seven TSR Jawans were killed at Ganganagar, Ambassa-Gandachera Road, on 20th March ATTF killed one Major and one Nayek of the Indian Army, on 22nd March ATTF killed six TSR Jawans at Dhupchara, Kalyanpur, on 29th June at Kuyaiyang, Baikhora two TSA Jawans were killed,

1999- On 14th March at Nasik Para insurgents killed one OC of TP and an assistant commandant of CRPF, on 11th July five TSR personnel were killed at Karbook, Natunbazaar, on 28th July six BSF Jawans were killed at Gumsing Para, Khowai, on 22nd September four Assam Rifle Jawans were killed at Kupilong, Udaipur, On 26th September in Chaumanu eight BSF Jawans were killed, on 28th November at Krishnapur, Khowai three forest guards were killed, on 21st December six TSR Jawans were killed at Tairuma, Baikhora. These kinds of incidents continued to happen at a high and low pace in Tripura for a long time.

### Attacks on Civilians

Insurgents used to target civilians to show their anger towards authorities who were not fulfilling their demands. Attacking civilians include burning villages, killing people with gunshots, laying land mines on roads, etc. Civilians belonging to tribal and non-tribal communities were attacked.

### Major Incidents,

1992- On 8th May at Kakrachara, Teliamura three fishermen were killed. 1994- On 20th January five-armed tribal youth were killed assuming that they were insurgents, on 8th September a private Jeep was attacked and killed four people, at Gandacharra-Ambassa Road, on 7th September ATTF attacked Purba Colony at Sidhai and killed three people, on 16th December NLFT looted more than a lakh rupees from UBI Bank at Vangmun. 1995- On 1st August insurgents killed five villagers at Marachara, on 2nd October in a tussle between Chakma people and insurgents one villager was killed at Lalchara, Manu, on 19th November NLFT and NSCN attacked UBI Bank at Kamalpur and looted Thirty One Lakh Rupees. 1996- On 21st January one person was killed at Hezamara, On 2nd July NLFT attacked Grameen Bank at Manai Pathar, Shantir Bazaar, looted more than eight lakh



rupees and killed one and wounded five, on 6th September NLFT attacked Jampuijala Gramin Bank and looted eight lakh rupees, on 12 October five killed at Champaknagar.

1997- On 11th February mass killing happened at midnight at Takarjala, fifteen were killed and the whole village was burnt, On 16th February tussle took place between insurgents and villagers at Ramchandraghat, Khowai, houses were burnt and many left wounded, on 2nd July NLFT attacked Gramin Bank at Manai Pathar and looted more than eight lakh rupees and killed one and wounded six. 1998- On 11th February five killed at Urbari, Sadar and at Midnight seven killed and six wounded at Ganaki, on 1st April Bimal Sinha, the then health minister was killed at Salema, Kamalpur, on 10th June owner of Adarini Tea Garden was kidnapped and his son was killed at the Garden, on 26th July insurgents killed 2, kidnapper 2, burnt and 30 houses at Charkara, Santir Bazaar, on 5th August mass killing happened at Narendrapur Tea Garden, Sadar, five tea garden workers were killed and looted one lakh eighty thousand rupees, on 15th August a bus carrying passenger was attacked at Kanchanpur-Pecharthal Road, killed six and wounded thirteen passengers, on 22nd August a bus carrying tribal people was attacked and killed three students and wounded fifteen students, on 28th August at Shiv Bari, Kamalpur seven were killed, six left wounded and kidnapped seven people, on 4th September insurgents attacked Kanairambari, Takarjala and killed one and kidnapped eight, on 10th October eight people killed, five wounded and burnt many houses at Trishabari, Teliamura, on 3rd November different areas at Mainama, Baramura, and Bisramganj were attacked and killed twenty three persons and wounded thirty six, on 29th November Dumbur Hydro Electric Project was attacked one killed and eight kidnapped.

1999- On 2nd February killed four and wounded three at Kanchanmala Bazaar, on 3rd February more than six hundred houses were burnt and killed eight persons at Kanchanmala, on 10th April insurgents killed five and wounded seven at Tulamura Bazaar, Udaipur, on 12th August Shivbari was gheraoed by insurgents and killed six villagers, on 28th August NLFT looted more than twenty-nine thousand rupees from Gramin Bank at Haflong Chara, on 15th November at Panchabati, Sidhai mass killing took place where seventeen people were killed, wounded fourteen, and kidnapped five, on 10th December five killed and ten were wounded at Rupini Para, Pecharthal, on 23rd December three killed and five wounded at Lakshmichara, Melaghar and in retaliation to this attack five tribal villages at Lakshman Depha were burnt and killed three people. These are the incidents that were reported in media.

## CONCLUSION

As a result of unrestricted migration from erstwhile East Bengal and Bangladesh, Tripura's tribal majority population has changed dramatically. The tribals were forced to the hills, and the Bengali-speaking locals and migrants dominated the governance in the state. The insurgency movement began as a reaction to this situation.

The period under this study witnessed both fierce insurgency and the surrender of insurgents in large numbers.

Disgruntled TNV cadres led by Dhananjay Reang created the National Liberation Front of Tripura (NLFT) in March 1989. Since then, the NLFT has gone through various splits. The leadership and cadres of the group are largely based in Bangladesh. One of the two active organisations in Tripura is the NLFT's dominant faction, led by Biswamohan Debbarma. The Ranjit Debbarma-led All Tripura Tiger Force (ATTF), founded in July 1990 as All Tripura Tribal Force, is the second organisation, in addition to the NLFT, which has resolutely refused to be brought into any peace settlement with the government. On August 23, 1993, the ATTF and the Tripura government signed a memorandum of understanding. However, Ranjit Debbarma's faction chose to continue their armed campaign. The group has taken refuge in Bangladesh throughout the years and engages in hit-and-run operations in Tripura. In the early 2000s, there was a high frequency of insurgent activities. It was after 2005 that their activities declined significantly. The state administration used a two-pronged strategy to combat the most recent wave of insurgency. On the one hand, the "disturbed territory" was subjected to a robust counter-insurgency campaign aimed at restoring the rule of law. On the other hand, in the areas that were liberated from insurgent control, the administration was soon resurrected, and development programmes such as SSA, MGNREGA, and NRHM were quickly implemented. Decentralized political organisations such as the PRIs, the Tripura Tribal Autonomous District Council, and others began to play an important role in fostering an environment conducive to peace and understanding.

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# INFLUENCE OF CROPS, WHICH ARE INCLUDED IN THE SYSTEM OF SHORT-TERM CROP ROTATION ON THE AMOUNT OF NUTRIENT IN THE SOIL

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## ABSTRACT

Soils of the Republic of Karakalpakstan are salty and low in fertility. In such soils, measures should be taken to improve the meliorative condition of soils and increase soil fertility for receiving high yield from agricultural crops. In order to increase soil fertility, it is better to use organic fertilizers.

Field experiments have been carried out to determine the influence of crops which are included in the system of short-term crop rotation on the amount of nutrients in the soil. In this case, in determining the influence of mung bean, sesame and soybean, which were sown before winter wheat, on the amount of nutrients in the soil, in the system of crop rotation 1: 2, cotton: past crop + mung bean for siderate + 20 t / ha of manure + winter wheat, when it was sown in the method of winter wheat the amount of humus in the soil was determined to increase by 0.40 %.

**KEYWORDS:** crop rotation, nutrients, past crops, humus, winter wheat, fertility, soil salinity, agrochemical properties.

