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International Conference on Global Research Trends in Higher Education

(19 – 20 August, 2023)

Conference Special Issue - 43 August - 2023

Jointly Organized by:

Management Institute, The Warsaw University of Life Sciences , Poland
International Scientific Research Association
Research Culture Society
&
Swaraj Research Institute

Research Culture Society & Publication

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Date: 19 – 20 August, 2023

Conference Special Issue - 43

The Managing Editor:
Dr. C. M. Patel
(Research Culture Society and Publication)

Organized by :
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About the organizing Institutions:

Management Institute was established in 2019. The Institute, in its assumptions, conducts research, as well as disseminates knowledge in the field of management science and quality, and in particular: knowledge management, digital management, or social corporate responsibility (CSR). The Institute attaches great importance to cooperation with domestic and, in particular, foreign universities and other research entities. The Institute takes care of the high level of knowledge, skills and competences of its staff.

The Warsaw University of Life Sciences is the oldest agricultural university in Poland and the fourth of this type in Europe. Its origins date back to 1816 and are related to the establishment of the Agronomic Institute in Marymont. The advocates of its foundation were Stanisław Staszic and Stanisław Potocki, and its first director was Jerzy Benjamin Flatt, one of the best experts in economic relations in the Kingdom of Poland.

International Scientific Research Association (Scientific Research Association) is registered and an esteemed research association working on to provide scientific research services, educational studies and activities at international level, also coordinate with other research organizations for the educational research events. Scientific Research Association as honorary partner of the 'Research Culture Society' with MoU – collaboration.

'Research Culture Society' (RCS) is a Government Registered International Scientific Research organization. Registered with several United or Government bodies. It is also an independent, professional, non-profit international level organization. RCS-ISRO shall also initiate and set-up new educational and research programs with other international organizations. Society has successfully organized 125+ conferences, seminars, symposiums and other educational programmes at national and international level. Society has collaboration – MoU with 70+ institutions – universities.

Educational institutions, colleges, universities are welcome for Memorandum of Understanding (MoU – free to sign without any charge) for Academic Exchange, Knowledge sharing and collaboration to organize events with us. We are promoting and sponsoring educational events as well as publishing research work in collaboration. We also invite sponsorship from the industries, corporates, institutions and government bodies for our educational programs.

Swaraj Research Institute is involved in sponsoring and organizing National/International Conferences, Seminars, Workshops and Faculty Development Programmes. The institute also provides the facility of publication of books and research papers to the research scholars in national and international journals since 2015. Swaraj Research Institute also has a publication tie-up with Research Culture Society.

Supported by: Institut für Dienstleistung, Germany.

About the Conference and Publication:

The current trends in higher education and advances in the Social Sciences, Business Management research with the whole concept of this advanced technology is to process from the past, analyse the present and implement for the future the latest innovative evolving theories and technologies to surpass the hurdles and make modish frontiers.

Management of Business and Management of the Economy are two major pillars of world growth and wealth increase. The papers in this book cover various areas of the social sciences, commerce, management as well as varying aspects of higher education trends. Almost all papers are prepared as per the objectives : to observe scenarios towards the trends and advancement of common citizens' life by improving the theory and practice of various disciplines of Social Sciences, Commerce, Business, Management and Economy.

The edited issue is a collection of peer-reviewed scientific papers submitted by active researchers in International Conference on Global Research Trends in Higher Education - 2023. This edited issue can be important to understand the various concepts of Social Sciences, Commerce, Business, Management and Economy to the researchers and academia

Objective of the International Conference:

The main objective of the scientific conference is to discuss issues, exchange of ideas and views towards the advancement of theory and practices and to create space for presentation of current results of scientific work in the field of Social Sciences, Commerce and Business Management. Our main Aim is to organize lectures by scientists and experts and to disseminate their ideas and concepts among the Social Sciences, Commerce, Business Management and Another aim of the conference is to provide an interaction stage for researchers and practitioners from academia and industries to deal with advancement in their respective fields.

WARSAW UNIVERSITY OF LIFE SCIENCES, POLAND
MANAGEMENT INSTITUTE

MESSAGE

Dear Ladies and Gentlemen,

Thank you for your attendance at International Conference on Global Research Trends in Higher Education - 2023.

This year the Conference is jointly organized by the Scientific Research Association; Research Culture Society and the Management Institute from Warsaw University of Life Sciences, Poland.

The theme of the conference is very actual and worth discussing. It has a broad scope and great relevance in the context of the current scenario of the situation in the world education and economy development. The Conference light on the consequences of the current global trends in education and will point out the new challenges in the business environment.

I would like to take the opportunity to thank you all for contributing to this Conference.

I look forward to meaningful presentations, discussions, and collegial networking.

Prof. dr hab. Joanna Paliszkiewicz

Director of Management Institute
Warsaw University of Life Sciences

Dr.C. M. Patel
Director, RESEARCH CULTURE SOCIETY
Web: www.researchculturesociety.org
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Message

Dear Professional Colleagues.

I am very glad that ‘Scientific Research Association’, Management Institute, The Warsaw University of Life Sciences , Poland in collaboration with ‘Research Culture Society’ (Government Registered Scientific Research organization) are organizing - ‘International Conference on Global Research Trends in Higher Education’ during 19 – 20 August, 2023.

The aim of the conference is to provide an interaction stage to researchers, practitioners from academia and industries. The main objective is to promote scientific and educational activities towards the advancement of common citizen’s life by improving the theory and practice of various disciplines of social sciences, business management and global trends in higher education fields. Second objective is to provide the delegates to share their new research ideas and the application experiences face to face.

I believe, this International Conference will help in redefining the strong connection between students and academicians from different institutions. An additional goal of this international conference is to combine interests and scientific research related to Social Science, Commerce, Business Management and higher educational development; to interact with members within and outside their own disciplines and to bring people closer for the benefit of the scientific community worldwide.

My best wishes to the committee members, speakers and participants of this scientific conference.

Dr.C. M. Patel

Director, Research Culture Society.

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Patrons: Conference Chair Members :
Prof. Dr hab. Joanna Paliszkiewicz, Director of Management Institute, Warsaw University of Life Science - SGGW, Warszawa, Poland.
Dr. C. M. Patel, Director – Research Culture Society.

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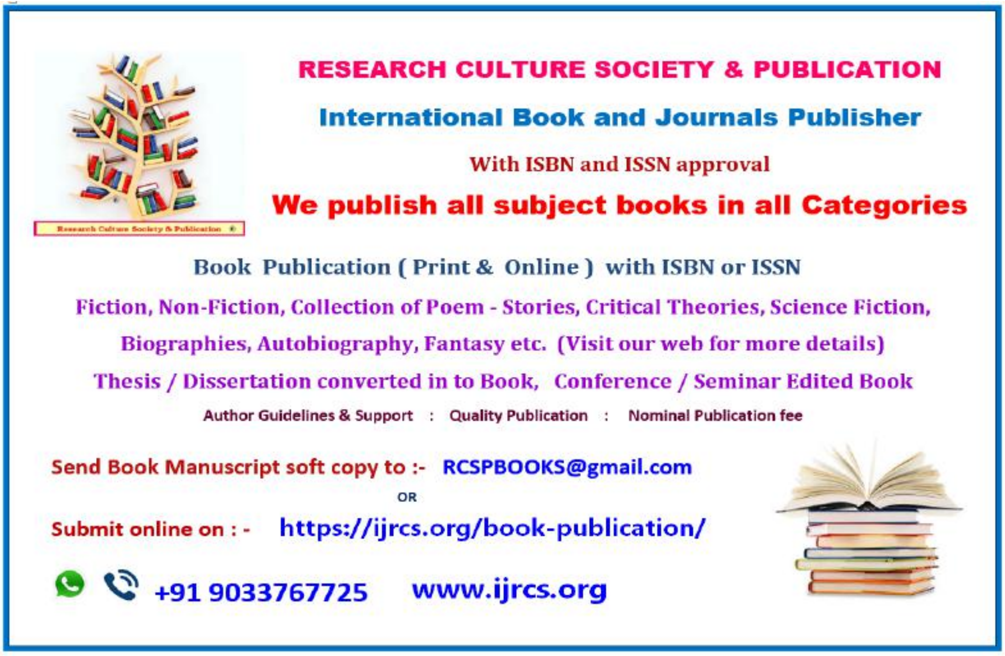

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Filipino Values of Secondary School Heads on School-Based Management: Basis for Values Enhancement Program

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Abstract: This study employed a Concurrent Triangulation mixed method design and focused on secondary school heads. Its objective was to explore how Filipino values are demonstrated in school-based management (SBM) functions. The findings identified strengths and weaknesses in integrating these values, emphasizing the need for a Values Enhancement Program. The research revealed consistent demonstration of Filipino values by school heads in various SBM functions. However, areas requiring improvement were identified. Weaknesses were observed in accepting negative feedback, avoiding personal pride, embracing innovation, and prioritizing the family needs of absent staff members. Notably, strengths were found in the School Environment domain, emphasizing "palabra de honor" and ethical leadership, the Resource Management domain, promoting integrity and transparency, and the Respect for elders domain, fostering a sense of belonging.

To enhance the understanding and application of Filipino values in SBM, a tailored Values Enhancement Program is recommended for public secondary school heads. This program should address the identified weaknesses while reinforcing the strengths in the School Environment, Resource Management, and Respect for elders domains. By doing so, the program aims to improve the integration of Filipino values in SBM functions. Overall, this research provides insights into Filipino values in SBM and offers recommendations for improvement through the proposed Values Enhancement Program.

Keywords: School-Based Management, Filipino Values, Leadership, Secondary School Heads, Values Enhancement Program.

INTRODUCTION :

The United Nations created a plan aimed at achieving a better future for all, which includes eradicating poverty, inequality, hunger, and injustice. This plan, known as Agenda 2030 for Sustainable Development, includes a target goal of ensuring that everyone has access to inclusive and equitable education and lifelong learning opportunities. The Principles for Responsible Management Education (PRME) and the United Nations advocate for a learning community that promotes good practices to inspire institutions and uplift responsible management in education. To successfully implement the Sustainable Development Goals (SDGs), stakeholders and school leaders must work together. Quality Education is founded on the idea that educational objectives and goals are achieved and satisfied, and quality is evaluated based on how societies perceive the role and function of education. (UNESCO, 2014). According to Laurie, R., Nonoyama-Tarumi, Y., Mckeown, R., and Hopkins, C. [1], education in its various forms has been recognized as "a process by which human beings and societies can reach their fullest potential." However, in industrialized nations, the primary focus of education has been on developing a skilled workforce, emphasizing excellence in a few core disciplines. As per the findings of a recent study conducted in 22 Asian countries by Mochizuki, Y. [2], education systems in these nations prioritize equipping students with the necessary skills and knowledge to compete in the global economy, rather than fostering critical thinking and responsible citizenship aligned with the principles of Education for Sustainable Development (ESD). The significance of the school leader in implementing successful ESD has been emphasized by researchers [3]. The principal plays a crucial role in supporting teachers to develop ESD pedagogical methods and establishing the school as an environmental agent in the community [4]. Good school leadership engages the community in school matters. The other stakeholders will gain when schools and the community collaborate to support learning, in addition to the children. School-community cooperation has the potential in strengthening support and even transform children, resulting to increased program quality of learning, more efficient use of resources, and better alignment of goals and curricula. It is crucial for schools to create a shared vision and develop a strategic plan for their growth. The school leaders should guide the teachers and other stakeholders in the development of these plans, which must be regularly reviewed and updated to ensure successful implementation. Holman [5] suggests that the governing body's responsibilities should revolve around functions that offer guidance and direction, making the head teacher accountable for enhancing the school's performance, and ensuring financial stability, integrity, and cost-effectiveness. The values of school administrators have a big impact on how they solve problems. In particular, the rational value types of consensus and consequences rule over personal preferences in the evaluation of school principals, and transrational principles are only applied in specific situations [6]. Because of its mismatch with conventional SBM competencies and guidelines, the implementation of SBM in public schools has been found to have observable shortfalls of leadership performance. It is undeniable that the quality of the leadership role played by school principals is primarily determined by their value system. School heads usually display Filipino values such as Maka-Diyos (God-fearing), Bayanihan, Barangayan, Batarisan, or Balikatan (feeling of civic togetherness and collaboration), Kapamilya (family cohesion), and care for the environment when executing their SBM responsibilities. Others include Pakikisama (smooth interpersonal interaction), Palabra de Respect (word of honor), and Respect for Elders. As an essential step towards addressing the ongoing decline in the quality of basic education, it is crucial to evaluate the demonstration of Filipino values by public secondary school heads in their leadership roles. The purpose of this research is to understand the experiences and challenges faced by these school heads, which will enable the development of effective solutions. By analyzing their strengths and weaknesses in terms of upholding Filipino values, the researcher will be able to identify practical alternatives to improve the situation. The study will focus on three school divisions, namely SDO Angeles City, SDO Mabalacat City, and SDO City of San Fernando.

RESEARCH QUESTIONS :

This study formulated a values enhancement program based on the Filipino values of School-Based Management (SBM) functions of secondary school heads in the Schools Division of Angeles City, Schools Division of Mabalacat City, and Schools Division of City of San Fernando. Specifically, the study sought to answer the following questions:

1. How are the Filipino values demonstrated in the implementation of the School-Based Management functions of the secondary school heads self-assessment and by teachers and stakeholders in terms of the domains:

1.1 Educational Leadership for School Improvement;

1.2 Curriculum Management by Student Learning;
1.3 School Environment;
1.4 Staff Management;
1.5 Resource Management; and
1.6 Community Building?
2. What are the strengths and weaknesses manifested by the secondary school heads in integrating Filipino values for their SBM functions?
3. What values enhancement program could be proposed based on the findings of the study?
4. What is the implication of the findings of the study to educational management?

METHODOLOGY :

Research Design

The study utilized a Concurrent Triangulation mixed method design to assess the demonstration of Filipino values among secondary school heads in the three Schools Divisions of Angeles City, Mabalacat City, and City of San Fernando in Pampanga. This design involves a single study containing qualitative and quantitative data collection which is conducted at the same time. The purpose of this type of investigation is to validate the findings generated by each method through evidence produced. The Concurrent Triangulation mixed method design allowed the researcher to examine and describe the current state of school-based management (SBM) and understand the factors contributing to the phenomenon. By employing a development research approach, the researcher aimed to create a values enhancement program for SBM based on the findings of the study.

Respondents

There were sixty (60) public secondary school heads with a complete set of PTA officers and a total number of three thousand eight hundred nineteen (3819) secondary teachers. Using Cochran formula, the computed sample size with 95% level of confidence at 5% margin of error was fifty-two (52) school heads, three hundred eighty-five (385) teachers, and one hundred sixty- nine (169) PTA officers.

Instrument of the Study

The study utilized a validated assessment tool adopted from Desamparo and Barrameda (2019), which consisted of 45 School-Based Management (SBM) performance functions divided into six school domains. The tool measured the demonstration of Filipino values by school heads in their SBM functions. The reliability index of the questionnaire was .72 for school heads and .71 for teachers. It was modified to suit the nature of the research participants, and both school heads and secondary participants, such as teachers and Parent-Teacher Association officers, used the same instrument for data validation.