## INTRODUCTION

Soils of the Republic of Karakalpakstan is characterized by salinity and low soil fertility. In these areas, high yields from agricultural crops are achieved through the use of mineral fertilizers in high standards. Application of mineral fertilizers at high amounts has a negative impact on the ecological condition of the soil and reduces its agrochemical and geophysical properties. Therefore, it is necessary to increase the fertility of the soil, by using organic and siderate crops, and to add to the crop rotation system, crops which have remaining roots and residues. Increasing the amount of organic matter in the soil at the expense of plant residues is the most economically and ecologically efficient way.

Methods of the research. Used for the field, the experiment includes 9 variants, repeated 4 times, one layer, systematic. "Krasnodarskaya-99" variety of winter wheat, "Durdona" variety of mung bean, "Karshyga"

variety of sesame and "Orzu" variety of soybean were used in the experiment.

1<sup>st</sup> variant of the experiment, control, continuous sowing winter wheat, 2-4<sup>th</sup> variants, sowing mung bean, sesame and soybean as past crops before sowing winter wheat, 5-7<sup>th</sup> variants, sowing mung bean, sesame, soybeans, before winter wheat and additionally 10 t/ha manure was used, 8<sup>th</sup> variant, mung bean was sown for grain before winter wheat and additionally manure added in the amount of 2 t/ha, 9<sup>th</sup> variant, mung bean was sown for grain as a past crop, the it was sown for siderate and additionally 2 t/ha manure was used, then winter wheat was sown.

## THE RESULTS OF THE RESEARCH AND ANALYZING THEM

Samples were taken from 0-30 and 30-50 cm layers of soil to determine their effect on the amount of nutrients in the structure of crop rotation.



The productivity of agricultural crops depends on the meliorative condition of the land and soil fertility. The more organic mass in the soil, the higher the humus content. For this, it is necessary to increase the amount of plant residues in the soil.

In the experiment, it was determined at the beginning and at the end of the experiment how to influence the fertility of the soil, when winter wheat and cotton were sown before winter wheat.

In the control variant (var. 1) of 2019, winter wheat was grown (sown in autumn 2018), mung bean, sesame and soybean were sown as past crops.

At the beginning of 2019, the amount of humus in the 0-30 cm layer of soil was 0.720-0.730%, at the end of the season it was 0.720-0.740%, and the amount of humus increased by 0.010%. As can be seen from the data, the amount of humus in the control variant of the experiment, i.e. in the control variant of sowing winter wheat, decreased by 0.010% at the end of the season. In other variants, the amount of humus did not decrease due to the presence of legumes, but increased by 0.010%.

The total and active amount of nutrients: nitrogen, phosphorus and potassium decreased in the control variant at the end of the season. In variants 2-9 of the experiment, these indicators differ slightly.

In the autumn of 2019, winter wheat was sown in all variants. In order to determine the influence of past crops on soil fertility, samples were taken from 0-30 cm to 30-50 cm layers of the soil at the beginning and end of the 2020 season.

At the beginning of the season, the amount of humus in the soil in the layer of 0-30 cm was 0.720-0.760%, with the lowest values in the control variant. Past crops, sown before winter wheat, norms of used organic fertilizers and interval crops influence differently on the amount of humus in the soil differently.

At the end of the season the amount of humus in the control variant decreased by 0.010 % comparing to the beginning of the season, it should be mentioned that due to sowing winter wheat in all variants the amount of humus decreased by 0.005-0.010 % at the end of the season comparing to the beginning, but the total amount of humus was 0.720-0.730 % in autumn 2019, 0.710-0.755 % in autumn 2020, and in variants of crop rotation it was 0.730-0.755 %.

Past crops, the norms of applied organic fertilizers allowed to increase soil fertility. When winter wheat was sown after legumes, which was sown for grain in the variants of short crop rotation (var. 2-4), the amount of humus at the end of the season in 2020 was 0.730-0.735%, when manure was used in the amount of 10 t / ha after legumes (var. 5-7) – 0.740 %, when 20 t/ha manure was used – 0.760 % and in the variant 9, when mung bean for grain + interval crop mung bean + 20 t/ha manure + winter wheat was sown it was 0.775%.

This means that when winter wheat was sown after past crops in order to keep the soil fertility and increase it short crop rotation systems should be used as the following: 1: 2, cotton: mung bean for grain + 20 t / ha manure + winter wheat, or 1: 2, cotton: mung bean for grain + mung bean for siderate + 20 t/ha manure winter wheat: winter wheat.

When we determined the amount of nutrients in the soil in 2021, we found out the following on the second year of the past crops. At the beginning of the vegetation period in the 0-30 cm layer of soil it was average 0.700-0.755% and at the end of the season - 0.700-0.750%.

At the end of the season, the amount of humus in the winter wheat sown control variant decreased by 0.010% compared to the amount in the spring. There was no decrease in the amount of humus when the past crops were sown for grain + winter wheat in variants 2-4 it was 0.715-0.730% in the spring, and 0.715-0.735% in the autumn.

Grains of legumes and cereals + 10 t / ha of manure + winter wheat. In variants 5-7 when in the 0-30 cm layer of soil the amount of humus was 0.730 % at the beginning of the season and 0.720-0.725 % at the end and the decrease of humus was 0.005-0.010 %. In variant 8, it was 0.750% and 0.755%, and when mung bean for grain + mung bean for siderate + 20 t / ha manure + winter wheat was used, it was 0.750% at the beginning of the season and 0.760% at the end of the season, and the amount of humus increased by 0.10% at the end of the season.

The agronomic measures to increase soil fertility and winter wheat yield is the rotation of crops, sowing legumes (mung bean, sesame, soybeans) as the past crops, application of



manure in the amount of 20 t / ha, sowing mung bean as siderate.

## CONCLUSION

In order to increase soil fertility and winter wheat yield in the conditions of saline soils of the Central region of the Republic of

Karakalpakstan the following methods should be used: short-term crop rotation, 1: 2, cotton: wheat: wheat, sowing legumes as a past crop before wheat, winter wheat + 20 t/ha manure + winter wheat, or 1: 2, cotton: wheat: wheat, mung bean for grain before winter wheat + mung bean for siderate + 20 t / ha manure + winter wheat: winter wheat.