Data Collection Procedure

The researcher obtained approval from Desamparo and Barrameda (2019) to use their instruments before administering the questionnaires to the participants. Permission was also sought from the Regional Director of the Department of Education Region III and the three schools division superintendents in Angeles City, Mabalacat City, and City of San Fernando Pampanga. The questionnaires, along with consent forms and endorsements, were sent to school heads, teachers, and Parent-Teacher Association officers through email and Facebook messenger. The participants' participation was voluntary and confidential, with no collection of email addresses for anonymity. The data was organized and analyzed using semantic differential means, where participants indicated their position on a scale between two bipolar words or numbers. The weighted mean was calculated to assess the demonstration of Filipino values by school heads, and interviews were conducted to validate the self-assessment and gather further insights.

RESULTS: This chapter presents the analysis and interpretation of the data gathered from the participants in order to determine how Public Secondary School Heads demonstrate Filipino values in performing their School-Based Management functions.

The Demonstration of Filipino Values by the Secondary School Heads in the Implementation of School-Based Management Functions.

Educational Leadership for School Improvement

Eight out of nine indicators in these school-based management functions were interpreted as "*Demonstrated*," with the school head's role in observing "*walang personalan*" (objectivity) receiving the highest rating among the indicators, with a general weighted mean of 7.16. However, the function of accepting negative feedback to enhance work performance, rather than preserving one's personal pride (*'amor propio'*), received the lowest average rating, with a mean value of 4.44, interpreted as 'Not Demonstrated'.

Curriculum Management by Student Learning

In this area, school heads' Filipino values in performing functions in school-based management (SBM) have consistently received high weighted means, with six out of seven indicating a "*Demonstrated*" level of performance within the range of 6.45-7.16, except for one function. This function obtained the lowest mean and was interpreted as "*Not Demonstrated*" among the participants. The specific function that received this rating is the acceptance and implementation of school heads' innovations in the school program to improve learning outcomes, such as incorporating non-traditional assessments and interactive teaching methods, while avoiding the attitude of insisting on outdated practices or believing that they were superior in the past (*'mas magaling kami noon'*). It received a mean rating of 4.21.

School Environment

The recognition by the school head of high-achieving students, teachers, and parents on significant occasions, along with their encouragement for others to strive harder by fulfilling promised recognition or reward, serves as a model of "*palabra de honor*" and received the highest mean of 7.44 among the six school-based management functions in terms of the school environment. All six of the school-based management functions were interpreted by the participants as "*Demonstrated*".

Staff Management

The Staff Management functions of school heads show a range of acquired grand means, varying from 7.31 to 5.77 for the 12 indicators. These means are interpreted as "*Demonstrated*." Among these indicators, the highest mean is related to school heads actively involving senior teachers to ensure they are respected and involved in providing values and career guidance to other staff members, with a general weighted mean of 7.31. On the other hand, the school heads' demonstration of the lowest function, interpreted as "*Not Demonstrated*" with a mean value of 4.34 in school-based management, is evident when they fail to prioritize and consider the absences of teachers who have urgent family needs or personal problems, disregarding the Filipino cultural value of placing family as a top priority.

Resource Management

The grand weighted means of Filipino values on school-based management functions of secondary school heads for resource management ranged from 5.94 to 7.34, with all indicators interpreted as "*Demonstrated*." The indicator with the highest mean (7.34) is the rejection by school heads of the value of procrastination (*mañana habit*) in procurement transactions for the school's equipment and buildings.

Community Building

All indicators under community building received general weighted means ranging from 6.48 to 7.35, indicating a level of performance interpreted as "*Demonstrated*." Within this School-based management function, the indicator with the highest weighted mean is the implementation of the *bayanihan* or *baranggayan* (sense of civic unity and cooperation) system in conducting Parent-teacher conferences or meetings, with a weighted mean value of 7.35.

Strengths and Weaknesses Manifested by the Secondary School Heads in Integrating Filipino Values for their SBM Functions.

Strengths Manifested by the Secondary School Heads In Integrating Filipino Values for their SBM Functions

The implementation of Filipino values by school heads can have a positive effect on their work. Filipino School heads have embraced their roles as positive contributors to their school communities, which can lead to increased job satisfaction [7].

The findings from the data indicate that Filipino secondary school heads demonstrate strengths in integrating Filipino values into their School-Based Management (SBM) functions. The mean values highlight key areas where school heads excel in embodying Filipino values. The School Environment domain stands out with the highest mean value of 7.33, emphasizing the value of "*palabra de honor*" (honoring one's words). This demonstrates that school heads prioritize ethical and transformational leadership practices, leading to improved school performance. Resource Management domain ranks second with a mean value of 6.98, showcasing the value of being *maka-Diyos* (God-fearing), which promotes integrity and transparency in financial decision-making. Respect for elders or *Paggalang* ranks third with a mean value of 6.95, highlighting the importance of fostering a sense of belonging and support within the school community. Other values such as *Baranggayan* (sense of civic unity and cooperation), *Bayanihan* (community spirit), *Pakikisama* (good interpersonal relationship), *Pananagutan* (sense of responsibility), and *Kapamilya* (family cohesiveness) also received positive mean values.

The advantage of having school heads who uphold their word of honor is that it can lead to a more positive school atmosphere and increased teacher empowerment [8]. Morales and Sapin [9] argued that School heads who uphold this value in his leadership and effective decision-making can also positively impact their schools. Furthermore, a commitment to active learning and instructional leadership can lead to improved student outcomes.

The findings suggest that Filipino secondary school heads prioritize merit-based decision-making, strategic planning, fairness, transparency, and accountability. These values contribute to effective school leadership, improved performance, and positive school-community relationships. To further enhance these strengths, continuous improvement and nurturing of these values within the Filipino secondary school leadership context are crucial.

Weaknesses Manifested by the Secondary School Heads In Integrating Filipino Values for their SBM Functions

According to the participants' feedback, three (3) specific school-based management functions were identified, each related to different domains. These functions pertained to the values of *amor pr*opio (ego defensiveness) in the domain of Educational Leadership for School Improvement, the insistence on preserving past innovations or a "*mas magaling kami noon*" attitude in the domain of Curriculum Management by Student Learning and neglecting to consider the pressing family needs of absent staff members in the domain of Staff Management. In all cases, these indicators received scores ranging from 4.21-4.44, indicating that they were perceived as "*Not Demonstrated*." This suggests that the school leaders exhibited only slight or poor evidence of the defined competencies associated with these functions.

The absence of values in the leadership of school principals can have practical and social consequences. From a practical standpoint, it can result in a lack of harmony between the stated values and the actions and decisions of school leaders, which can hinder the effective implementation of those values in schools (Kulophas et.al, 2018). Moreover, school administrators may prioritize administrative tasks, financial management, and disciplinary measures over instructional leadership, which can have a negative impact on the educational quality [10].

CONCLUSION :

1. The majority of school-based management functions demonstrated the integration of Filipino values by secondary school heads. Out of the 45 functions assessed, 42 were classified as "Demonstrated," indicating consistent and intentional manifestation of expected qualities associated with these functions.
2. Based on the findings of the study, it is evident that secondary school heads demonstrate significant strengths in integrating Filipino values into their school-based management functions. The majority of the functions assessed (42 out of 45) were consistently demonstrated, reflecting the school heads' commitment to incorporating Filipino values in their challenging settings.

The findings highlight the strengths of Filipino secondary school heads in integrating Filipino values into their School-Based Management (SBM) functions. These values, such as "palabra de honor" (honoring one's words), being maka-Diyos (God-fearing), respecting elders (Paggalang), and fostering community spirit (Bayanihan), play a significant role in shaping their leadership practices. The school heads demonstrate a commitment to ethical decision-making, transparency in resource management, and fostering positive relationships within the school community. These values contribute to a harmonious and supportive school environment, empowering teachers, and promoting student growth. The findings emphasize the importance of continuously nurturing these Filipino values within the context of school leadership. By doing so, schools can cultivate a culture of integrity, collaboration, and accountability, ultimately enhancing the quality of education and the overall success of Filipino secondary schools.

3. A Values Enhancement Program for public secondary school heads is necessary to strengthen their value-centered competencies, particularly in the areas of Educational Leadership for School Improvement, Curriculum Management by Student Learning, and Staff Management.

The program should focus on instilling values such as accepting negative feedback, avoiding personal pride, rejecting attitudes of superiority, and considering the pressing family needs of absent staff members.

RECOMMENDATIONS:

Based on the conclusions mentioned from the findings, the following recommendations can be drawn:

1. Encourage secondary school heads to establish collaborative learning communities where they can share best practices, exchange experiences, and learn from one another's successes and challenges. These communities can serve as platforms for continuous improvement and the integration of Filipino values in school-based management.
2. It is highly recommended to implement the proposed Values Enhancement Program through the Human Resource Development (HRD) in the three Schools Division Offices to continuously enhance the competencies of school heads in managing their respective schools. This program should specifically focus on integrating Filipino values school-based management (SBM) functions. Special attention should be given to school heads who are newly onboarded, as they may benefit greatly from the program to strengthen their understanding and practice of Filipino values in their leadership roles.
3. A parallel study should be conducted in other Schools Divisions within the Region to determine if similar results and patterns emerge. This expanded study will allow for a broader understanding of the integration of Filipino values in SBM functions and provide a more comprehensive view of the challenges and opportunities faced by school heads in different contexts.
4. To ensure the alignment of the Values Enhancement Program and other recommended interventions and initiatives with the educational framework and standards, it is crucial to obtain validation and approval from the National Educators Academy of the Philippines (NEAP) or the regional office responsible for educational policies and programs. This validation process will provide assurance that the program meets the requirements and guidelines set by the educational authorities, ensuring its effectiveness and adherence to the established educational framework.

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Assessment of Adoption of Inquiry-Based Approach by Biology Teachers in Secondary Schools in Kiambu County, Kenya

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Abstract : Inquiry-based approach (IBA) is a pedagogical approach that invites students to explore academic content by posing, investigating, and answering questions. It develops students' interest and attitudes in the subject and improves academic performance. The purpose of this study was to assess the extent to which IBA was adopted by Biology teachers. Descriptive survey design was adopted. The target population of the study was 1,194 Form 3 students and 29 Biology teachers from 37 secondary schools in Githunguri sub-County, Kiambu County, Kenya. The study adopted simple random and purposive sampling in selecting 358 respondents. Questionnaires, interviews and classroom observation schedule were used for data collection. Data was analyzed using descriptive and thematic analysis with the help of Statistical Package of Social Sciences (SPSS). The findings show that majority of Biology teachers have inadequate teaching experience in using IBA. It was reveal that IBA was adopted to a lesser extent in the classrooms and infrequent among Biology teachers during practical activities. Biology teachers pointed out that, students' preparedness, their ability to learn through IBA and do research, insufficient resources, inadequate teachers' training in IBA, limited time, students' weak entry behavior in the subject and students' behaviors, limited the extent to which IBA was adopted in the classrooms. The study recommends that a training programme in IBA should be organized for Biology teachers to enable them adopt IBA and the Biology curriculum should have in it an extended time to enable Biology teachers implement IBA frequently. The Ministry of Education should take into consideration the quality preparation of Biology students by revisiting the 100% transition policy. This will create seriousness in their studies and promote quality and good entry behaviors in the subject.

Keywords: Inquiry-Based Teaching Approach, Biology, Secondary Schools.

INTRODUCTION:

Inquiry-Based Approach (IBA) is one of the learner-centered approaches used to enable students to experience the process of creating knowledge through questioning and investigating. It is a process whereby students engage in active learning that involves guiding them toward learning on their own. Regular adoption of IBA enables students to acquire research skills and discover new knowledge on a continuous basis. It has the ability to stimulate students' interest and attitudes in the subject and improves academic performance (Spronken-Smith, 2008). According to Côté and Levine (2000), a student's attitude has a significant impact on how successful they will be in a certain subject. It has been recognized that performance in science influences attitude, and attitude influences performance (Russell & Hollander, 1975; Schibeci, 1986). According to Owino et al. (2015), and Muthoni (2012), good teaching method motivates students to apply more effort in their studies, because it promotes positive attitude. It was found that, students' performance will decline if the content of Biology lessons is not efficiently presented to them. This is because they will have insufficient conceptual understanding of the subject. In Kenya, Ochungo et al. (2021), showed that performance in Biology, both at national and county level, is alarming. It draws concerns since students who perform below C^+ in Biology are not allowed to pursue courses such as medicine, engineering, law and pharmacy in Kenya (Waseka & Simatwa, 2016). According to Ogutu et al. (2014), the consistent dismal performance of students in

Biology KCSE examinations, is an indication of poor teaching and learning quality, and if not reversed, will affect the possibility of Kenya's attaining Vision 2030. Muriithi (2022), further acknowledged that, educationalists and medics have raised concerns in Kenya that the numbers of students qualifying for diploma in nursing courses have declined due to low performance in Biology KCSE. Student needs to earn a mean grade of C^{+} in Biology to be eligible to pursue a diploma in nursing. Correia and Harrison (2020), revealed that teachers are being encouraged to adopt inquiry-based approach, because it develops students' attitudes, interests, investigative skills, understanding the concepts of Biology and improves academic performance. However, the extent to which IBA is adopted in Githunguri sub-County, Kenya is a concern as poor performance of students in Biology KCSE continue to rise. Therefore, the researcher, after considering this, chose to assess the extent to which IBA was adopted by Biology teachers in secondary schools in order to recommend suggestions to education stakeholders about how to counteract the factors restricting teachers from regularly integrating IBA in order to improve performance among students.

STUDY OBJECTIVE :

The objective of the study was to assess the extent to which inquiry-based approach was adopted by Biology teachers

LITERATURE REVIEW :

Extent to which Inquiry-based Approach is Adopted by Biology Teachers

Extent is defined by the Mariam Webster dictionary as the range, degree, or limit to which something extends. According to Correia and Harrison (2020), the curriculum, students' assessment and the education level of the teacher have significant impact on the frequency of integrating inquiry-based approach in the classroom.

In America, Wallace and Kang (2004), conducted a study and revealed that teachers' attitudes toward inquiry, content knowledge, pedagogical content knowledge, school policies, time constraints, and curriculum had an influence on how extensively inquiry is implemented. Teachers' beliefs about students' ability to learn through inquiry, efficiency, and exam preparation also influence the frequent implementation of inquiry-based teaching. Findings from an interview with six teachers on their views of inquiry implementation revealed that, inquiry has the ability to develop students' critical thinking and their skills to solving problems. They noted that implementing inquiry-based approach (IBA) is the appropriate way to facilitate students into adopting scientific thinking practices and stimulate their creativities in learning science which includes Biology. Teachers' training programme was recommended to positively reinforce teachers' views about the importance of using inquiry-based teaching through scientific practices and developing skills in debate which are key in teaching science. Although teachers are aware of the importance of integrating IBA, factors that influence extent to which inquiry-based approach is integrated in Gitnunguri sub-County is not discussed.

A study conducted in Finland and South Korea by Kang and Keinonen (2016), revealed that, when teachers develop high confidence in their abilities in teaching science and acquiring inquiry-skills, they will frequently implement inquiry and this depends on their beliefs and confidence levels. The confidence of teachers in teaching science and working together with other teachers to improve science teaching were correlated with regular use of IBA in Finland and South Korea. This motivation was due to the training they acquired on how to teach inquiry in Finland. However, the amount of IBA applied in Korea was found to be influenced by class size, appropriate resources for teaching of inquiry in Finland, and the educational levels of teachers. In both countries, teachers emphasized that examination was not a hindrance to frequently implement IBA. However, Finnish and Korean teachers were found to possess low confidence levels in teaching science which lead to low implementation levels of inquiry practice. Fitzgerald et al. (2019), acknowledged that, the promotion of inquiry-based learning in science classes is greatly facilitated by Teacher Professional Development (TPD). According to Ogutu et al. (2014), the level of training a teacher acquired determines the effective teaching and learning ability which has the potency to influence students' performance in Biology. An analysis of teachers' ability, training and confidence levels influenced the extent to which IBA was integrated in Finland and Korea, which was the priority area of this study in Githunguri sub-County, Kiambu County, Kenya.

The general believe and acceptance to implement IBA due to its value has been seen to increase. However, South African teachers consistently have difficulties with its implementation. According to Ramnarain and Hlatswayo (2018), teachers from rural parts of South Africa possessed positive attitudes towards inquiry in teaching Physical sciences. They understood that students' understanding of abstract science concepts is facilitated by teaching through inquiry. The study revealed that teachers claimed to be inadequately prepared to adopt inquiry teaching into their lessons. Adopting an inquiry-based teaching strategy, according to the teachers, presented a variety of difficulties, including shortage of laboratories, instructional resources, insufficient time to cover the curriculum, and large class sizes.

In Ghana, Mohammed et al. (2020), established the limited integration of IBA in some Ghanaian schools. Teachers were found to frequently use the conventional teaching methods instead. However, students from urban public Junior high schools were noted to engage in less inquiry-based learning activities than students in rural public junior high schools. The study recommended the investment of more resources into reforming science teaching and learning in Ghanaian and African schools in order to properly integrate scientific inquiry. This study was conducted to fill the gaps in Githunguri sub-County, Kiambu County, Kenya.

A study conducted in Kenya by Njagi (2016), established that, due to insufficient teaching and learning resources and inadequate teachers TPD programs, early childhood teachers could not fully adopt inquiry teaching in their lessons. Ndirangu (2017), also acknowledged the partial implementation of the leaner-centered approach in Kenyan secondary schools. From the sample of 68 head teachers and 147 science teachers, 75% did not fully implement inquiry-based teaching in their lessons, while 5% were full implementers. Otara et al. (2019), revealed that teachers will show negative attitudes towards learner-centered approach if they are inadequately trained. However, two distinct studies carried out with Form 1 and Form 3 students in Kenya by Hassan (2015) and Wabuke et al. (2017), acknowledged the impact of inquiry-based teaching approach on students' performance. Mwangi (2014), showed that student-centered approach significantly influences the performance of Form 4 students in the KCSE. However, a lack of implementation of IBA and the negative attitudes of Biology teachers contributed to students' poor performance. The analysis of the study established the extent to which teachers in other parts of Kenya adopted IBA in Wareng sub-County and Murang'a South District, Kenya. This study aimed at establishing the extent of adoption of IBA in Githunguri sub-County, Kiambu County, Kenya.

METHODOLOGY:

This research adopted both qualitative and quantitative methods. Shorten and Smith (2017), described mixed research method as a methodology in which qualitative and quantitative data are gathered, analyzed, and evaluated within the same study. The approach was suitable because it may be utilized to better understand the relationships or disparities between qualitative data and quantitative data, allowing participants to speak up and share their experiences throughout the process of the study (Shorten & Smith, 2017). According to Mugenda and Mugenda (2019), mixed research method provides opportunity for the researcher to gain skills in both qualitative and quantitative approaches. It provides explanation on the data derived from quantitative studies that presents the underlying explanation behind the given figures and statistics (Orodho, Nzabalirwa, et al., 2016). Qualitatively, it provides appropriate explanations of research questions to support the results with some numbers. Therefore, it was appropriate to combine the two approaches to get thorough results that are helpful to the research.

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Analysis and Discussion

Findings from Teachers' Questionnaires on inquiry-based teaching approach

Extent to which Inquiry-Based Approach is Adopted by Biology Teachers

The first objective of the study was to determine extent to which inquiry-based approach is adopted by Biology teachers. The data for this objective was collected from Biology teachers and students as analyzed as followed.

Table 1 Biology teachers' response to ***"I often use inquiry-based approach to teach Biology."***

Response	Frequency	% of Frequency
Strongly Agree	5	35.7
Agree	1	7.1
Not Sure	0	0.0
Disagree	6	42.9
Strongly Disagree	2	14.3
Total	**14**	**100.0**

According to the data presented in Table 1, 42.8% of the teachers agree that they often use inquiry-based approach to teach Biology whereas, 57.2% disagree that they often use inquiry-based approach to teach Biology.

Table 2 Biology Teachers responses to ***"I choose the procedure to be used in investigating a given problem."***

Response	Frequency	% of Frequency
Strongly Agree	4	28.6
Agree	9	64.3
Not Sure	0	0.0
Disagree	1	7.1
Strongly Disagree	0	0.0
Total	**14**	**100.0**

Data in Table 2 shows that 92.9% of Biology teachers agree that they choose the procedure to be used in investigating a given problem, while 7.1% did not choose the procedure to be used in investigating a given problem.

Table 3 Biology Teachers responses to ***"Students select the procedure to solve a problem chosen by themselves."***

Response	Frequency	% of Frequency
Strongly Agree	3	21.4%
Agree	2	14.3%
Not Sure	1	7.1%
Disagree	7	50.0%
Strongly Disagree	1	7.1%
Total	**14**	**100.0**

The findings in Table 3 shows that 35.7% of the teachers agree of allowing their Students to select the procedure to solve a problem chosen by themselves, whereas 57.1% agree. However, 7.1% of the teachers were not sure of the response.

Table 4 Biology Teachers responses to ***"I encourage the students to find the right answer to the investigated problem."***

Response	Frequency	% of Frequency
Strongly Agree	8	57.1%

Agree	6	42.9%
Not Sure	0	0.0
Disagree	0	0.0%
Strongly Disagree	0	0.0%
Total	**14**	**100.0**

Data in Table 4 shows that 100% of the teachers agree that they encourage students to find the right answer to the investigated problem.

Table 5 Biology Teachers responses to ***"I facilitate students to get to the solution(s) of the problem during practical activities."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	9	64.3
Agree	5	35.7
Not Sure	0	0.0
Disagree	0	0.0
Strongly Disagree	0	0.0
Total	**14**	**100.0**

The findings in Table 5 reveals that 100% of the teachers agree to facilitate students to get to the solution(s) of the problem during practical activities.

Table 6 Biology Teachers responses to ***"I encourage students to plan their own experiment and provide answers to their own questions."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	0	0.0
Agree	1	7.1%
Not Sure	0	0.0
Disagree	9	64.3%
Strongly Disagree	4	28.6%
Total	**14**	**100.0**

Data in Table 6 shows that 7.1% of the teachers agree to encourage students to plan their own experiment and provide answers to their own questions whereas, 92.9% of the teachers disagree.

Table 7 Biology teachers' response to ***"I encourage students to ask questions during teaching time."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	5	35.7
Agree	9	64.3
Not Sure	0	0.0
Disagree	0	0.0
Strongly Disagree	0	0.0
Total	**14**	**100.0**

Findings in Table 7 shows that 100% of the teachers agree that they encourage students to ask questions during teaching time.

Table 8 Biology teachers' response to ***"I allow students to ask scientific questions for investigation."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	4	28.6
Agree	3	21.4

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Not Sure	1	7.1
Disagree	4	28.6
Strongly Disagree	2	14.3
Total	**14**	**100.0**

Data found in Table 8 shows that 50.0% of the teachers agree that they allow students to ask scientific questions for investigation. The findings further reveals that 42.9% of the teachers disagree while 7.1% were not sure.

Table 9 Biology teachers' response to ***"Students determine what data they need to collect when carrying out investigations in Biology."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	2	14.3
Agree	2	14.3
Not Sure	1	7.1
Disagree	4	28.6
Strongly Disagree	5	35.7
Total	**14**	**100**

Data found in Table 9 reveals that 28.6% of the teachers agree that students determine what data they need to collect when carrying out investigations in Biology while 64.3% of the teachers disagree. The findings also shows that 7.1% of the teachers were not sure.

Table 10 Biology teachers' response to ***"in my class, student defend a scientific argument."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	5	35.7
Agree	3	21.4
Not Sure	0	0.0
Disagree	4	28.6
Strongly Disagree	2	14.3
Total	**14**	**100.0**

Data in Table 10 shows that 57.1% of the teachers agree that in their class, student defend a scientific argument, 42.9% disagree that students defend a scientific argument.

Table 11 Biology teachers' response to ***"I encourage students to ask questions"***

Response	**Frequency**	**% of Frequency**
Strongly Agree	9	64.3
Agree	5	35.7
Not Sure	0	0.0
Disagree	0	0.0
Strongly Disagree	0	0.0
Total	**14**	**100.0**

According to the data that are presented in Table 11, 100% of the Biology teachers agree that they encourage students to ask questions.

Table 12 Biology teachers' response to ***"I give students opportunity to manipulate materials and equipment to gather data during investigation."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	8	57.1
Agree	4	28.6
Not Sure	0	0.0
Disagree	1	7.1

Strongly Disagree	1	7.1
Total	**14**	**100.0**

The data in Table 12 reveals that 85.7% of the Biology teachers agree that they give students opportunity to manipulate materials and equipment to gather data during investigation. The findings further shows that 14.2% of the teachers disagree that they give students opportunity to manipulate materials and equipment to gather data during investigation.

Table 13 Biology teachers' response to ***"I allow students to design investigations in Biology."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	4	28.6
Agree	2	14.3
Not Sure	1	7.1
Disagree	2	14.3
Strongly Disagree	5	35.7
Total	**14**	**100.0**

According to the findings in Table 13, 42.9% of the teachers agree that they allow students to design investigations in Biology class. The findings further reveal that 50% of the teachers disagree with the statement, whereas 7.1% of the teachers were not sure.

Table 14 Biology teachers' response to ***"I encourage students to discuss results of investigations in small group."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	8	57.1
Agree	3	21.4
Not Sure	0	0.0
Disagree	1	7.1
Strongly Disagree	2	14.3
Total	**14**	**100.0**

Data found in Table 14 shows that 78.5% of the Biology teachers encourage students to discuss results of investigations in small group, while 21.4% disagree that they encourage students to discuss results of investigations in small group.

Table 15 Biology teachers' response to ***"I provide step-by-step procedures when carrying out investigations."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	8	57.1
Agree	6	42.9
Not Sure	0	0.0
Disagree	0	0.0
Strongly Disagree	0	0.0
Total	**14**	**100.0**

According to the data presented in Table 15, 100% of the Biology teachers provide step-by-step procedures when carrying out investigations.

Table 16 Biology teachers' response to ***"I encourage students to verbally communicate findings from investigations they have conducted."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	6	42.9
Agree	8	57.1
Not Sure	0	0.0

Disagree	0	0.0
Strongly Disagree	0	0.0
Total	**14**	**100.0**

Data found in Table 16 shows that 95.7% of the Biology teachers agree that they encourage students to verbally communicate findings from investigations they have conducted.

Table 17 Biology teachers' response to ***"I prepare inquiry-based activities for my class."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	8	57.1
Agree	3	21.4
Not Sure	1	7.1
Disagree	2	14.3
Strongly Disagree	0	0.0
Total	**14**	**100.0**

Table 17 shows that 78.5% of the Biology teachers agree that they prepare inquiry-based activities for their class while 14.3% disagree. The findings also reveals that 7.1% of the teachers were not sure that they prepare inquiry-based activities for their class.

Table 18 Biology teachers' response to ***"Students draw conclusions based on data collected during Biology investigations."***

Response	**Frequency**	**% of Frequency**
Strongly Agree	6	42.9
Agree	5	35.7
Not Sure	1	7.1
Disagree	2	14.3
Strongly Disagree	0	0.0
Total	**14**	**100.0**

The data presented in Table 18 shows that 78.6% of the teachers agree that students draw conclusions based on data collected during Biology investigations, while 14.3% disagree. The findings further reveal that 7.1% of the teachers were not sure that students draw conclusions based on data collected during Biology investigations.

The respondents were further asked to arrange the levels of inquiry in order in which they are easy to implement starting from the easiest one. The findings are shown in Figure 1.

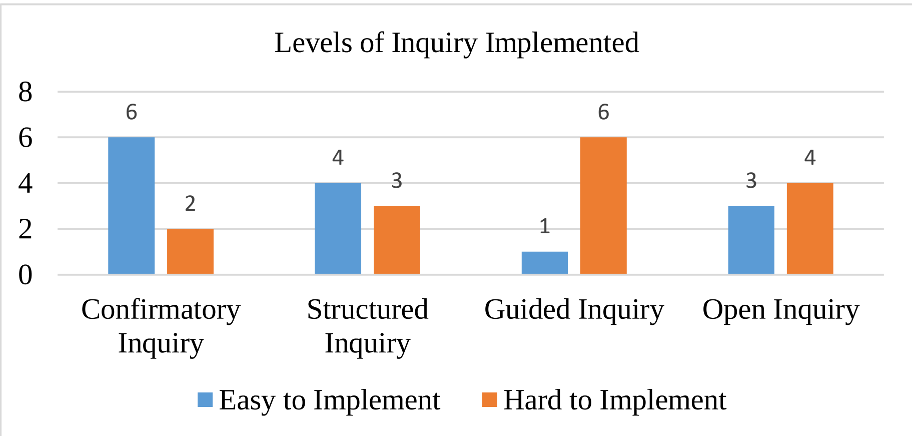

Figure 1 Levels of Inquiry Implementation

Figure 1 shows that six (6) of the teachers stated that confirmatory inquiry is easiest to implement and four (4) of the teachers said structured inquiry was easier. The findings further reveals that six (6) teachers reported that Open inquiry is the hardiest to implement follow by Guide inquiry.

Findings from Classroom Observation Guide on inquiry-based approach

The researcher observed extent of integration of IBA by teachers and the findings are summarized in Table 19.