### Influence of crops in short-term crop rotation on the amount of nutrients in the soil, 2020

Variants	Layers of soil, cm	Humus, %	Total amount, %			Active amount, mg/kg		
			N	P	K	N-NO <sub>3</sub>	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Spring</b>								
1	0-30	0,720	0,020	0,065	0,075	5,0	37,5	170
	30-50	0,580	0,015	0,020	0,035	4,5	20,5	140
2	0-30	0,740	0,030	0,075	0,080	5,2	42,0	180
	30-50	0,600	0,025	0,040	0,035	5,0	21,5	140
3	0-30	0,745	0,025	0,075	0,075	5,3	43,0	185
	30-50	0,600	0,030	0,045	0,035	4,8	22,5	135
4	0-30	0,730	0,030	0,080	0,080	5,2	39,5	190
	30-50	0,600	0,020	0,040	0,040	4,6	30,0	140
5	0-30	0,750	0,040	0,080	0,080	5,3	40,5	210
	30-50	0,600	0,025	0,040	0,045	5,0	37,5	160
6	0-30	0,750	0,045	0,085	0,075	5,5	41,5	200
	30-50	0,610	0,030	0,045	0,040	4,5	36,5	160
7	0-30	0,740	0,045	0,080	0,075	5,6	41,6	200
	30-50	0,600	0,025	0,040	0,035	4,8	37,0	150
8	0-30	0,765	0,050	0,085	0,075	5,6	43,0	210
	30-50	0,625	0,030	0,045	0,040	5,2	36,5	160
9	0-30	0,780	0,055	0,090	0,080	6,0	42,5	230
	30-50	0,630	0,030	0,045	0,040	5,8	40,0	180
<b>Autumn</b>								
1	0-30	0,710	0,015	0,060	0,070	4,8	36,0	160
	30-50	0,570	0,012	0,015	0,030	4,3	18,5	120
2	0-30	0,730	0,025	0,070	0,075	5,0	40,0	170
	30-50	0,590	0,020	0,035	0,030	5,0	20,5	130
3	0-30	0,735	0,025	0,070	0,070	5,0	41,0	175
	30-50	0,580	0,025	0,040	0,030	4,3	20,5	130
4	0-30	0,730	0,025	0,075	0,075	5,0	37,5	180
	30-50	0,590	0,015	0,035	0,035	4,4	27,0	120
5	0-30	0,740	0,035	0,070	0,075	5,0	38,0	200
	30-50	0,580	0,020	0,020	0,035	4,6	35,5	160
6	0-30	0,740	0,040	0,080	0,070	5,1	40,5	180
	30-50	0,600	0,025	0,040	0,030	4,2	35,0	160
7	0-30	0,740	0,040	0,075	0,075	5,2	40,0	200
	30-50	0,590	0,020	0,035	0,030	4,2	35,0	160
8	0-30	0,760	0,045	0,080	0,070	5,5	42,0	210
	30-50	0,620	0,030	0,040	0,035	5,0	35,0	160
9	0-30	0,745	0,050	0,080	0,075	5,8	43,0	240
	30-50	0,620	0,025	0,040	0,035	5,6	40,0	180



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## PEDAGOGICAL TERMS AS AN OBJECT OF LINGUISTIC RESEARCH

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### ABSTRACT

*It is safe to say that Greece is the birthplace of pedagogy. Historical sources show that in ancient Greece, slaves were called "educators" (tutors), ie educators who guided the children of their masters, cared for them and taught them military skills. Later, people who were specially trained and trained in pedagogy were called educators. The emergence and development of terms is inextricably linked with the development of language, so the richer the language, the deeper and more meaningful it should be noted that words and terms also play a role in this phenomenon. Central to the system of pedagogical terms and concepts was the term "education" in the 11th century. Hence and the term "education". An analysis of the sources shows that education has been recognized as the foundation of all human life. In teachings of such a pedagogical phenomenon as to underlie education, the term "education" in the "sources" is often defined by the term "teaching," which is placed next to it: images [I will emphasize in the following places -AR and heart-wrenching education ], " young people affirming about colorful book education. "However, in the sources, the pedagogical term " education "is less common than others. significance means the content of any changes with the expediency of exposing it. In most cases the XI-XIV sources spelled the term "education" for centuries as "image".*

**NEW WORDS:** enlightenment, education, upbringing, pupil, home education, school education, pedagogical education.

### INTRODUCTION

A feature of the event was the process of writing and folding the language of the Slavic peoples with the spread of Christianity in this process, so along with the alphabet the Slavs received a whole set of translated liturgical, spiritual, moral and scientific works. The Slavic enlighteners Cyril, Matthews and their disciples translated the Bible, the Apostle, the Psalms, the main church services into the Slavic language in the 9th century, the lives of the chosen Saints - Patrick, the Old Testament, Nomokanon. In the XI-XII centuries. the whole set of scientific works has been translated, in his opinion, by academician V.M. Istrina, including: Sinkel's Chronicle, George Amartol's Chronicle, Josephus Flavius' History of the Jewish War, K. Indikoplova's Christian Topography,

Alexander's Tale of Macedonia, and others. For example, Ioann Damascus's "Dialectics", Aristotle's "Categories" and others are cited in 1073 excerpts from Izbornik. Translated scientific works began to appear locally and in areas such as grammar, geography, astronomy, and medicine.

### THE MAIN RESULTS AND FINDINGS

The translation and content of local works include many pedagogical terms. Represents well-formed pedagogical phenomena. The range of sources from the middle of the 11th to the 17th centuries is based on a wide range of pedagogical terms and concepts, so all sources can be divided into three groups:

The first group includes books that are not subject to anyone, changes and editing and



pedagogical terms have been preserved and have not changed over the centuries. This is the Scriptures Psalter, liturgical books, monuments of church law - religious books and others. Religious books conformed to the norms of humanity, were to be present in every family and passed on to the next, so that the same pedagogical terms and concepts became the property of many generations.

The second group of sources includes books that should be read as exemplary, spiritual and moral: the lives of saints, chronicles, collections "Golden Chain", "Prologue", "Izmaragd" and others.

The third group of sources includes scientific and educational literature: alphabets, primers, grammars, books used in the educational process, arithmetic, song collections, chronographs, cosmography, medical books, textbooks "seven on "free art" and others. The texts of these works are divided into several groups, which are recommended for ease of consideration of terms and concepts, covering the whole complex of pedagogy:

- **Terms and concepts of general pedagogical nature** ("education", "enlightenment", "education", "education" and their derivatives). The most important pedagogical terms for these served as a valuable basis for other Slavic and foreign terms and concepts;

- **Terms denoting the names of educational institutions** ("school", "school", "didascalia", "seminary", "board (s)", "academy", "classes", etc.);

- **Terms denoting the participants of the educational process** ("student", "student", "school student", "teacher", "didascal", etc.);

- **Terms describing the content, forms, methods, results of education and upbringing** ("education", "pedagogy", "didaskalism", "lesson", "class", "exercise", "testimony", etc.).

Analysis of the content of these terms can be done to show the impact of the system of basic values on the process to solve a number of problems Formation and development of the

system of pedagogical terms during the XI - XVII centuries;

- Review the content of the most important pedagogical terms and explain the concepts, methods and forms of their use and interaction;

- Consider the reasons and methods of supplementing Slavic pedagogy foreign terms, their interrelation and application in educational practice;

- to reveal the continuity of the content of terms and concepts throughout

During the XI-XVII centuries. From the moment of birth, when a mother reads the gospel to a child, she describes the lives of exemplary saints, sings the Psalms or tells what she has heard. The temple in service, etc, a series of descriptions of historical events - the surviving chronicles are many lists and periods presented by different regions. Named books or quotes from them met the child and led him to teach literacy at home or at school. Content Comprehension Terms and their literacy and writing skills that occur in the process of entering the spoken word, through reading kits - Prologue, "Chrysostom", "Izmaragd", "Alphabet" and others. acquainted with the reader. Pedagogical terms and their content were implemented primarily in schools; second, in the process of studying at home on a daily basis, alone or with an adult. The scope of textbooks and textbooks was exactly the same for different classes, and the same mastery of the content of pedagogical terms was ensured. The whole complex is books that accompany children and adults in their daily lives: at home, in teaching, in the temple, in the military or public service. And with such an approach, it was the natural state of man that the desire to live in accordance with that pedagogical content was associated with the assimilation of the terms that came with it.

Central to the system of pedagogical terms and concepts was the term "education" in the 11th century. Hence and the term "education". An analysis of the sources shows that education has been recognized as the



foundation of all human life. In teachings of a pedagogical phenomenon that underlie this level of education, the term "education" in the sources is often defined by the term "teaching," which is placed next to it: images [emphasis in later places -AR] and heart-warming education", "young people affirming about colorful book education". However, the pedagogical term "education" in the sources is less common than others. The importance of the word image, which was associated with the doctrine, means the meaning of any changes with the expediency of exposing it.

For example, the spiritual and moral collection "Bee" (manuscript of the XIV century) contains the following sentences: z sending light is every body and work of light forms", "they stick to a soft wax like a seal, the teachings of the wise are shaped in young children "and many other examples. Similarly, we can observe this in another source: with dignity from the boyars, the voivode, sincere joy and splendor, and all other virtues - they form the habit of having the same body and the courage of the spirit. The evidence quoted in the sources is only revealed

Along with al-Khorazmi, the famous Central Asian scholars al-Farghani, Habash al-Hasib, Khalid ibn Abdumalik al-Marwarrudi, Yahya ibn Abu Mansur, Abbas ibn Sayyid Jawhari, Ahmad ibn Abdullah Marwazi, Muhammad ibn Musa ibn Shakir and others, as well as the best scholars and translators invited from all regions of the caliphate. In the eighth and ninth centuries, Baghdad, the capital of the Arab Caliphate, was a prosperous, prosperous, and commercial city. Al-Khwarizmi's scientific activity dates back to the time of Baghdad and the caliphs of Baghdad - al-Ma'mun (813-833), al-Mu'tasim (833-842) and al-Wasiq (842-847). is coming.

Archaeological findings and written sources on physical education in Central Asia in ancient times. The Avesto is an ancient written source of spirituality and enlightenment. The importance of physical education in the education system and lifestyle of the peoples of

ancient Central Asia. Features of physical education of our ancient ancestors. General description of games and physical exercises of the peoples of ancient Uzbekistan. Physical Education in Central Asia in the Middle Ages (IX-XVI Centuries). Thoughts of the great scholars and thinkers of the East on physical education. On physical education in Abu Ali Ibn Sina's Laws of Medicine. Amir Temur's military-physical doctrine. During the Middle Ages, the peoples of Central Asia practiced physical exercises and national games. The peoples of Central Asia are among the most ancient peoples in the world. Our ancestors, who lived in Central Asia, created a high and unique culture. The history of culture of the peoples of Uzbekistan is reflected in various sources. Their content is related to physical culture as an integral part of the overall culture. The developmental processes of the ancient ancestors were closely linked with socio-economic and political development. Based on this, it is necessary to study the physical culture of our ancestors and the history of its development together with the culture, enlightenment, historical events, customs and traditions of different social systems. The study of the culture of our ancient ancestors, including physical culture, can be based on three main sources: archeological excavations, folklore - ancient myths, legends, information from folk tales, great thinkers, creative heritage of scholars, manuscripts, ancient written sources, historical books.

Along with al-Khwarizmi, the famous Central Asian scholars al-Farghani, Habash al-Hasib, Khalid ibn Abdumalik al-Marwarrudi, Yahya ibn Abu Mansur, Abbas ibn Sayyid Jawhari, Ahmad ibn Abdullah Marwazi, Muhammad ibn Musa ibn Shakir and others, as well as the best scholars and translators invited from all regions of the caliphate. In the eighth and ninth centuries, Baghdad, the capital of the Arab Caliphate, was a prosperous, prosperous, and commercial city. Al-Khwarizmi's scientific activity dates back to the time of Baghdad and the caliphs of Baghdad - al-Ma'mun (813-833),



al-Mu'tasim (833-842) and al-Wasiq (842-847). is coming.

In the historical and pedagogical literature, the analysis of the process of formation and development of the term "education" in the period of the XI - XVII centuries. almost no was produced because the prevailing opinion is that this term has become used only from the 18th century". The exception was made in 1960s work by B.B. Komarovsky "Russian pedagogical terminology" and I.M. Kantor "Pedagogical lexicography and lexicology", in which the fact of the existence in the Russian language of the word "education", but with an extremely narrow meaning. So, in the work of B.B. Komarovsky noted: "Until the 16th century, the word "educate" was purely worldly meaning - "carefull". Then it gradually became pedagogical value. According to I.M. Kantor, "In the field of theory education in the 17th century, the term "education" was approved, replacing the terms "care", "cultivation", "feeding". These statements appear to be insufficiently substantiated, since thousands of surviving manuscripts of the period of the XI-XVII centuries. talking about pedagogy the meaning of the term "education", which already from the 11th century meant physical and moral development of a person in the conditions of implementation education.

Distribution of new terms and familiarization of the population of language with them was accompanied by the compilation from the 13th century of dictionaries of foreign words and alphabet books known since the 16th century. They helped during the exercise mastering foreign terminology, including pedagogical. The distribution and popularity of this kind of benefits allow talk both about the demand for them but also with ancient Greek and Latin pedagogical terms and concepts. Eventually a unified terminological space was formed on the territory principalities. Foreign terms and concepts were used simultaneously with Slavic, and their application in the language and educational practice was equal. In some cases, a foreign phenomenon received

term given on the basis of understanding the essence of a borrowed phenomenon (for example, the activities of a teacher according to certain patterns and programs - "teaching", a document on the completion of an educational institutions - "evidence"). In other cases, foreign phenomena retained their "native" term without translation ("occupation", "exercise", etc.). Thirdly - for one foreign language the term fixed in Russia several concepts (for example, the term "school" was used in three meanings: *a place of learning, a building for training sessions, level of teaching*).

## CONCLUSION

Basic pedagogical terms include the initial stage of formation and the use of the term "enlightenment" in the sense of concepts. The terms "education" and "enlightenment" in the sources often use the term "punishment", which has a pedagogical character. As ideas about its content changed over time, it was necessary to clarify the interpretation of the term "punishment". The word "punishment" has been in common use since the 11th century, meaning "instruction" or "instruction, discipline." The meaning of this term was reflected in the household sources of the XI-XVII centuries, which reflected exactly this meaning and were associated with teaching children certain ethical rules. Any physical impact on the child was excluded, supported by the teacher's personal example. It is an important source that reveals the meaning of the term "punishment" and is a spiritual, moral, legal part of the whole process of influencing the personality of the child. Particular attention was paid to the need for a personal example of a loving teacher. In historical and pedagogical literature, "praise to the stick" and similar verses appeared in Russia only in the middle of the 17th century, the translations of which were known as Polish and incorrect Russian. Such misconceptions were noticed by scientists in the 19th century in the scientific literature encountered. In connection with the features of Russian pedagogical terminology, the context of the whole



educational process, especially the popular "Domostroy", aroused his pedagogical ideas and caused a lot of controversy. In addition, the text of "Domostroy" is a compilation found in partial sources in the 11th-13th centuries by views that were completely different in its educational nature. Finally, it should be borne in mind that the literary work, like the recommendations of Domostroy, is not primarily a real practice of education, but a compiler that reflects his point of view. Domostroy has several chapters devoted to the issues of raising children. It contains pedagogical terminology. The general focus of these chapters can be summed up in the following assessment: "The pious are the parents, the wise and prudent children, who fear God, punish every intellect and knowledge with good punishment and wisdom, and promote crafts and sewing." The above advice very clearly reflects the tradition for the XI-XVII centuries. The terms "education", "teaching" and "punishment" in relation to each other are a means of teaching and punishing. At the same time, education was a conditional analogue of "consciousness, knowledge, crafts and crafts" modern "knowledge, skills and abilities". In another chapter, "How Children Learn and the Fear of Salvation", it was advised: "Discipline your children with discipline, and you will find peace and blessing in them. The content of the last chapter of Domostroy corresponds in many respects to the traditions of education mentioned above.