Table 19 Observation on Extent of Adoption of inquiry-based approach by Biology Teachers

	No		**Yes**	
Extent of Integration of IBA	Count	%	Count	%
Teacher elicits students' prior knowledge before starting the lesson	1	9.1%	10	90.9%
Teacher makes learning Biology interactive and interesting	6	45.5%	5	54.5%
Teacher provides guidance during practical activities	4	36.4%	7	63.6%
Teachers encourages questions from students	0	0.0%	11	100.0%
Teachers allow students to work individually during a given task	0	0.0%	11	100.0%
Teacher pose questions for students	6	45.5%	5	54.5%
Teacher guides students to think	6	54.5%	5	45.5%
Students came up with a question on their own	7	63.6%	4	36.4%

N=11

Data presented in Table 19 reveals that 90.9% of the teachers elicits students' prior knowledge before starting the lesson and 54.5% of the teacher make learning Biology interactive and interesting. The findings further shows that 63.6% of the teachers provide guidance during practical activities. According to the data, 100% of the teachers encourage questions from students, and allow students to work individually during a given task, while 54.5% of the teachers pose questions for students. Furthermore, 54.5% of the teachers did not guides students to think while 63.6% did not allow students to come up with a question on their own.

Findings from Teachers' Interview Schedule on Extent of IBA

Teachers were asked to explain about the level of inquiry emphasized in teaching Biology and the findings in presented in Figure 2.

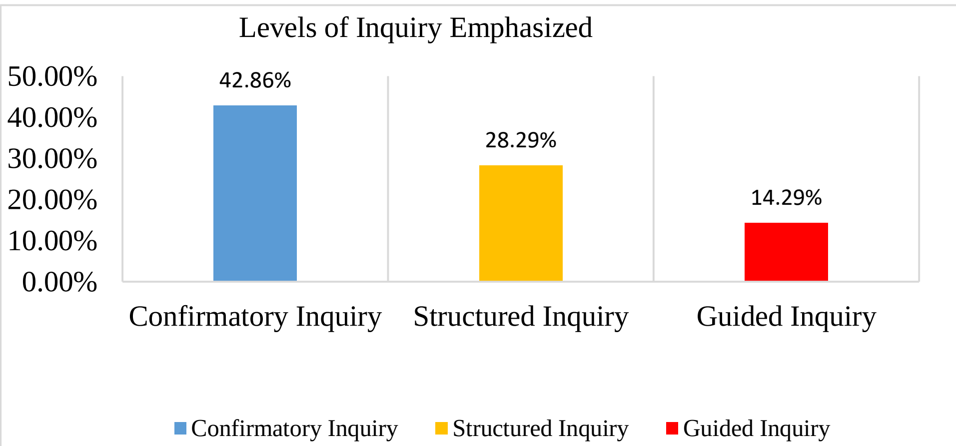

Figure 2 shows that 42.86% of the teachers emphasized on confirmatory inquiry, while 28.57% emphasized on structured inquiry. A few of the teachers representing 14.29% emphasized on guided inquiry.

Teachers were asked to explain about the extent or how often IBA is a good approach to teaching Biology science subjects and the findings are presented in Figure 3.

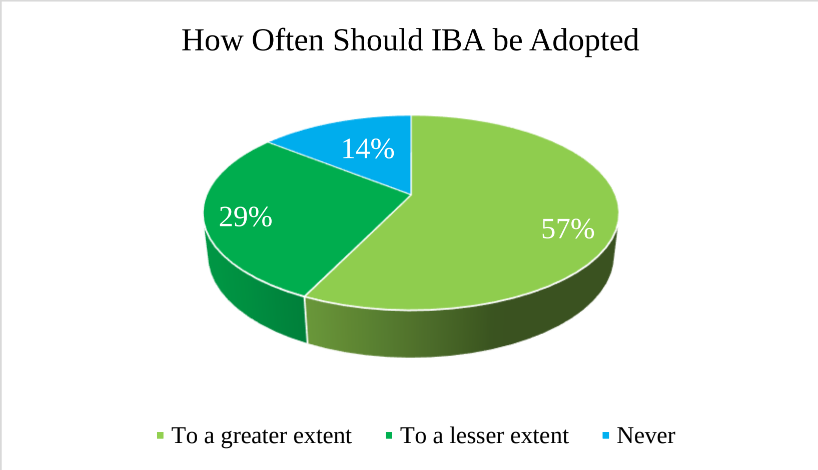

Figure 3 How Often Should IBA be Adopted?
N=14

Figure 3 shows that 57% of the teachers said inquiry-based approach should be adopted to a greater extent, while 29% of the teachers said it should be adopted to a lesser extent. On the other hand, 14% said it should not be adopted always.

ANALYSIS/DISCUSSION :

According to Chichekian et al. (2016)**,** in the course of time, the extent to which teachers engaged students into inquiry activities reduced. The data in Table 2, 92.9% of the teachers chose the procedures to be used in investigating a given problem in an inquiry class. As reflected in Table 12, 57.1% of the teachers do not give students the opportunity to choose their own procedure. The findings correlates with the results in Table 13, where half of the teachers did not allow students to design investigations in Biology. The results presented in Table 1 shows low level of IBA adoption by Biology teachers. It reveals that 57.2% of the teachers do not often use inquiry-based approach to teach Biology, except 42.8% of teachers who implemented IBA. This may be due to the teaching experience of the teachers. According to Figure 2, 42.90% of Biology teachers have inadequate teaching experience in using IBA. According to Annan et al. (2019), use of IBA in the classrooms will enhance students' performance and develop their interest and attitudes in the subject. However, it was observed that most of IBA activities were done in the laboratory and limited in classrooms.

Results presented in Figure 3, show that 57% of the teachers agree that IBA should be adopted to a greater extent, while 29% prefer it's adopted to a lesser extent. On the other hand, 14% of the teachers do not prefer the adoption of IBA. However, the findings in Figure 1 show that most of the teachers considered confirmatory level of inquiry to be easy. Results in Figure 2, reveal that 42.86% of the teachers emphasized on confirmatory inquiry in teaching Biology**.** The teachers, stated that students are used to getting answers for a question without doing good research, and they lack the knowledge and skills to study through higher levels of inquiry such as Guided and open inquiry. This finding contradicts that of Eltanahy and Forawi (2019)'s findings who said that teachers used structured inquiry more easily than other types of inquiry.

According to Ramnarain and Hlatswayo (2018), the adoption of inquiry-based teaching strategy presented a variety of challenges for teachers which include; insufficient teaching and learning resources and insufficient time to cover the curriculum. In an interview with Biology teachers, while explaining about how often IBA should be adopted, some of them said ***"**IBA should be adopted always, because Biology is an experimental subject."* Some teachers provided condition by saying *"Although IBA is a good approach that will solve the problems of students' attitudes and performance, it should be adopted regularly provided there are sufficient resources and time.* Other respondents said, *"We adopt inquiry-based approach to a lesser extent due to insufficient resources. According to the teachers, if they planned to teach a topic that required using some resources like the projector, and when another teacher is using it, this will hinder the adoption of the approach. Thus, we resolved to lecture the students."*

According to Schmid and Bogner (2015), since teaching through inquiry cannot be fully adopted because of limited time, teachers can implement it by focusing on certain aspects of the lessons as deemed necessary. This was true in the responses of the respondents when they were asked, if there are times they do not use IBA. Majority of the teachers said "*Yes, when there was limited time to cover the syllabus and when students ask so many questions it takes too much time which affect the effective covering of the syllabus*." Moreover, IBA, according to the teachers, is not necessary with slow learners and when teaching theoretical topics like evolution that requires much lecturing.

According to the Data presented in Table 19, the researcher observed that majority of the teachers who implemented IBA provided guidance during practical activities, encouraged questions from students, and all of the teachers allow students to work individually during a given task. The responses in Table 4 also show that all of the teachers encouraged students to find the right answer to the investigated problem. According to the results presented in Table 4.15, 78.5% of Biology teachers provide step-by-step procedures when carrying out investigations. The researcher, as recorded in Table 19, observed that 63.6% of Biology teachers provided guidance during practical activities. The study's findings correspond to the of findings of Gathage et al. (2021) that guidance should be provided for students in the process of learning. This will enable them follow the steps of scientists in order to experience the process of developing knowledge.

RESULTS/FINDINGS:

The findings show that 42.90% of Biology teachers have inadequate teaching experience and affected the extent to which IBA was adopted. The findings reveal that IBA was adopted to a lesser extent in the classrooms and infrequent among Biology teachers during practical activities. According to the data presented in Table 1, 42.8% of teachers often adopted IBA to teach Biology. This was cited by Chichekian et al. (2016)**,** that teachers with low or no experienced may likely adopt IBA to a lesser extent.

The findings presented in Table 2 show that 92.9% of the teachers chose the procedures to be used in investigating a given problem in an inquiry class, while Biology teachers do not give students the opportunity to choose their own procedure. Table 8, shows that 50% of the teachers did not allow students to design investigations in Biology. The findings reveal that most of the teachers emphasized on the confirmatory level of inquiry. The teachers stated that students are used to getting answers for a question without doing good research and they lack the knowledge and skills to study through higher levels of inquiry such as Guided and open inquiry. Moreover, half of the teachers stated that IBA should be adopted to a greater extent, while, 29% prefer it be adopted to a lesser extent.

According to Ramnarain and Hlatswayo (2018), adopting an inquiry-based teaching strategy, presented a variety of difficulties for teachers which include; shortage of laboratories, insufficient instructional resources, and insufficient time to cover the curriculum. In the responses of Biology teachers about how often IBA should be adopted, some of them said it should be adopted always because Biology is an experimental subject, while other teachers said it should be adopted regularly provided there are sufficient resources and time. According to Schmid and Bogner (2015), although teaching through inquiry cannot be fully adopted because of limited time, teachers can implement it by focusing on certain aspects of the lessons as deemed necessary.

Majority of the teachers said, they do not adopt IBA often because there is limited time to cover the syllabus, and allowing students to ask too many questions takes too much time which affect the covering of the materials. The teachers said, IBA is not necessary with slow learners and theoretical topics like evolution that requires much lecturing.

RECOMMENDATIONS:

The study recommends the need for teachers to embrace integration of inquiry-based approach in teaching Biology and other subjects in the classrooms as well as in the laboratory. The school management in collaboration with Ministry of Education should provide necessary resources to support application of inquiry-based approach. The school management and Ministry of Education in collaboration with SMASSE INSET should invest more in training Biology teachers to extent the adoption of inquiry-based approach in public secondary schools. The training will impact on the ability levels of teachers to implement and extent IBA.

CONCLUSIONS :

The study concluded IBA was adopted to a lesser extent in the classrooms and not frequent among Biology teachers during practical activities in the laboratory. Biology teachers pointed out that, students' preparedness, their ability to learn through IBA and to do research, insufficient resources, inadequate teachers' training in IBA, limited time, students' weak entry behavior in the subject and students' behaviors, limited the extent to which IBA was adopted in the classrooms.

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Assessment of Education 4.0 among Teacher Education Institutions: Basis for School Leadership Model

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Abstract: This study aimed to assess the status of Teacher Education Institutions (TEIs) in relation to Education 4.0, identify best practices, and determine areas that require improvement. The findings revealed that TEIs strongly prioritize the development of critical knowledge, skills, and behavior in students, which is extensively implemented and fully integrated into the institutions. Various learning methods, including face-to-face, online distance learning, and hybrid learning, are employed, with both traditional and innovative approaches being utilized. However, the utilization of current and emerging Information and Communication Technologies (ICTs) in TEIs is still limited, with Google Meet being the most commonly used platform. Innovative facilities, services, and systems are employed to enhance the learning process to a significant extent. Best practices were identified from the competencies, learning methods, and ICTs components. These were supplemented with the continuous professional development, tool accessibility and utilization, strategic planning, personalized and remote learning, encouragement of active and life-long learning, fostering a culture of innovation, and collaboration with parents and global linkages. Areas requiring improvement were identified from learning methods, ICTs, and Infrastructure. Improvement on facilities, technological implementation, financial resources, designation of focal person, educational programs and curriculum alignment, and the development of a global mindset and response to international demands were also specified. Building upon the study's findings, a model of School Leadership relative to Education 4.0 is proposed, emphasizing four domains: Responsive and Adaptive Curriculum, Highly-skilled Human Resources, Technology-driven Structural Paradigms, and Transformative Learning Environment. In addition, the model underscores the essential roles of school leaders.

Keywords: Education 4.0, Status, Best Practices, Areas Needing Improvement, Teacher Education Institutions (TEIs), Implementation, School leadership model.

INTRODUCTION :

At present, the world has entered the fourth industrial revolution (Industry 4.0 or 4IR), which is marked by increased global interconnectedness, digital advancement, developed digital systems, and artificial intelligence. 4IR is engrossed in most active sectors such as industry, agriculture, medicine, and economics and the education sector are not isolated from this new era. The interaction and relationship between human and technology have created enormous impact on various sectors, particularly in the educational system [1]. According to the World Economic Forum in 2018, 65 percent of today's learners will work in jobs that do not yet exist, and 47 percent of today's jobs will be mechanized in the next decade [2]. Moreover, 35% of the abilities that are vital in today's workforce will change within the next few years[3]. The rise of artificial intelligence (AI) and automation is likely to lead to the displacement of certain jobs, particularly those that involve routine tasks that can be easily automated. However, at the same time, it is expected that new jobs will emerge, particularly those that require skills and knowledge in technology and data analysis. As a result, new skill sets will be needed for the new revolution and the application of new technology. This challenged the education sector to adapt with the fast-changing world. The education system worldwide has to transform for the imminent 4IR as the job market will be largely prompted by the advancement of digital economy, robotics, artificial intelligence, and automation technology [4]. Hence, the educational paradigms and systems need to be rebuilt alongside each new revolution in society.

Education 4.0 is a method of learning that is aligned with the fourth industrial revolution and focuses on transforming the future of education through advanced technology and automation [5]. It is a new challenge in learning requiring transformation of education system to keep pace with the changes. Education 4.0 emphasizes the use of emerging technologies to enhance and transform the traditional education system. There should be elevation in terms of the curricula and the skills of people to keep pace with the 4IR [6]. Teachers, learners, and workers must become literate in the many types of 4IR technologies in order to function effectively in the 4IR and contribute to the attainment of the SDGs [7]. If higher education institutions want to generate graduates who can compete on the labor market, they must integrate Industry 4.0 into their curricula. They must give students the chance to study and use the most recent technology innovations in practical settings. Various strategies, including internships, hands-on training, and industry partnerships, can be used to accomplish this. In addition, curriculum and teaching approaches must be adjusted to meet the economic needs of the 4IR [8]. Hence, institutions and universities must continue their role in preparing for innovation and education of the future generation in order to meet the demands of 4IR.

Teacher education institutions (TEIs) have a critical role to play in preparing educators who can effectively integrate technology into the classroom and prepare students for the demands of Industry 4.0. Assessing Education 4.0 among TEIs holds paramount importance in shaping the future of education and preparing educators for the dynamic learning landscape. It is vital for TEIs in terms of decision-making about teacher recruitment, professional training and evaluation, human talent management, and institutional policies.

TEIs need to revise their existing learning practices and develop education 4.0 models that prepare students for their future working roles. To ensure that teachers are equipped with such attributes, it is essential to evaluate and enhance teacher education programs, encouraging a lifelong learning mindset [9]. Thus, there is a need to address and further study the integration and implementation of Education 4.0 among TEIs.