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## DESCRIPTION OF SOME TURKIC TRIBES AND CITIES IN WESTERN CHINA

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### ABSTRACT

“Shiji” [《史记》], “Xan shu” [《汉书》] Hou Xan shu [《后汉书》] “Tan shu” [《唐书》] describes the history and problems of some cities and tribes of Central Asia, in particular, the ethnonyms of the Tiaoji tribes, the toponymy and location of Dunyuy, Shini, [苏薤 Sū xiè] and a description of their problems and geographical location.

There are sources in various languages for studying the history of the peoples of Central Asia. Among them is the role, prestige and importance of Chinese sources. This is because Chinese sources are traditionally divided into a series of events, chronicles, travelogues, embassy reports, trade relations documents, and many other types and kinds. Although much has been done in science to date, little-known documents and other sources that serve to uncover various aspects of the history of the peoples of Central Asia require in-depth research.

**KEYWORDS:** Central Asia, Dunyuy, Tiaoji Tribe, Suse [苏薤 Sū xiè], Shini, toponymic and ethnonymic information, Shiji [《史记》], “Xan shu” [《汉书》] Hou Xan shu [《后汉书》] “Tan shu” [《唐书》].

### INTRODUCTION

The Central Asian region is geographically very large. Since it is impossible to describe it in one article, the coverage of Central Asia in Chinese sources and in the works of other Chinese chroniclers and historians is exemplified by the fact that some areas of this region, including the Tiaoji tribes Dunyuy, Shini, Suse [苏薤 Sū xiè] were stopped and its geographical location was determined.

Tiaoji, ruled by Dudu [都督] [1], has his own court. The Tiaoji state is one of the westernmost regions mentioned in the annals of the Han and Wei states. Its location, availability, and boundaries are still controversial. While there are many reports about this state, it is not enough to say exactly which territory they occupy. There are several perspectives on this. The most important of them:

- 1) Area of the Arabian Peninsula;
- 2) Located in the lower reaches of the Tigris and Euphrates rivers;
- 3) the Persian province [2] of southern Iran (their location may be exactly the same as that of modern Iran, as the Tiaoji are Tajiks and have historically lived in Iranian territory as well). They were formed in eight tribal lands. They formed a state called Hedalochoji, with Fubaosedyan as its capital [2. 43p, b. 9a, 6-8]. The city has been described by Chinese scholars as part of Zabulistan.

In the vicinity of the Tiaoji, the Gudo state is sometimes referred to as Kadolo. The width and length of the territory is 1000 li. The prince's residence is located in Sychjujian (Khuttalon). They have beautiful red horses with lots of blackberries. There are four large salt mountains, the mountains yielding black salt.

Referring to Chinese sources about this people, the history of the Lesser Han Dynasty [《hòu hànshū》] (Hou Hanshu, chapter 118) contains the



following information: “Tyaoji, Ansi [后汉书] and other countries sent gifts to the Palace in the amount of 40,000 demons, along with interpreters. In the summer of '97, Gan Ying was sent west from Pan Chao, where he returned to the West Sea (Sihai) [3. 217].

We know that the Tyaoji tribe did exist in the decrees and documents of this people, and that they live in what is now northeastern Tajikistan and Afghanistan. In other words, Pan Yun, who was appointed ruler of the Western lands by the Chinese emperor in 56 BC, wrote, “The Tyaojichi residence is located in the mountains, around 40 li; it has a land route to it from three directions near the western sea: south, north, and east, and only northwest. The climate is warm, the soil is moist, and animals such as lions, bison, peacocks, and ostriches live there, and mug-sized eggs have been found. Located in the east after a 60-day horse ride to the north and then east. The main military of the Tyaoji controlled the surrounding small towns [3. 224].”

**The Dunyuy** state is also known as Sufalanatsyuidalo and is inhabited by the Syanbi tribe. There is also a state dominated by women in the Western Sea (Sihai) region, which is why it is also called the East. In the east, it is bordered by Tibet, the Dansyans (descendants of the Tanguts who founded the state of the same name), and the Maochzhou District (a military territory established during the Tang Empire and now in northern Sichuan). In contact with Sanbohe in the west, bordering the Yuitian (Hotan) in the north, Yajou County in the southeast, barbarians (nomadic Hun tribes) lonyui and baylan (Syanbi tribes bordering China and recognizing its dominance) part of the field), It is a nine-day journey from east to west and a twenty-day journey from south to north. The state has about 80 cities. The state is run by women. It lives in the valley of the Kanyan River, surrounded on four sides by steep mountains and hills. Zhoshuy, which flows to the south (the Moroccan dictionary states that there are 9 rivers of the same name, which should be the river that flows through the Kunlun Range). It was made of sewn leather and numbered about 40,000 families, with about 10,000 warriors [4].

The Prince of a state ruled by a woman is called a “bin”, and the minister in charge of the administration is called a “gaobali”, which corresponds to the position of first adviser. External positions are managed by men, while women in

positions in internal institutions give orders and directives to men to carry out.

The ruler is served by several hundred servants. Every five days, public affairs are analyzed. In the event of the ruler's death, the people hand over tens of thousands of gold coins to the royal family and ask them to elect girls from two dynasties. One of them is appointed as the ruler and the other as the successor and ruler in the event of his death.

The ruling woman wears a dress made of black junmato, the skirt of which is a patterned silk skirt that touches the ground. In winter, she wears a Karakol fur coat decorated with embroidered tassels. The hair is tied in a small knot, earrings are worn on the ears, and sodas are worn on the feet (there must be leather shoes). According to their custom, men do not look at women as servants. Men take off their hair and paint their faces with red paint. They only do military work and prepare the ground for grazing. Newborn boys get their mother's last name [2. 221A, b. 3p, 4 — 4a, 8].

The climate is cold, wheat grows well, and sheep and horses are grazed. They also mine gold. Everyday customs are the same as in India. In them, the eleventh month is the first month of the year. In the tenth month, the shamans go to the mountains, where they throw the fermented grain to the birds and perform magic.

When a ruler dies, her mourning period lasts for three years, with family members changing their clothes and not washing their hair. At the funeral of the ruling woman, several dozen people will join her for burial [2. 221A, b. 3p, 4 — 4a, 10].

During the U-da (618-627) era, the Emperor sent ambassadors to Tan-Pan for the first time. Emperor Gao-Szu (618-626) sent them various gifts. Due to the looting of the Turks, it was not possible to maintain contact with them. During the reign of Chen-Guan (627-650) the ambassadors returned again.

**Shini.** Shini, sometimes called Shitsini or Sani. In the south-east, the capital of the [Tang state] reaches 9,000 li, in the east, 500 Tsunlin [5], in the south, 300 li, and in the northwest, 500 km, to Juimi [6]. The capital was initially in Kuhan, but later spread to the mountain valleys. In the five great valleys there are five chiefs who manage their property, which are called the “five shinas.” The area stretches to 2,000 li, and grain crops do not grow. People love wars, attack traders, and make a living by looting. Most of them live in caves [2. 221B, b.



7p, 2.]. The region borders Shi (Tashkent) to the north and is traditionally similar to Kan (Samarkand). They were also good at horse breeding [2, 221B, b. 7p, 9. ].

**City of Suse** [苏薙 Sū xiè]. The city of Suse is mentioned in a reference to the Kangyuy state in the 3rd century, which states: The Kangyu state had five distinctive princes (王 syao van). The first of these was called Prince Suse, whose residence was in the city of Suse. The minister was 8025 miles from Yanguan military base. In the 3rd century, the second hieroglyph of the city's name was [薙] xiè "ce".

According to Shiji, 苏薙 Sū xiè] gushi [姑師 Gushi], along with Gushi [ū ī Gushi] and shanshen [扞深 Qiānshen], are located in the Fergana Valley of Central Asia, east of the great Yuechi [月氏 Yuè zhī]. Their way of life is like any other, and they have their own city [7].

At the end of the Jin [晋代 Jin dài] (265 – 420) period, the state of Suse [苏薙 Sū xiè] did not exist. Jin Shu [晋书 Jin shū] was the residence of the king of the Qang [康居 Kāng jū] state, located in the northwest of Davan [大宛 Dà wǎn] [7].

SinTan here confirms the status of the city of Suse [苏薙 Sū xiè] and says that it was first conquered by the Kang kings, and that there is Tokharistan [托哈里] 400 li south of it [7].

There are now a number of debates about the localization of Suse [苏薙 Sū xiè] and the location of this ancient region, some of which are discussed below:

- 1) Some ancient Greek sources use the toponym Suse together with the name Charosmi (Khorezm) (the ancient spelling is [古国名 Gūguó míng]) [8];
- 2) The toponym of the name Suse As the ancient Sogdian toponym is very close to the reading, Suse [苏薙 Sū xiè] is known in the Sogdian region or as one of the khokimiyats. But Hàshū [汉书西域传] is said to be the ruler of both Suse [苏薙 Sū xiè] and the Sogdian and Qang [苏薙 Sū xiè] [9];
- 3) Suse [苏薙 Sū xiè] is located in Parkent district of Tashkent region. The ancient reading of Susek is Sukek - Sukak (Soqoq) and its current location may be Soqoq village of Parkent district of Tashkent region. This

can be explained as follows: Suse in the ancient Chinese pronunciation - the modern name of Sukeke Sokoq village, Parkent district [8]; It is said in Hanshuds, 《汉书西域传》:

- a) During the reign of the Han dynasty (206 BC - 220 AD), the Qang dynasty [康居 Kāng jū] had two capitals, one was Bityan [卑闐城 Bì yánchéng] and the other was Suse [苏薙 Sū xiè] [9].

All of the above opinions are valid and based on sources, but as a scientist we have found it appropriate to mention our proposal that Suse [苏薙 Sū xiè] Qang [康居五小王 Kāng jū wǔ xiǎo wáng] is one of the governments of the state. But here we can see in the research of these modern Chinese scholars that the state of o'rinda Suse [苏薙国 Sū xiè Guó] and the cities of Suse [苏薙城市 Sū xiè Chéngshì] are located in different regions.

## CONCLUSION

A study and analysis of Chinese, Greek, and Roman sources, as well as works by Russian and Uzbek historians, led to the following conclusions:

- We can learn about the history of Central Asia mainly through Chinese sources.
- Chinese chroniclers have sought to cover every region and city in Central Asia in detail. The main reason for this was the intention to seize the area later. The military is well-written for small areas for easy movement. Tourists and ambassadors also wrote about the climate, soil, and population of each region they visited.
- Greek and Roman historians say that the Trog people did not visit the region in person, but only on the basis of information they had heard from various sources.
- "Chinese travelers and chroniclers named each region in their own language and described it in hieroglyphs that were in use at the time." Some areas have retained their Chinese names, and it is unknown what their previous names were. Examples are the state of Suse [苏薙国 Sū xiè Guó] and the city of Suse [苏薙城市 Sū xiè Chéngshì].
- "It's because Chinese sources have been written at different times and the ruling dynasties in China have changed." And because the hieroglyphs have changed over



time, there are a number of mysteries in the exact name of the area.

Regardless of the purpose for which the Chinese study our regions, these studies allow us to study our history more accurately and deeply.

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# THEORETICAL FOUNDATIONS OF THE STUDY OF THE CONCEPT OF THE HEART IN MODERN LINGUISTICS

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## ABSTRACT

*Although much research has been conducted in the field of concept in recent years, there is no clear understanding of what a concept is and to what category it belongs, nor has a single methodology been developed for their study. Man, the standard of all things, is an attractive object of study for many sciences. Because "the word is the prelude to the whole being", linguistics is at the forefront of such disciplines. While comparing the national and cultural peculiarities of French phraseology with a set of Russian phrases, V.G. Gak also took the word heart to its meaning and explained F.B., and this series of more interesting historical and cultural connotations. stressed that it is associated with z. V.G. Gak notes that the formation of F.B., which contains the word heart in European languages, was influenced by biblical traditions, and that in modern languages it is often combined with emotions, subtleties. In the Bible, it focuses mainly on the correspondence between the concepts of 'intellect' and 'thought' [Gak 1999]. In the history of English culture, the combination of heart power has varied from a symbol of spiritual strength, military courage, perseverance to emotion, a symbol of love.*

**KEY WORDS:** *concept, feeling, emotion, world of emotions, phraseology, intellect, thought, mind.*

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## INTRODUCTION

In most cases of concept, the concept is divided into "core and external aspects" as a matter of course, but in fact there is no single criterion for this type of separation. Some researchers use the statistical criterion: the most common signs are considered to be central, and the least common - external (Alekseyeva 2003; Yevtushok 2004; Kontrimovich 2005; Stepanova 2004; F. Btissova 2005), but statistical the results of the analysis will largely depend on the visual material and its selection options. Other researchers consider the most stable features that remain in the concept for a certain period of time (concept evolution) as belonging to the core (Bobrova 2005; Yelokhova 2006): they also study the etymological criterion of the word that serves as the concept name.(Stepanov

2004): the core can also be seen as "the most vivid figurative component of the concept" (Karasik, Slishkin 2001; Zvada 2003). One of the central concepts of cognitive linguistics remains to this day much more ambiguous and contradictory, in that the features that different researchers consider to be related to this concept are often mutually exclusive. This concept:

- At the same time, it is a category, a unit and a structure, which at the same time acquires an individual and social character:

- The idea of "abstract, thematic-associative and evaluative features, as well as a comprehensive history of the concept" (Stepanov 2004);

- "is an abstract scientific concept developed on the basis of the concept of life" (Solomnik 1995: 241): "



- "Personal perception and interpretation of the objective essence and concept as the minimum content of meaning" (Likhachyov 1993: 281);

- "memory. Mental vocabulary, the conceptual system and language of the brain, the operational unit of the whole worldview, is the quantum of knowledge" (KSKT 1996: 90);

- "the semantic forms of the concept itself are the essence expressed in the image, concept and symbol" (Kolesov 2004: 19);

- "is a perceptual-cognitive-affective product of an individual nature with a dynamic character that acts objectively in the human mind" (Zalevskaya 2005:624);

- "the operational unit of thinking, the unit of social knowledge that is expressed in language and has ethnocultural identity (leading to higher spiritual values)" (Vorkachyov 2004: 51);

- "specific cultural genes belonging to a culture genotype, multidimensional idealized shaped products with a self-generating integrative functional system based on a concept or false conceptual basis" (Lyapin 1997: 16);

- "any discrete semantic unit (image) of the mind" (Karaulov 1989: 170) and so on.

## THE MAIN RESULTS AND FINDINGS

Opinions also differ on the interrelationships and interactions between concepts. However, it should be noted that the mechanisms that provide such links have not yet been described in detail. (Givon 2004). According to L- S. Likhachev, the concepts are interconnected and form conceptual areas that are structurally determined by "man's cultural level, his belonging to a particular community of people, his individuality" (Likhachev 1993: 6).