RESEARCH QUESTIONS :

This study aimed to explore and assess the Teacher Education Institutions (TEIs) of Pampanga in relation to Education 4.0 as basis for a school leadership model.

The study specifically sought to address the following questions:

1. What is the status of Education 4.0 among Teacher Education Institutions in terms of the following:
   1.1 Competencies;
   1.2 Learning Methods;
   1.3 Information and Communication Technologies;
   1.4 Infrastructure?

2. What are the best practices of the institutions brought about by Education 4.0?
3. What are the areas needing improvement with the implementation of Education 4.0?
4. What school leadership model may be proposed based on the findings of the study?

METHODOLOGY:

Research Design

The study explored and evaluated the implementation of Education 4.0 in Teacher Education Institutions in Pampanga using a descriptive-quantitative research method. Descriptive research aimed to comprehensively describe various aspects of the phenomenon, with a focus on Education 4.0 implementation. The purpose was to collect and analyze data to quantify the extent of implementation and provide statistical analysis to support the findings. By employing this approach, the researchers aimed to provide an objective and detailed account of the state of Education 4.0 implementation among Teacher Education Institutions in the province of Pampanga, contributing to existing knowledge and informing educators, policymakers, and stakeholders for enhancing its implementation.

Respondents

The research participants were the twenty (20) deans, seven (7) assistant deans, and fifteen (15) department heads and sixty-eight (68) senior faculty and teachers of the Teacher Education Institutions in Pampanga with a total of one-hundred ten (110) in all. Total enumeration of the population was used for the research which included the deans, assistant deans, department heads and senior faculty of the institutions. Primarily, all the participants answered a survey-questionnaire that assessed the status of their implementation of Education 4.0 based on four core components. Afterwards, selected participants answered a set of questions for the brief interview.

Instrument of the Study

The study utilized a researcher-made survey-questionnaire which is divided into four (4) sections, the core components of Education 4.0. The first section is a Likert-scale that contains twenty-one (21) statements assessing the status of schools in terms of transversal and disciplinary competencies. The second section is divided into two, the checklist part consisting of the different learning modalities being offered by the school and the Likert Scale part wherein ten (10) learning approaches will be assessed. The third section contains both a Likert Scale with ten (10) examples of emerging ICTs and a checklist to assess the utilization of various tools, platforms, and LMS for learning. The fourth section is a Likert Scale which contains twenty (17) statements measuring the status of schools in terms of infrastructure. Together with the interview guide questions, the research instrument was checked and validated by five (5) experts in the field of education and technology for the content. These questionnaires were also checked by Language Expert and Statistician for the face (grammar) validity and interpretation of data. Suggestions were incorporated in the final research instrument. Prior to the conduct of the study, the survey-questionnaire was floated to various institutions in Tarlac for the reliability test.

Data Collection Procedure

Before commencing the study, the researcher obtained written permission from the Commission on Higher Education Region III Office in San Fernando, Pampanga. Once the request was approved by the CHED office, the researcher received an endorsement letter.

Subsequently, the researcher sought permission from the relevant institutions to carry out the study. Upon approval from the institution's president/director, the researcher issued a letter of consent to the deans, assistant deans, and department heads, inviting their participation and assistance in the study. The survey questionnaires were distributed to the participants either in printed format or through a link/QR code. The responses were collected and analyzed using Google Form. Additionally, selected participants were interviewed briefly, either in person or via Google Meet/Zoom.

RESULTS:

Through rigorous data collection, analysis, and interpretation, these are the discovered valuable results and insights of the study:

Status of Education 4.0 among Teacher Education Institutions

- Competencies

The study's findings reveal that Teacher Education Institutions have a strong standing in terms of transversal competencies related to Education 4.0, as evaluated by administrators and teachers. The results show that institutions are successful in providing the expected competencies to students, with a grand mean of 3.61 and a standard deviation of 0.56, falling within the "Strongly Agree" category, indicating full implementation of Education 4.0-related competencies. All four competencies, namely critical thinking, cooperation and collaboration, communication, and creativity and innovation, received a "Strongly Agree" rating with weighted means of 3.67, 3.58, 3.62, and 3.58, respectively thus, indicates fully implementation of Education 4.0. The majority of statements were rated as "Strongly Agree," suggesting a solid foundation in developing soft skills among students. These findings indicate that Teacher Education Institutions effectively equip students with the necessary skills to tackle the challenges and opportunities of Education 4.0.

Similarly, TEIs are strongly in favor of the effective provision of disciplinary competencies to students, as indicated by a high grand mean of 3.56 and a relatively low standard deviation of 0.67. This signifies a full implementation of Education 4.0 in terms of disciplinary competencies. Specifically, the training and development of functional, technical, and technological knowledge and workplace performance skills received a favorable rating of 3.68, while the capacity to research, design, create, and implement new technologies received 3.55, and the use of emerging technologies and best practices to propose technology-based solutions received 3.45. Moreover, the majority of items within each competency were rated as "strongly agree," further confirming the positive outcome of disciplinary competencies' implementation in relation to Education 4.0 within these institutions.

Overall, both the transversal and disciplinary competencies in relation to Education 4.0 were provided extensively integrated and fully implemented into the educational system.

- Learning Methods

On the learning modalities offered by the TEIs in Pampanga, it is apparent that face-to-face learning is universally offered by all institutions, demonstrating a 100% adoption rate which signifies full implementation. Similarly, among the 20 schools surveyed, 17 (85%) offer online synchronous learning, while 16 (80%) provide online asynchronous learning which also corresponds to full implementation. In terms of hybrid learning approaches, the blended learning is implemented by 15 schools (75%), while only 2 schools (10%) employ flipped classroom.

On the learning approaches, the evaluation of teaching approaches in the schools revealed that Experiential Learning, Cooperative learning, lecture method, discussion method, and demonstration method are highly implemented, with mean ratings of 3.71, 3.69, 3.83, 3.83, and 3.90 respectively. Additionally, it is evident that challenge-based learning, problem-based learning, game-based learning, discovery-based learning, and direct instruction are also implemented in schools, albeit with slightly lower mean ratings of 3.33, 3.48, 3.21, 3.50, and 3.50 respectively.

- Information and Communication Technologies

The findings reveal that the utilization of Information and Communication Technologies (ICTs) in Teacher Education Institutions (TEIs) is limited. This is evident from the grand mean of 2.18 and a standard deviation of 1.13, which corresponds to a verbal description of "Rarely Utilized" which implies that these are partially implemented in terms of Education 4.0. Among the ten assessed ICTs, only four, namely Big Data, Virtual Reality, Biometrics, and Internet of Things, are actively implemented in these institutions. In contrast, augmented reality, artificial intelligence, cloud computing, and robotics are rarely utilized thus, partially implemented. Notably, two ICTs, namely 3D Printing and Holograms, are completely unused or not implemented in TEIs.

In terms of the platforms, learning management system, and tools used by the TEIs, it was revealed that Google Meet is the most widely used platform, with 100% frequency, followed closely by Zoom at 95%. Google Classroom, Microsoft Teams, and Office 365 are also extensively adopted, with percentages ranging from 75% to 90%. This implies full implementation of the said tools and platforms. Other LMS and tools, such as Blackboard, Canvas LMS, Edmodo, Schoology, and Edukasyon.ph, have varying degrees of utilization, with percentages ranging from 15% to 60%. Platforms like Webex, Tutor LMS, Absorb LMS, Learning Pool Suite, and Cypher Learning have comparatively lower utilization rates, ranging from 5% to 10%.

- Infrastructure

There is a general agreement, with a grand mean of 3.06 and a standard deviation of 0.85 which means that Education 4.0 is implemented in terms of infrastructure. However, the data also reveals areas where the institution falls short, which are indicated by a rating of "Disagree" that is associated with partial implementation. It was revealed that not all rooms in the institution are equipped with fast internet connectivity, with a mean of 2.52 and a standard deviation of 0.85. Additionally, the institution does not offer massive open online courses (MOOCs), as evidenced by a mean of 2.52 and a standard deviation of 0.91.

Conversely, the majority of statements received mean scores and standard deviations that indicate agreement. Findings reveal that the institution provides accessible internet connection, has well-structured rooms for advanced learning, employs technology devices in classrooms and offices, offers customized furniture for comfort and ease, plans the structure with consideration of colors and illuminations, provides well-ventilated rooms, maximizes the use of digital learning spaces, utilizes digital management systems, offers personalized learning experiences, provides digital information services and research databases, focuses on the future, and has open innovation laboratories.

Best Practices of Teacher Education Institutions in the implementation of Education 4.0

The TEIs have successfully implemented best practices in various competencies, learning methods, and ICTs. In terms of competencies, the organization has fully integrated critical thinking, communication, cooperation and collaboration, creativity and innovation, as well as disciplinary skills related to functional, technical, and technological knowledge and the capacity to research, design, create, and implement new technologies. Furthermore, the organization has successfully utilized emerging technologies and best practices to propose technology-based solutions, showcasing its overall excellence in competency development and workplace performance skills.

Regarding learning methods, the organization has fully implemented best practices across different modalities, including face-to-face, online synchronous, online asynchronous, and hybrid (blended) approaches. It has also successfully incorporated various teaching approaches, such as the demonstration method, discussion method, experiential learning, lecture method, and cooperative learning, all of which contribute to an effective and well-rounded learning environment.

Additionally, the organization has demonstrated proficiency in utilizing a range of ICT tools, platforms, and Learning Management Systems (LMS) like Google Meet, Zoom, Google Classroom, Microsoft Teams, and Office 365, further enhancing the learning experience and supporting a technology-driven approach to education and training.

The following practices were also highlighted through the interview: continuous professional development, tool accessibility and utilization, strategic planning, personalized and remote learning, encouragement of active and life-long learning, fostering culture of innovation, and collaboration with parents and global linkages.

Areas Needing Improvement in the Implementation of Education 4.0

The findings revealed the areas needing improvement in various aspects of learning methods, ICT integration, and infrastructure. In terms of learning methods, the hybrid (flipped) modality has not been implemented, indicating a need for improvement in this area. Concerning ICT, emerging technologies such as Augmented Reality, Cloud Computing, Artificial Intelligence, and Robotics have only been partially implemented, highlighting the need for further development and integration. Additionally, certain ICT tools, platforms, and Learning Management Systems (LMS) like Schoology, Edukasyon.ph, Webex, Tutor LMS, Absorb LMS, Learning Pool Suite, and Cypher Learning have not been implemented, pointing to an area that requires attention and implementation.

Furthermore, the institution's infrastructure, while partially implemented, also needs improvement. Although all rooms have fast internet connectivity, there is room for enhancement to ensure a seamless learning experience. The offering of massive open online courses (MOOCs) for delivering learning content online is also only partially implemented, indicating room for expansion and wider reach. Overall, the findings suggest a focus on addressing the areas needing improvement in learning methods, ICT integration, and infrastructure to enhance the institution's overall educational experience and effectiveness.

Along with the areas for improvement these aspects were also identified through the interview: facilities, technological implementation, financial resources, designation of focal person, educational programs and curriculum alignment, global mindset and international demands.

Proposed School Leadership Model based on the Results

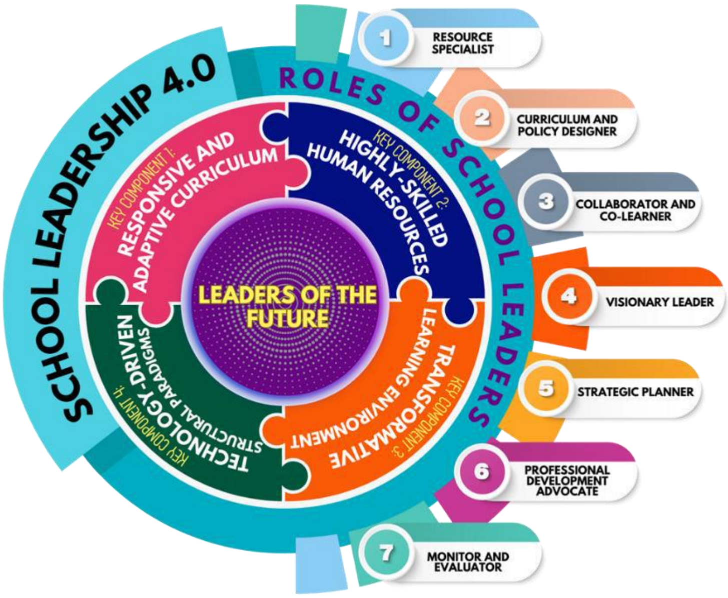

Figure 1. School Leadership 4.0

The researcher analyzed the responses of all research participants to determine evidence of how they incorporate Education 4.0 in their respective schools resulting to the structured model. The School Leadership 4.0 model represents an innovative and forward-thinking approach to education, designed to equip educators and teacher education institutions with a strong focus on four key components - Responsive and Adaptive Curriculum, Highly-skilled Human Resources, Transformative Learning Environment, and Technology-driven Structural Paradigms. This model aims to prepare students for the challenges and opportunities of the future. focuses on preparing educators, particularly those working in Teacher Education Institutions (TEIs), to thrive in an ever-evolving educational landscape driven by rapid technological advancements and changing societal needs. This theme highlights the critical role of school leaders in equipping educators with the necessary knowledge, skills, and mindset to effectively navigate and leverage the opportunities presented by the 4th industrial revolution.

CONCLUSION:

The school leaders strong agreement regarding the effectiveness of TEIs in equipping students with critical competencies demonstrates a key strength that educational managers can capitalize on. This indicates that TEIs are already making positive strides in preparing students for the demands of Education 4.0. Furthermore, the flexibility demonstrated by TEIs in offering various learning methods, including face-to-face, online distance, and hybrid approaches, presents an opportunity for educational managers to create inclusive learning environments. By combining both traditional and innovative approaches, educational managers can cater to the diverse needs of students and foster a well-rounded educational experience.

However, the underutilization of current and emerging information and communication technologies (ICTs) in TEIs reveals a potential area for improvement. Educational managers should prioritize the integration of advanced technologies to enhance student engagement and provide broader access to resources. By exploring a wider range of ICT tools beyond the commonly used platforms, such as Google Meet, educational managers can enhance the educational experience and better align with the principles of Education 4.0.

The recognition of innovative facilities by school leaders indicates positive educational management practices. It is crucial for educational managers to continue investing in infrastructure to create conducive learning environments that support the implementation of Education 4.0.

In terms of best practices, educational managers should prioritize continuous professional development for educators. This ensures that they stay up-to-date with the latest pedagogical approaches and technological advancements, enabling them to effectively integrate Education 4.0 practices into their teaching. Promoting tool accessibility and utilization empowers both educators and students, allowing them to leverage educational tools effectively. Strategic planning aligned with Education 4.0 principles provides a roadmap for the institution's growth and progress. Encouraging personalized and remote learning, fostering a culture of innovation, and promoting collaboration with parents and global linkages are also crucial practices. These initiatives contribute to creating a dynamic and forward-thinking educational environment that prepares students for the demands of the digital age.

Identified areas needing improvement, such as facilities, technological implementation, financial resources, designation of a focal person, and educational programs and curriculum alignment, require attention from educational managers. Allocating resources to improve infrastructure, enhancing technological utilization, and ensuring sufficient financial support are necessary steps in advancing Education 4.0 practices. Designating a focal person or team responsible for oversight and coordination, as well as regularly reviewing and aligning educational programs and curriculum, ensures that the institution stays relevant and responsive to the evolving needs of Education 4.0.

Overall, these insights provide valuable guidance for educational managers to enhance educational management practices, foster innovation, and effectively implement Education 4.0 principles within TEIs. By capitalizing on strengths, addressing areas for improvement, and embracing best practices, educational institutions can better prepare students for the challenges and opportunities of the digital era.

RECOMMENDATIONS:

In light of the comprehensive findings and conclusions of the study, several recommendations are deduced.

Firstly, it is highly recommended for school leaders to adopt the proposed school leadership 4.0 model in the implementation of Education 4.0 within their institutions. By incorporating the insights derived from this study, school leaders can effectively enhance the learning experiences of both students and teachers, thereby improving overall educational outcomes.

Secondly, institutions must prioritize providing high-quality and exceptional learning experiences for students. This can be achieved by embracing innovative processes, services, and programs that cater to students' unique educational needs, equipping them for future employment opportunities on both local and international levels.

Additionally, officials from the Commission on Higher Education (CHED) can utilize the valuable insights obtained from this study, particularly regarding Education 4.0 implementation, initiatives, and efforts in various institutions. This information serves as a solid foundation for crafting new educational policies or provisions that align with the four components of Education 4.0.

Furthermore, accreditation agencies and bodies should consider integrating Education 4.0 as a parameter for granting Level IV status to institutions. By reevaluating their evaluation tools and criteria, these agencies can recognize and commend institutions that excel in implementing Education 4.0, appreciating their best practices and efforts. Other higher education institutions can also benefit from the proposed model and evaluation tool, as they can identify and adopt best practices from schools that have successfully implemented Education 4.0. This approach will enable them to assess their current status regarding Education 4.0 implementation and foster a culture of continuous improvement.

Lastly, the research findings can serve as a valuable resource for future researchers exploring Education 4.0 and best practices in higher learning institutions. The proposed school leadership 4.0 model can form the basis for further studies, and the instrument/tool can be adapted to assess the status of Education 4.0 implementation in other institutions not originally covered by the study, thus advancing knowledge and encouraging ongoing research in this area.

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Magnitudinal Impact of Communication and Changing Dynamics of Indian Rural Scenario

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Abstract: The study of how we communicate with various audiences, users, and communities is known as communication studies. Communication takes place in a range of social, political, and media contexts. Both social sciences and humanities are covered by communication studies. The foundation of communication studies is made up of empirical studies and analytical theories from the social sciences. From the view point of Humanities, communication plays a vital role in journalism, mass media news, marketing, advertisements, etc. It also overlaps with English and cultural studies, philosophy and history. The history of the community begins from prehistoric times. The best of communication ranges from exchange of ideas to debate and mass communication. Some 200, Ukrainian years ago there was a revolution in human communication with the emergence of human speech. Around 30 BC, script and writing developed.

With expanse of horizons, Communication has engendered transformative and profound change in rural India. It has made a huge and revolutionary impact on rural populace. Rural communities now have better access to information, opportunities, and services thanks to communication studies' assistance in bridging the communication gap between urban and rural locations. This improved connectivity and communication has in turn had an impact on the evolving dynamics of rural India. The study of numerous facets of human communication falls within the broad topic of communication studies. It examines the transmission, reception, and interpretation of communications in various circumstances, ranging from interpersonal communication to mass communication. The research paper explores a number of empirical facts in communication studies, including theories, research results, and important concepts.

The idea of communication models is one of the core empirical truths in communication studies. A framework for comprehending communication is provided by models like the sender-receiver model, transactional model, and communication competency model. These models serve as an example of the various components of communication, including the sender, message, channel, receiver, and feedback. The efficiency of various communication tactics and their effects on message interpretation and understanding can be examined by researchers using these models, according to empirical research, which has demonstrated that they offer useful insights into the communication process.

The importance of non-verbal communication in communication studies is another scientific truth. Non-verbal cues are used to transmit messages that includes gestures, body language, facial expressions, and others. According to research, nonverbal communication is extremely important for good communication. For instance, research has revealed that non-verbal cues can have an impact on how a message is understood, how people interact with one another, and even how persuasive communication is perceived. The use of nonverbal cues effectively has been linked to better communication results across a variety of circumstances. According to empirical data, those who are adept at deciphering and utilizing non-verbal signs typically communicate more effectively in a variety of situations.

Furthermore, a lot of empirical research on mediated communication has been done by communication researchers. The term "mediated communication" refers to communication that takes place via a variety of media platforms, including radio, television, social media, and online forums. Important new information about the impact of media on attitudes, beliefs, and behavior has emerged as a result of this field of study. For instance, empirical data has demonstrated that exposure to violent media can make people hostile, especially kids. Studies have also looked into how social media affects political campaigns, misinformation dissemination, and public opinion. This empirical study emphasizes the significant influence that mediated communication has on society and the necessity of analyzing its ramifications.

Case Study: Disadvantages of Social Media platform

Social media such as Facebook, Instagram, WhatsApp and many others, and Influencers have generated hate speeches and this has led to killings and murders in India as well as abroad. "In a tragic incident, a fight over a message on WhatsApp group in Sonepat, Haryana turned fatal after a 28-year-old man was killed and three of his brothers were injured." (Outlook Web Bureau)

A 28-year-old man, Luv, was killed and three of his brothers were hurt during a fight over a WhatsApp group message in Sonepat, Haryana. According to reports, the victim was killed due to a blow on his head by suspect Dinesh and that also for unintentionally posting Dinesh's family photos to a WhatsApp group chat.

Primarily, communication is the term used to describe the process of transmitting information from the sender to the receiver in which such a medium is used, allowing the transmitted information to be understood by both the sender and the receiver. It is a process by which animals exchange information through various mediums. Communication demands that target groups understand the same language being exchanged, auditory mediums (such as speech, song, and occasionally voice tone) as well as nonverbal. Communication can be defined as the exchange of information through physical means, such as body language, sign language, paralanguage, touch, eye contact, or writing. actions that can be taken to formulate and communicate meaning in an effort to establish consensus. A variety of abilities are needed for this action. Processing on both an intrapersonal and interpersonal level, including listening, watching, speaking, and asking, analyzing, and evaluating. These methods can be applied in all spheres of life—at home, at school, in the community, at work, and elsewhere—and are developmental in nature. It is the means by which cooperation and affirmation occur. Verbal or non-verbal, as long as an evocative thought, a gesture, an action, etc. is transmitted,

Communication is the expression of sending messages through various means. It occurs at many levels (even for a single action), in many different ways, and for most animals as well as some machines. It is crucial to understand which aspect of communication we are referring to when discussing it because most, if not all, fields of study give it some consideration. There are innumerable divergent and relevant definitions of communication, some of which acknowledge that animals can interact symbolically with humans and other animals, while others are more restrictive and only include human interaction. However, a few essential dimensions are typically present in communication. Content (the kinds of things being transmitted), source, coagulation doer, sender or encoder (who), form (how they are being transmitted), channel (the medium they are being transmitted through), destination, receiver, target or decoder (who they are being transmitted to), and purpose or practical aspect are all described. Communication between parties entails actions that impart information and experience, provide counsel and instructions, and pose queries. These actions can take many forms, among many different manners of communication, depending on the ability of the group to communicate. does communication, the elements and forms together make up the message that is transmitted to the target, which may be itself, another person or entity, or another entity (such as a corporation or group of entities. The semantics governed by the three levels of information transmission can be seen as semiotic rules.

Communication and development have co-existed at par since the turn of the civilization. Both have undergone changes with the growth development of human beings pertaining to their needs. It has played a vital role in the acculturation process. Development signifies increase in per capita income while communication can be defined as transference of coding and decoding process of knowledge dissemination.

The concept of national development in India is actually embedded in the rural development of India. If it is said that the axis of economic development is the development of agriculture and economic development is hidden in the development of agriculture, then there will be no exaggeration. For the improvement of the condition of agriculture, the villagers / farmers can be made aware of technical and technological knowledge and information by making proper use of means of communication and can also be benefited from government and non-government help. The reach of information technology has increased and there is scope for using this medium for rural development and empowerment. Many creative experiments are also being done in this direction. The central and state Governments have taken several major and innovative initiatives to speed up this process. New technologies are capable of moving small farmers towards knowledge-intensive agriculture. Rural development refers to the comprehensive development of rural areas in its entirety. Dr. APJ Abdul Kalam, the former President of India and a scientist of international repute, often used to say that providing urban facilities in villages is the key to rural development. This can not only improve the condition of the villages, but it can also reduce the increasing burden on the cities and the ever-increasing pressure on civic amenities and the imbalance in rural and urban development can be eradicated. These urban amenities include metalled roads, potable water, electricity facilities, schools, better health and sanitation facilities, and efficient postal and banking systems. Now a new facility has also been included in them which is not only a welfare step in itself, but it can also speed up the work of collecting other facilities. This is information technology and communication.

There is a steady increase in the use of information technology and communication to make villages advanced and developed like cities. Although the progress in this direction is still slow, but good results are coming out in some areas. Agriculture is the backbone of our rural economy. The prosperity of villages depends on agricultural production. Therefore, with the help of the central government, various state governments have taken further steps towards e-agriculture. Due to this, the pathetic condition of the farmers has improved due to increase in agricultural production. At the same time, their standard of living is also increasing continuously. The central government is giving information about e-farming to the farmers and providing necessary equipment and services. Farmers are making the biggest use of information technology in carrying out their various agricultural works. Today, works like plowing and leveling large fields, weaving, weeding, fertilizing, irrigation, spraying of insecticides and disease-killing chemicals are being done successfully by computer-controlled machines. Along with this, computers also help in packaging agricultural products, selecting suitable markets for selling and determining prices. Computer controlled machines have an important contribution in protected cultivation of vegetables, flowers and fruits inside the poly house. In protected farming, where the computer determines the quantity and time of water, fertilizer and moisture etc. to the crops. In order to strengthen the rural economy and provide better value to the farmers for their produce, the government has recently launched several important schemes, programs. and technologies etc. have been introduced.

- **ICT Technology: -** The use of information and communication-based technology (ICT) to increase production in agriculture can be specially mentioned in agricultural extension activities through mobile app of KV. Realizing the importance of ICT, several initiatives have been taken to provide farmers with the most recent agricultural scientific information. For the farmers, web-based KV portals have also been developed. The purpose of the Agricultural University Portal is to offer pertinent information about agricultural education. Apart from this, KV's mobile app has also been made available to the farmers to provide quick and accessible information which is contributing significantly in realizing the vision of Digital India in agriculture and rural development. Many mobile apps like Kisan Portal, Kisan Suvidha, Pusa Krishi, Fasal Bima Portal, Agri Market App, Kisan Portal, Krishi Mandi Mobile App have also been started for the convenience of farmers through information and communication technology.
- **E-Farming: -** Today villagers and farmers have many mediums to get information and new information, but internet is the most effective, simple and easy medium to solve any problem related to rural development and agriculture. Today farmers can solve any problem related to their agriculture by emailing from any corner of the country.
- **Pusa Krishi Mobile App: -** Pusa Krishi Mobile App has been started to help the farmers to realize the dream of the Honorable Prime Minister from Lab to Land.
- **M-Kisan Portal: -** Millions of farmers are being consulted through M-Kisan Portal Krishi Vigyan Kendras. Automatic weather stations have been added at 100 Krishi Vigyan Kendras' by the Indian Meteorological Department.

- **National Agricultural Market (e-NAM Portal): -** Establishment of National Agricultural Market e-NAM Portal is a revolutionary step for the farmers. Under this, emphasis has been laid on one nation and one market and prosperity of farmers in e-NAM. Through which there will be a positive change in the condition and direction of rural India. Earlier, there were different market laws in all the states in the country. For the purpose of providing a single market for the farmers, three major reforms such as recognition of electronic trading, market fees at a single point and integrated license system etc. were made after talking to the states. On April 14, 2016, on the occasion of Ambedkar Jayanti, the National Agricultural Market, a web-based online trading portal was launched by the Honorable Prime Minister. Through this portal, farmers will be able to sell their produce through mandis across the country. Initially, 23 mandis of 08 states were connected with National Agricultural Market Portal, and 46 lakh farmers, 90,000 traders, 47,00 commission agents, and 419 mandis from 13 states were all connected to the e-NAM portal as of June 2017.
- **Establishment of e-livestock-haat portal: -** National Milk Day was celebrated for the first time in the country on 26 November 2016. On this auspicious occasion, the e-Pashudhan-Haat portal has been launched under the National Productivity Mission. In order to connect breeders and farmers for indigenous breeds, this portal will be extremely important. Farmers will be able to access breed-specific information about native breeds through this portal.
- **Wi-Fi Choupal**: - In the year 2016-17, CSC-SPB started Rural Wi-Fi Choupal facilities with which a new era has come in terms of providing connectivity to the villages. Wi-Fi Choupal Projects have been launched to provide Wi-Fi internet facilities in rural India through CSCs. The first Wi-Fi Chaupal was opened on 07 April 2016 at Ghoranda village in Faridabad, Haryana. Today Wi-Fi infrastructure has been installed in 819 gram-panchayats of nine states and two union territories. Internet service has been started at 483 places.
- **Digital Literacy Campaign**: Through this, the goal is to make at least one person in each family digitally literate. About 35.44 lakh people were given certificates under this program in the year 2016-17. Due to which the total number of persons who have obtained the certificate till March 2017 reached 56.46 lakh, that was only 18.01 lakh in March 2016. The implementation of the new, ambitious Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMG DISHA) program for digital literacy, which was introduced by the Indian government in February 2017, has also been delegated to CSC (Common Service Centres)- SPV (Special Purpose Vehicle). As a result of this expansion of information technology infrastructure, the wave of e-revolution has started moving faster in the villages, the post offices of the villages are also being computerized. For the expansion of e-governance, many innovative schemes have been launched in rural areas of different states, which is playing a useful role at the local level.

Case Study of Bihar Based Farmer Mr. Sudhanshu Kumar

Sudhanshu Kumar, Village Head in Samastipur, Bihar has been operating scientifically and methodically for automating his farm of 200acres. He uses the latest technology of drip irrigation. He has a wireless broadband connection and applies contemporary, scientific farming techniques. Sudhanshu Kumar from Bihar uses scientific farming techniques on a fully automated farm with a wireless broadband connection to grow a wide range of fruit trees, including mangoes, lychees, jamuns, and dragon fruits. The village's farmers have adapted the drip irrigation method and are using it on their lands to increase crop yield. He says “Sugarcane is widely grown in the region, and it is water-intensive at the same time. A few farmers have started using drip techniques to reduce water costs. They are also planning to convert some areas into a horticulture space,” he adds.