Thus, if the notion of a concept as a generality, that is, traditional for logic (BSE, 1974), is applied to the concept as a part of the concept, as many researchers think, (Apresyan 2001: Karasik 2002. Kubryakova 1992. Likhachyov 1993. Teliya 1996. Cherneyko 1997 and many other researchers).

If we distinguish between concept and concept, how do they work and how do they relate to each other? The word "pig" has a completely different meaning for an urban citizen who sees the image of a pig in a scientist's pig farm veterinarian only in Dosia brand laundry detergent boxes. For a Muslim who hears the saying "pig is an unclean animal" many times a day, the word has a completely different meaning. The term is relevant not only to Muslims, but also to people who have never seen a live pig, but who liken it to a pig who is dirty and filthy. The non-verbal version of the concept of a pig is the same for all of the above, and the concept of a pig is different. Finally, the question of the ontology of concepts is cross-referenced: how are concepts formed? Two-year-olds can easily recognize the image of a cat drawn with straight lines in a simple picture, and we find that the position of the cat's paws is not four, but three, even if it is hairless or tailless, that is, it is typical of a cat. We know that he is a cat even without any signs (Allakhverdiv 2003). Can we say that we have an understanding of the cat? If so, why can't we explain such a concept, or even imagine a cat as a concept, that is, "a cat in general"?

It is even more difficult to explain the nature of the emergence of abstract concepts: "For example, in experience it is known that no two things are the same. We know that it is impossible to go down the same river twice at the same time, but we still have the concept of equality. If we do not get such concepts in practice, then how do they appear (Gorsky 1961)? Even if we don't actually encounter any potential and actual infinities in our real life, for some reason we can still think seriously about the differences between them. Even Plato was well aware that concepts are not the reflection of anything concrete and, of course, cannot be the case" (Allakhverdiv 2003).

Thus, concepts are formed by language, but we cannot comprehend the process by which they arise: attempts to interpret the concept of life are ineffective: the concept becomes



"logical", that is, it loses its class affiliation. We do not yet have the ability to know (if any) how our minds work with the so-called concepts of life. To claim that a logical concept is a conditional operational unit of thought is a preconceived misconception for completely understandable reasons. Concept cannot be the same in works where semantic and distributive analysis methods are used to study the concept. In general, the definition of a concept understood in cognitive linguistics encourages the observation of hypostasis - the concept has a well-developed structure, is known to be characterized by independent essential features that are prone to evolutionary changes, concepts are self-organizing and self-generating is considered to be capable of mutual interaction within the conceptual field. The consequences of such misunderstandings can be so severe that we are convinced of this in the example of a concept in which an abstract scientific concept tends to hypostasis and is characterized by features of real essence.

In a number of works, the concept is made up of syllables, which in speech are linked to the essence, which consists of certain cognitive features that make up the conceptual content (Sternin, 2004). Such a definition implies the existence of a concept as part of the essence: *sems* (symbols that form the essence or meaning) provide some cognitive features that form the conceptual content, in which case some components of the essence can form the conceptual content, some of which the natural conclusion is that it cannot; that is, conceptual research should describe the semantics that are important to the research and that can form the conceptual content. But what criteria should be used to select them? Articles on cognitive linguistics tend to explore the concept by analyzing the lexical definitions of the word that correspond to it.

If we look up the lexeme of the heart in dictionaries, we can find a number of interpretations, some of which are common to several languages. We can call the most general

characters we get as a result of comparing these annotated dictionaries (the resulting landscape is special: technical, medical and similar dictionaries or indicators can also be compared) by comparing the definition content in the dictionary. the universality of such a concept is more conditional, given that the subject of the horse, the dominant ideology in society, is determined by the experience and views of those who make such comparisons.

Therefore, it is not correct to equate the semantics of a word with the concept that defines the word. In other words, the concept is not as important as it is traditionally understood.

The concept is provided by a complex prototypical representation of interactions at the level of the individual's nervous system: "the interaction of the studied organism with the environment leads to the formation of simple representations. As the number of interactions with similar components in the environment increases, the representation of such interactions becomes more complex ...

As the experience of interaction with the environment increases, simple prototypical representations begin to function only as part of complex prototypical representations. ... if a specific state of activity occurs, then this leads to the activation of the whole complex representation as well. The same thing could have happened if the organism had interacted with the obvious essence that corresponds to this representation ... When we hear the word "smoke" we see it as if we knew it was the smell of smoke. we can imagine and smell the smoke in front of us ..." (Kravchenko 2001: 2005). The close connection between a component of the environment (smell of smoke, its color, opacity) and a sign (a word that is an integral part of the environment, such as smoke) is provided by the state of neuronal activity.

Another question arises: Is it correct to say that this complex representation, which is called a concept, is also activated in the interaction with the sign as an integral part of the complex representation? If the word



LEMON is repeated on its own for a long time and silently, the image of a lemon will inevitably appear in the mind, a sour taste will appear in the mouth, and saliva and gastric juice will begin to separate: the organism is called "lemon". interacts not with the physical essence, but with the representation of interactions that have previously taken place with such an essence.

A sign is any essence or unit, and the interaction with such an essence or unit is able to make changes in the interacting organism due to the experience available in this sign. For example, clouds appearing on the horizon at sunset indicate that many more weathers may be bad. A language sign is a word (sounding or writing) that is culturally pronounced because it is pronounced by a person in this sense. For a one-year-old who has not yet spoken, the words spoken by the people around him are no different from the rattling of a rattle, the footsteps, or the sounds of animals. Linguistically, words are irrelevant to the baby: they are only signs for the baby because the child has not yet had the experience to speak.

It is often said that not only words but also syntactic stretches help to understand the concept. However, in the study of sign interpretation, the relationship between the signifier (word) and the signifier (representation of interactions in the nervous system) is of an experimental nature, that is, it is formed in the process of ontogeny, but in the field of signaling. the formation of the concept becomes artificial. This indicates that it (the concept) belongs only to the field of scientific reasoning.

It is difficult to answer within the existing approaches based not only on linguistics, but also on other disciplines, and some of the questions that cannot be answered at all are: where do the concepts apply, how and at what cost are the connections between them? mined. What is "polyapellation" or "multiple ways of access to a concept" (Karasik, Slishkin 2001: Slishkin 2005: 38), how does the mind work with concepts (Boldirev 2000: 23), why does it

belong to a culture in the minds of different people, different words mean different concepts (Frumkina 1992: 97) and so on - like many other questions, these questions remain unanswered.

So, if a concept is a logically artificial situation, an artificial construct, then for what purpose is it created and modeled? Apparently, a concept, like many other concepts in cognitive science (frame, script, etc.), can also be a tool to help identify and explain the general mechanisms that underlie language interpretation alone. There is no compelling reason to say that the connection between the representation of interactions and the sign is only one-sided, that is, the representative can act as an exponent and vice versa: it depends on what we base it on. Iadi. But neither mathematicians nor physicists are serious about the existence of essences such as vectors, straight lines, spheres, logarithms, derivatives, or integrals, or about their complex structure, relationships, and interactions. The fact that somatic in both languages are more similar in figurative basis is due to the fact that the basic human emotions are universal. The inconsistency between the images of FBs, which are based on a common figurative idea in different languages and represent exactly the same concepts, is explained by the national individuality of the metaphors in the phraseological image, reflecting the worldview and worldviews perceived in the context of English speakers' cultural traditions.