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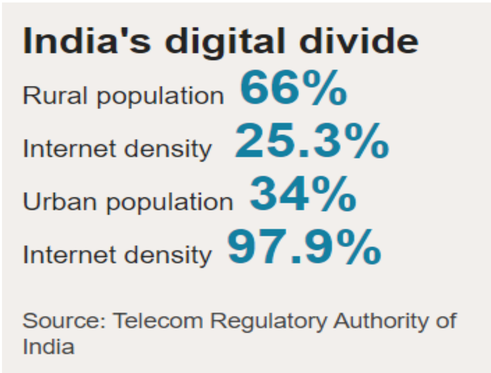
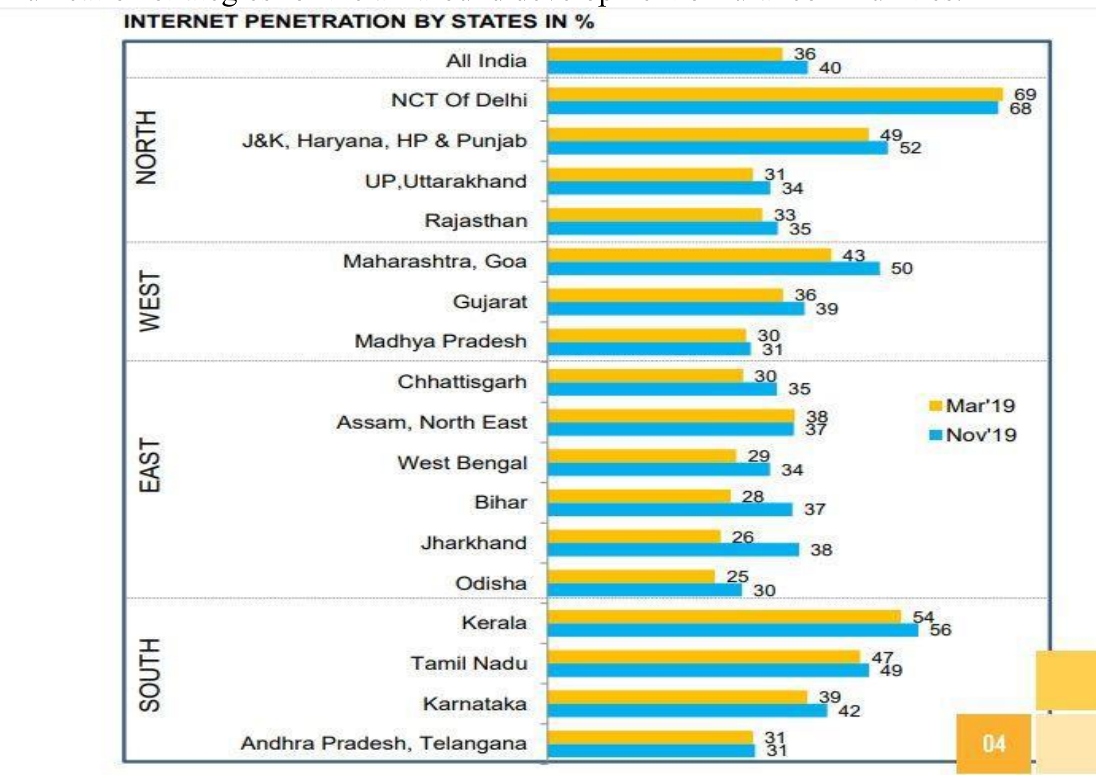
(Agriculture I Bihar Lede)

His accomplishments were acknowledged and valued on many different levels. He received the 2011 Role Model Award from the International Consortium of Contemporary Biologists and The Board of Trustees of Madhawi-Shyam Educational Trust (ICCD-MSET) and the Jagjivan Ram Abhinav Kisan Puruskar, an innovative farmer award, as well as the Mahindra Samriddhi India Agri Awards in 2014. All the farmers in Bihar are not literate and may not benefit from the ICT and other government programmes as they are poor. Most of the farm hands have migrated and lack of infrastructure are the drawbacks.



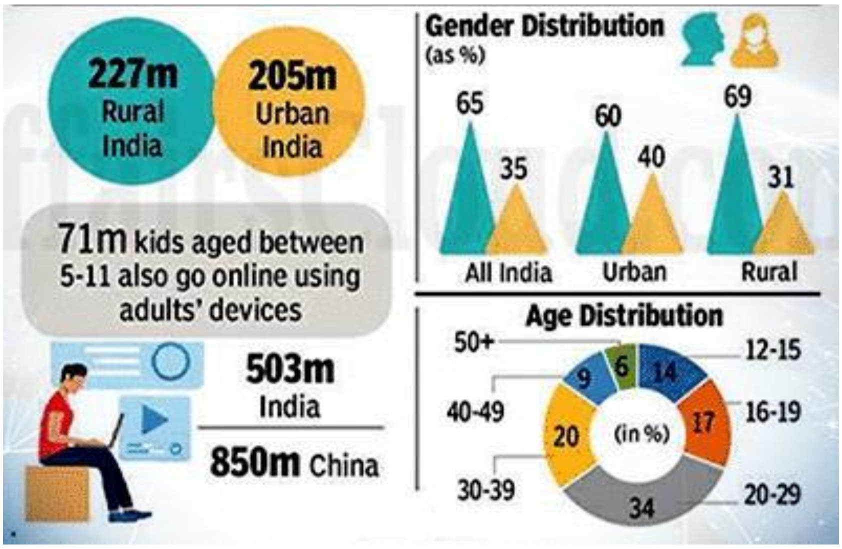
Comparative Literacy rate in Kerala 97%, while in Bihar it is mere 44%. This causes variation in outreach of communication mass media. Variations in the reach of print media (Bihar 9%, Kerala 65%), and electronic media (Kerala 63%, Bihar 17%) The mass media's constrained audience places restrictions on universal communication with rural consumers. To find the best medium to ensure the greatest possible spatial reach, there are three requirements.

At large, communication studies in rural India seek to comprehend communication dynamics, pinpoint communication gaps and difficulties, and create creative, context-specific communication strategies for the all-around development of rural communities.



The core areas that need to be focused on in the study of communication in rural India is increased internet outreach in the remotest regions and literacy %. Yet the percentage of usage in rural areas is more than urban areas.

In the investigation of communication in rural India, some important areas to focus on include:
1. **Stimulate Awareness-building and information dissemination**: Communication is essential for spreading knowledge about various government initiatives, such as welfare programs, health initiatives, and educational opportunities. It aids in raising awareness of the rights, entitlements, and resources available to rural communities.
2. **Participatory communication:** Methods of participatory communication seek to involve regional communities in planning and development processes. This can be accomplished using tools like participatory video, community radio, and local media. Rural communities are empowered by participatory communication to express their opinions, voice their concerns, and take an active role in the development process.
3. **Information and communication technologies and mobile technology**: Mobile phones' affordability and accessibility have revolutionized communication in rural India. Mobile technology is being used to open up opportunities for economic empowerment, healthcare, and education. It makes it easier to access banking services, market connections, and skill development.
4. **Social and Behavioural change communication**: Communication techniques are used to influence behavior in areas like agriculture, women empowerment, environmental preservation, and health and sanitation. These strategies concentrate on raising awareness, educating people, and encouraging constructive attitudes and behaviors in rural communities.
5. **Media and entertainment**: Television and radio in particular are effective communication tools in rural areas. They can be used to spread entertaining content, socially conscious messages, and educational and informative content. Health campaigns, public awareness of government initiatives, and women's issues are just a few examples of areas where media interventions have been successful.



According to the 2020 IAMAI and Nielson report "Digital in India," there are more internet users in India's rural areas than in its urban areas

The rate at which communication technology is permeating every aspect of our lives has accelerated since the Covid-19 pandemic. A few examples of how technology is quickly becoming all-pervasive include workplaces quickly converting to digitally enabled business solutions, education and medical consultations moving online, and the preference and promotion of contactless digital transactions. But the pandemic has also highlighted India's stark digital divide, which has kept a sizable portion of the country's population from benefiting from this paradigm shift. Even though there may be more Internet users in rural areas, efforts should be made to raise the percentage of digital literacy in order to break down communication barriers and speed up the development of technology there.

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Indigenous Resources and Economic Development

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Abstract : Basically economic development implies the process of securing levels of productivity in all sectors of economy and this in turn is a function of the level of technology. The process of economic development involves the growth of national output. To achieve an expansion of national output it is essential to develop indigenous resources with capital. Indigenous resources determine the course of development and constitute the challenge which may or may not be accepted by thehuman mind. It is based upon the naturally occurring sources of economic potentialgrowing from within localities and regions. Indigenous resources are naturally home-grown assets and resources that may be more locally and regionally embedded, more capable of making enduring and sustainable contribution to local and regionaldevelopment. They seek to work with the existing assets and resources from the ground up to explore and unleash their potential for local and regional development.The resources are passive by nature and as such are in capable of initiating economic development. This passivity of the Indigenous resources necessitates their exploitation and use by scientific techniques and human efforts. But sustainable development is central to indigenous intervention in recognizing the relationship between economy, society, and ecology. The indigenous resources are belonging naturally to a place. These resources are land, forest, fisheries, water, power, coal, mineral oil, nuclear energy and human resources. To be effective, a development strategy must reflect population concern among its primary objectives to achieve sustainable development.
"The development of a country is brought about by people, not by money. Moneyand the wealth it represents, is the result not the basis of development." **Julius K. Nyerere**, 1967

Keywords: Indigenous, Resources, Economic & Development.

INTRODUCTION:

"A country wants to progress in a hundred ways. We have therefore, to take into consideration the order of preference what is first, what is second and what is third. There are so many things we want to do in India, and I want to do them quicklyand passionately. The question of finding the proper way to reach a certain goal becomes important."

---- Jawaharlal Nehru

Robert L. Garner who was the vice-president of the International Bank for Reconstruction and Development observed "Development is a state of mind. People have to develop themselves before they can change their physical environments andthis is a slow process....... It requires improvement of governmental organizations and operations, the extension of institutions, school courts and health services."[1] Development is not movement towards a fixed goal but continuous adaption to maximize well-being in changing conditions. It is defined as a planned and comprehensive economic, social, cultural and political process in a defined geographic area that is right based and ecologically oriented and aims to continuously improve the well-being of the entire population and all of its individuals. Basically economic development implies the process of securing levels ofproductivity in all sectors of economy and this in turn is a function of the level of technology. The process of economic development involves the growth of national output. It has three concepts like social development, economic development and environmental protection. To achieve an expansion of national output it is essential to combine indigenous resources, human resources and capital. Indigenous resources determine the course of development and constitute the challenges which may or may not be accepted by the human mind.

It is a matter of fact that a country's development is dependent upon its indigenous resources. Indigenous resources are naturally home-grown assets and resources that may be more locally and regionally embedded, more capable of making enduring and sustainable contribution to local and regional development. They are a country's location, her accessibility to raw materials and markets in other countries, the present state of knowledge about resources, growth of techniques, the attitudes of the people to material things, willingness to save and invest productively, all combine in the economic development of the nations. Professor W.A Lewis mentions that "The extent of a county's resources is quite obviously a limit on the amount and type of development which it can undergo. It is not the only limit, or even the primary limit."[The Theory of Economic Growth, Lewis W.A, Allen and Unwin]. Most of the underdeveloped countries with the dawn of self-rule are embarking on programs of economic development. They usually have to begin with and concentrate on the development of their indigenous resources. They concentrate on the development of locally available natural resources as an initial condition for lifting local levels of living and purchasing power, for obtaining foreign exchange with which to purchase capital equipments and setting in motion the development process.

Indigenous Resources

Indigenous means originating in a particular region. These resources may grow there, live there, produced there or occur naturally there. They exist naturally. First time the word indigenous was officially used by the United Nations in its political declaration of the world summit on sustainable development in 2002. They seek to work with the existing assets and resources from the ground up to explore and unleash their potential for local and regional development. The resources are passive by nature and as such are in capable of initiating economic development. This passivity of the Indigenous resources necessitates their exploitation and use by scientific techniques and human effort. The indigenous resources are belonging naturally to a place. These resources are as follows:-

- Land resources
- Forest resources
- Fisheries resources
- Water resources
- Power resources
- Mineral resources
- Human resources

Guiding Principles of Indigenous Resource Development

The principal objective of resource development is to achieve sustained contribution to national output. It is imperative that these resources should be so harnessed in the process of production that there is an optimum utilization of resources realizing in a maximum increase of national income. Within the frame work of these broad objectives of attaining maximum sustained increase in national output various guiding principles have been evolved for resource development.

- Economic use of resources to achieve minimum waste.
  Reducing waste to minimum acquires added significance with respect to the exhaustible or stock resources, notably minerals. Inability to make use of by products, inability to work a mine fully due to the backwardness of technology, failure to reclaim cultivable wastes, lack of adoption of appropriate technology etc are included in the concept of waste.
- Sustained use of economic resources.
  It is applicable to renewable of flow resources like land, water and forest resources. It is necessary of soil conservation by the process of over- exploitation of land.
- Multi-purpose use of resources.
  Plan to use of resources in such a manner that by catering to several uses e.g.while taming a river for flood control it is planned to use it as a source of irrigation or power supply or navigation or water supply to industrial enterprises.
- Integrated planning in the use the resources.
  While making use of resources, it should be endeavor of the society to consider the needs of the region or the area and also develop inter-related resources. For instance, the Bhakra Nangal project serving the benefit of floodcontrol releases water for irrigation and also supplies electricity.
- Location of industries with a view to reducing transport costs to the minimum.
  In the production of any commodity, raw materials and fuels are of great importance. For instance in an iron and steel industry, coal is burnt into ashesfor steel production. So the coal is termed as a weight-losing factor and iron sa weight-saving factor. The weight-losing factor is utilized at the point of origin and the weight-saving factor be transported to join the weight-losing factor in the production process.

In short the guiding principles of resources development emphasize the 'least cost principle' in the use so as to enable sustained economic growth. Conservation of renewable resources and economic use of exhaustible resources can provide maximum social benefit. The degree of poverty or affluence in an economy, given the socio-political set-up is determined by the volume and character of the indigenous resources available in this area, and the intensity and efficiency of their exploitation during a certain period.

- **Land Resources**

One-fourth part of the world is land resources out of which the total geographical area of India is about 329 million hectares. About 47% of the available area is under the cultivation.