## CONCLUSION

Emotions are not in the form of the simplest mental processes based on perceptions and perceptions, but in a slightly different perspective from another class of mental, cultural products, such as happiness and affection. considered. Such feelings fall into the category of socialized emotions and are often expressed through ontological metaphors. For example, the word heart is a symbol of love in the landscapes of the world in which the languages are compared. In English, speakers



compare to something that can be valuable to gain or win (to gain one's heart), to steal to steal one's heart, to lose one's heart to smb. etc. The relative interest of linguists in somatic phraseology is a natural manifestation of the anthropocentric paradigm in social, including linguistic knowledge.

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# TECHNOLOGIES FOR DEVELOPING ARTISTIC IMAGINATION BY TEACHING HIGH SCHOOL STUDENTS TO WORK ON COMPOSITIONS ON VARIOUS TOPICS

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## ABSTRACT

*This article focuses on the use of the rules of fine arts in teaching students of fine arts, the development of artistic imagination through the teaching of compositional work on the basis of subject and nature, the use of technology in the presentation of works of art by artists and methodologists.*

**KEYWORDS:** *fine arts, composition elementary education, shape, size, perspective, artistic creation.*

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## INTRODUCTION

One of the important tasks today is to increase the artistic thinking of students in the country's comprehensive schools, increase their aesthetic and emotional susceptibility, develop visual literacy, harmonious artistic education using various innovative educational technologies.

The item "Development of education and science" of the "Strategy for further development of the Republic of Uzbekistan" sets out the following priorities: "Construction of new children's sports facilities, children's music and art schools, reconstruction of existing ones in order to involve children in mass sports, their involvement in the world of music and art" [36]. This lays the foundation for the development of the student's general and professional abilities, ensuring his active and

successful participation in society, industry and social, political, cultural, educational life.

## THE MAIN FINDINGS AND RESULTS

Decree of the President of the Republic of Uzbekistan No. PP-4688 of April 21, 2020 "On measures to further increase the efficiency of the fine and applied arts", PF-5712 of April 29, 2019 "On approval of the Concept of development of public education in the Republic of Uzbekistan until 2030" Decree No. The first initiative of the program "5 important initiatives to raise the morale of young people and meaningful organization of their leisure time" on March 12, 2019 is to increase the interest of young people in music, art, literature, theater and other arts. This dicertation serves to a certain extent in the implementation of the tasks set out in other normative legal acts related to the link "serves to reveal the talent."



It is well known that in children, the attempt at visual activity, especially painting, and the beautiful depiction of various forms, begins very early. The experiments of world scientists show that a child begins to be interested in visual activities from the age of 2-3 years. Although the child still does not have a high level of knowledge of the laws of composition, construction, appearance of volumes and other fine arts, he develops an interest in imagining shapes and depicting some mythical shapes. Characteristically, children prefer drawing to reading and writing. However, the duration of the pictures they draw is very short and the skills of how to start and finish the image are not developed. Although the drawings drawn by the children are not literate, the content can depict any appearance, event or object according to their abilities, their characteristic features. They don't like to use paints enough because working with them causes them certain difficulties. But items painted in different bright colors are of great interest to children. His devotion to his work quickly returns when his pictures don't come out well. In such a situation, it is useful for the teacher to help the children quickly and try to lift their spirits.

There are specific features of the methodology of cognitive training in teaching students to work on the composition based on the topic and the development of artistic imagination in secondary schools, and they are reflected in the following types of activities:

- Peculiarities of the methodology of art and construction lessons in primary school.
- Methods of drawing lessons depending on the nature.
- Working on a sculptural composition depending on the object itself.
- Work on a still life composition made of colored pencils and household items in watercolor.

- Working on sketches of various domestic animals and birds in pencil drawing.
- Creating compositions based on the types of Uzbek national folk arts, etc.

Research in recent years has shown that students' perceptions of being are reflected in the classroom curriculum, which aims to give children an idea of the structure, shape, color, size, and proportions of the objects and events that surround them. This is because children can clearly describe their surroundings only if they have a good idea of the environment, ie the world of animals and birds, insects and fish, people, weather, objects and objects, construction and vehicles. Depending on the content of the cognition exercises, the following ways should be used to study them in practice:

1. A study of the shape, structural properties, and functionality of items through their use in everyday life.
2. Read fiction about the subject and explore it through a teacher-free conversation.
3. Learning through the organization of mutual questions and answers among students.
4. To study by describing the change of nature in different seasons (wind, cloudy weather, rainy day, sunshine, etc.).
5. Learning through pedagogical drawings described by the teacher in master classes on the classroom board, etc.

For teachers, the objects and images on display are primarily related to the topic of the lesson, and it is desirable that they be simple, understandable, and emotional in their structure, shape, color, and size. Most importantly, it is important that such materials make students think, enriching children with new concepts.

The form of the demonstrations, their analysis, plays an important role in verbally conveying information about their images to children. It is expedient to conduct this analysis directly in the form of questions and answers about the structure, shape, color, size of objects, their essence.



Compositional activity classes in elementary school consist of parts such as painting composition, decorative composition, and sculptural composition.

In painting composition classes, children often work on topics such as the seasons, holidays, public performances, the daily work of rural and urban workers, and the lives of birds and animals. In such lessons, the teacher should focus on the idea, the content of the picture, elements of the picture on the surface of the paper in a compositionally correct way. In primary school, there is no need to describe the process or dimension of things described using a light, perspective. While it is not required to follow the rules of perspective, it is important to describe what is near is larger and what is far is smaller. It will also be necessary to reflect the interdependence, the connection between the animals, birds, and people depicted in the painting composition. All the elements in the composition must be depicted in an interrelated way. One of the characteristic features of children's painting composition is the simplicity, simplicity, perception and depiction of the world in their paintings. These features in them should be preserved in children's drawings. The main task of the teacher in this regard is to increase the creative activity of children, to fully express the idea in the picture, to influence the emotional impact of the picture.

Special attention is paid to illustrative painting in decorative composition classes, and it is based on works of art such as fairy tales, stories, parables, poems. The success of such training depends in many ways on its proper organization. To do this, first of all, it is necessary to choose a literary work that is suitable for the age of children, interesting and educational. In addition, it is necessary to fully convey the content of the work to the minds of children, to find the most interesting places in it, to show children illustrations related to or close to the work, to analyze them in terms of ideas, content, composition, color.

In the course of illustration, the teacher should focus on the creative nature of children's drawings, the depiction of the characters in the work in a figurative, unique way, the interaction of them and other visual details. They should also follow the rules of composition and choose colors that match the image and events, not to neglect the planning in the picture. It is important to make children aware of the need to portray images and objects as close as possible, and as far away as possible, and to help them apply them to their own images. Another important feature of illustrative drawing lessons is that they focus on developing fantasy, figurative imagination in children. More attention is paid to the development of these qualities in grades 3-4. Since illustrative painting is mainly concerned with literary works such as fairy tales, stories, and parables, children are allowed to depict the animals in the work in human form. They can be described as wearing clothes, living in houses where people live, talking to each other, and working. This, in turn, excites children, activates their creative work.

## CONCLUSION

In conclusion, it should be noted that in addition to the various exercises mentioned above, the illustrative drawing lessons give students the pleasure of depicting shapes in human, animal, bird and other complex structures. For him, the reader is concerned with reading a variety of works of art by writers and poets in addition to visual activities. Images, events, and real-life events in works of art play an important role in developing children's artistic literacy. It is important to use visual aids in the organization of such trainings.

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