Problem of increasing Cultivable Area

- Area under forests
- Fallow lands
- Cultivable waste land
- Not available for cultivation
- Net area sown
- Area sown more than once

- Not irrigated area

Suggestion to raise production and save land resources

- Increase the productivity per acre on the present cultivable area.
- Improvement in double cropping.
- Facilitates irrigation.
- Use of modern techniques
- Conserve the fertility of cultivable land
- Lands not fit for cultivation can be used for forestry, pastures and grazing purposes

Forest Resources

Forests are important indigenous resources. They are the largest renewable source of food, fodder & fuel. They have moderated influence against flood and protect the soil against erosion. It provides a lot of resources like timber, fruits, honey, firewood, herbal medicines etc. It also provides raw materialsto the manufacturing industries like furniture, matches, paper, rayon, construction, tanning etc. Forest in India is a significant rural industry and a major environmental resource. Total forest areas in the world are 4.06 billion hectors i.e 31% of the total land area. The rank of India for the forest resources is 3rd. According to the India State of Forest Report 24.62% of geographical area was under the forest area. But now it is reduced to 21.71% of the total geographical area of India. Forest in India is mostly owned by states. India is still short of industrial wood.

Forest Policy

Govt. Of India declared forest policy in 1952 for developing the forests. It aims at maintaining one-third of the geographical area underforests. The National Forest Policy of India 1988 is the main policy framework for forest management in the country. The objectives of these policies were ---

- To increase the productivity of forest.
- To link up forest development with various forest-basedindustries.
- To develop forests as a support to rural economy.
- To ensure the ecological security and stability.
- To protect the environment and meet the basic needs of the people around it.

Fisheries

The fisheries resources are either in inland or marine. The principal rivers and their tributaries, canals, ponds, lakes, reservoirs comprise inland fisheries. The marine resources comprise the two wide arms of the Indian oceans and a large number of gulfs and bays along the coast. The 5th 5-year plan had assigned a high priority to the development of fisheries because of the necessity levels of protein deficient. In 6th 5 year plan the fisheries programhad given special attention to family based labor-intensive inland and brackish water fisheries. Fisheries are the two types; Capture fishery & Culture fishery. India is the 3rd largest producing country that contributes 8% for global production.

Development of Fisheries

The importance of developing fishery resources lies in fact that they can act as substitute to our land resources. An Integrated fisheries project had been operated in Cochin and the major activities of this project include:

- Experimental fishing

- Production and marketing of diversified fish products
- Setting of modern aluminum canning plants
- Training of personnel for fisheries industries

The central Govt. sponsored Fish Farmers Development Agencies (FEDA's) to popularize fish farming in tanks and ponds. India is extremely rich in fisheries and the prospects of exploitation of these resources are indeed quite bright.

Water Resources

Three-fourth area of the world is surrounded with water resources. 97% of thewater on Earth is salt and only 3% is fresh water. Thedevelopment of water resources has to be viewed in relation to the need to set up agricultural productivity by means of providing more irrigation facilitiesand by controlling flood and water logging. It is helpful in meeting domestic and industrial requirements. Water resources can be broadly classified into two parts: (a) Surface water (b) Underground water. India accounts for 18%of the world population and about 4% of the world's water resources. India is ranked 133rd in the world for the amount of water available per person per year.

The water resources can be used for -

- Irrigation
- Public water supply
- Industrial purpose
- Navigation purpose
- Creating hydro-electric power

Power Resources

The most important single factor which can act as a constraint on economicgrowth is availability of energy. India is the world's 3rd largest energy consuming country & 3rd largest producer of electricity in the world. There are three sources of energy.

- Living energy (human effort and animal power)
- Commercial energy (coal, natural gas, hydro-electric power, nuclearfuel)
- Non-commercial energy(firewood, charcoal, vegetable wastes, dried cow-dung)

There is a direct correlation between the degree of economic growth,the size of per capita income and per capita consumption of energy. Since energy is an essential input to all productive economic activity. The process of economic development inevitably demands higher level of energyconsumption. Energy sets the "basic foundation for the economic development of the country". The energy consumption is bound to increase over the years with the development of the country.

Pattern of Energy Consumption

- **Power** is an essential ingredients required for commercial (industrialization) and non-commercial (lighting, cooking, and use of mechanical gadgets) uses.
- **Coal** has the forward linkage effect with steel, cement, fertilizer, electric power and other industries. It is the country's top energy source with a share 46%.
- **Mineral oil** leads to a great stimulus to industrial development and the general intensification of the country's economic activities.(ONGC, OIL,LPG). The share of natural oil is 24%.

- **Nuclear energy** contributes nuclear power to the total powergeneration.
- **Hydro power** is a renewable resources help to provide a permanentsource of energy.

Minerals

The economic development of a country depends to a great extent on the availability of minerals. These are the most important natural resources that determine a country's industrial & economic growth by supplying raw materials. The minerals like coal, iron, mica, manganese, copper,lead and zinc which are of economic importance. Coal is the 4^{th} largest reserve , iron ore & manganese ore are the 7^{th} largest reserve, mica, bauxite are 5^{th} largest reserve minerals in the world. Minerals are of two types;

- **Metallic minerals** (iron, manganese, copper, lead, zinc, gold, aluminium, chromium, nickel, uranium, thorium etc)
- **Non-metallic minerals** (mica, gypsum, lime stone, sulphur, etc)

Human Resources

"We do not believe in anarchy in material production, and we do not believe in anarchy in human reproduction. Man must control nature and he must also control his numbers." ---------- Population policy on communist China

The process of economic development involves the utilization of physical resources of a nation by the labor force of a country. The effort of development of the country makes a positive contribution, but the rapidly growing population retards the process of development. What is needed to increase our productive capacity to support a large population on the one hand and to reduce fertility rates on the other so that the growth of populationis stabilized at a lower level? Human capital formation is still a far cry for the development of an economy. Human resources influences economic growth by broadening its people's knowledge and skills. The action-plan for development must focus onissues like literacy, education, health care, on the job training, migration etc. The contributions of indigenous people are essential in designing and implementing solutions for our eco - systems. Human resources means the size of population of a country along with its educational qualities, organizational abilities , efficiency and productivity.

The United Nations Population Fund in the cooperation with the Govt. of Netherlands organized a Forum in November 1989 at Amsterdam. This forumclearly emphasized the need for linking population strategy with developmentstrategy: "To be effective, a development strategy must reflect population concerns among its primary objectives. Similarly, a population strategy mustreflect development concerns. It must link population programs to programs in health, education, housing and employment, among others. Indeed, it is only through such linkages that sustained and sustainable development can be achieved."

The mobilization of human material is possible through educational reforms. Having described the need for improving the quality of existinghuman resources, we now attempt to outline population proble4m and its control. The object here is to solve the problems of the people, in so far as theexisting stock is concern. All attempts will be small to control the growth rate,making it to Z.P.G (Zero Population Growth) to negative growth. It is in this sense that improvement in the quality of human resources is essential for them and only then the abundant population will be an asset in the process ofsocio economic development against what is now a clear liability. So the problem of population is to be attacked in two district wage: First to increase the production capacities qualitatively and quantitatively, and secondly problems of the people have to be analyzed.

For the national development approach to be realistic, the population- abundant under- develop nations have to utilize their abundant masses largely on utilized- to their full potential into the development system as an asset which stands now as liability. This means that the interdependence has to beformed between economic growth and human resources. Indigenous peoples are great contributors for sustainable development.

For the indigenous mobilization of resources the indigenous approach may be necessary and helpful but on their own way they are not sufficient forlocal and regional development. Indigenous identity is mainly based on the aspects like culture, social, political, institutional, spiritual, economical, natural resource management, health, education, technology etc. To conserve our resources it is necessary to promoting the use of renewable energy and implementing the principles of 3 R's (Reduce, Reuse, and Recycle), promotion and development of natural skills, knowledge on natural resources management and indigenous technology. The allocated funds should be increased for conversation and management of natural resources and the projects subjects to the consent of indigenous communities.

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Assessment on the Implementation of Mental Health Services in Public Secondary Schools of Region III: Towards a Proposed Plan of Action

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Abstract: This study aimed to assess the implementation of Mental Health services in public secondary schools within Region III. A descriptive survey approach was employed, utilizing a self-designed questionnaire validated by mental health experts. Participants included guidance designates, school heads, and teachers to gain insights into the current state of Mental Health services in the educational setting.

Five mental health services were examined: Assessment of Mental Health Status, Webinar/Seminar on Mental Health, Psychosocial Support, Counselling Services, and Referral Program. Analysis revealed that the Assessment of Mental Health Status and Counselling Services required more attention. Key issues identified were the lack of assessment tools, a shortage of trained professionals, and inadequate training for guidance designates. The implementation of services was found to be challenging due to reliance on guidance designates and teachers to fulfill the role of a guidance counselor.

Further analysis and feedback gathering from students and other stakeholders are recommended to gain a more comprehensive understanding of the strengths and areas for improvement within school mental health services.

Keywords: Mental Health Services, Mental Health, Assessment, Implementation, Guidance and Counselling

INTRODUCTION :

According to the National Statistics Office (NSO), mental health illnesses rank as the third most common form of morbidity among Filipinos. In the assessment conducted on the Philippine mental health system, a prevalence of 16% of mental disorders among children was reported. The Philippine Development Plan 2017-2023 emphasizes the importance of including children, who constitute about 40% of the country's population, in strategies aimed at reducing risks and enhancing adaptive capacity. Despite their significant representation, critical issues affecting children persist, and many of these challenges have not been effectively addressed. Approximately 20% of Filipino adults are affected by. Disturbingly, one in four young Filipinos aged 13 to 15 experiences emotional and psychological distress. Access to mental health services remains unequal, with regions facing shortages of mental health professionals and facilities. Stigma surrounding mental health is still prevalent, discouraging many individuals from seeking help. Moreover, the COVID-19 pandemic has exacerbated mental health issues, causing increased anxiety, stress, and depression due to health concerns and economic challenges.

Despite these challenges, the Philippine government has taken steps to raise awareness, reduce stigma, and integrate mental health into the healthcare system through the Mental Health Act of 2018 (Republic Act No. 11036). Continued efforts are essential to prioritize mental health, provide accessible support, and ensure the well-being of all Filipinos. However, mental health remains poorly resourced: only 3–5% of the total health budget is spent on mental health, and 70% of this is spent on hospital care (WHO & Department of Health, 2006).

The Philippine Guidance and Counseling Association, emphasized that an optimal guideline for the ratio of guidance counselors to students is one counselor for every 500 students. According to this standard, elementary schools in the Philippines should ideally have approximately 47,000 guidance counselors to cater to the needs of their students effectively. However, the reality is quite different, as the Philippines currently only has 4,474 guidance counselors in place. This stark difference between the ideal and actual numbers highlights a significant shortage of guidance counselors in the country's elementary schools. It's essential to note that the figure mentioned above does not even consider the number of students enrolled in higher education institutions under the Commission on Higher Education (CHED).

With the shortage of guidance counselor in the Philippine Educational system, teachers are often appointed as "Guidance Designates" or "Guidance Teachers" to ensure that students receive the necessary academic support without violating any regulations. These teachers take on additional responsibilities to provide guidance services, even though they are primarily recruited as educators rather than trained counselors. The situation poses challenges for these "Guidance Designates" as they find themselves juggling teaching, administrative duties, and counseling responsibilities. Balancing these diverse roles can be overwhelming, and they may experience anxiety about fulfilling all these tasks effectively. (Arbaya et.al., 2022).

Research shows that the COVID-19 pandemic has had a negative impact on students' behavioral and socio-emotional development, as acknowledged by a considerable number of public-school staff (Cox et al., 2022). However, the effective strategies for schools to address these impacts remain uncertain due to several ongoing challenges. These challenges include shortages of mental health providers, staff burnout, disparities in access to services based on race and ethnicity, and long-term sustainability issues. It is crucial to address these challenges and improve access to school-based mental health services to effectively address the growing mental health concerns among youth. By prioritizing and investing in mental health resources, training and supporting school staff, addressing disparities, and ensuring long-term sustainability, schools can better support the well-being and socio-emotional development of students. Collaborative efforts between education systems, mental health organizations, and communities are essential in overcoming these challenges and providing necessary support to students in need.

RESEARCH QUESTIONS:

This study assessed the implementation of mental health services of the Public Secondary Schools in Region III. Specifically, this study intends to accomplish the following objectives:

1. How are the mental health services of public secondary schools be assessed by the research participants on the following:
   1.1 Assessment on Mental Health Status;
   1.2 Webinars/ Seminars on Mental Health;

1.3 Psychosocial support;
1.4 Counseling;
1.5 Referral Program?

2. What are the services needing improvement in the implementation of mental health services?
3. What are the problems encountered by the guidance designates in the implementation of Mental Health Services in public secondary schools?
4. What plan of action can be proposed to improve the least implemented mental health services of public secondary schools?
5. What is the implication of the findings of the study to educational management?

METHODOLOGY:

Research Design

To address the research questions, the study utilized a descriptive survey design. This facilitates the collection of data from a diverse and extensive pool of participants, encompassing various schools, guidance designates, school head and teachers involved in mental health services. This inclusivity ensures a comprehensive and well-rounded dataset. The design also inherently geared towards offering a detailed depiction of the subject matter. When evaluating the implementation of mental health services, this level of detail is crucial for capturing the array of services provided, available resources, the strength and weakness, and challenges encountered

Respondents

The participants of this study were secondary schools (big schools) in Region III, indicating their larger scale in terms of student population, resources, or infrastructure. The sample was selected through purposive sampling. A total of 455 research participants, consisting of 83 school heads and head teachers, 72 guidance designates, and 303 teachers, participated in the study.

Instrument of the Study

The data utilized in this research was collected through a researcher-made questionnaire and was validated by experts in the field of guidance and counseling. The questionnaire went a pilot test to ensure the validity and reliability as well as identify any potential issues or areas for improvement. After the pilot test, the researcher ensured that the final version of the questionnaire was valid, reliable, and fit for its intended purpose. A reliability test was performed on the pilot test outcomes. The resulting Cronbach's alpha value of 0.993 suggests an excellent level of internal consistency for the questionnaire

Data Collection Procedure :

The researcher obtained official permission from the Office of the Regional Director prior to distributing the online survey to secondary school heads, guidance designates, and teachers in Region III. Once the researcher obtained the approved permit from the Regional Director, a formal request letter was also sent to each of the Schools Division Offices. After obtaining approval to proceed with the research study, the Schools Division Research Coordinator supplied a comprehensive list of prominent secondary schools along with their respective email addresses. Subsequently, a formal letter was sent to the email addresses of the identified schools. This letter encompassed several key components, including a request for permission to carry out the study at their institution, an introduction to the study's objectives, and pertinent details regarding the research process. Within the same letter, a link to a Google Form for the questionnaire was provided.

RESULTS:

This chapter presents the analysis and interpretation of the data gathered from the participants on the assessment on the implementation of mental health services.

The Availability of Mental Health Services in Region III.

Assessment of Mental Health Status- All research participants agreed on rating of this service as moderately complied (3.43) in quality which means that it is meeting the basic needs of students, but not necessarily providing comprehensive or specialized support. There are wide areas of the services that is needed to monitor, evaluate and review. The school fully complied in the presence of a designated personnel who is in-charge of the mental health status. More often, a guidance teacher designate is in control of the service. Schools need test or questionnaires in assessing the mental health status of the school community. The study found out that there is no standard test being given to public schools in assessing the mental health status of learners or teachers. The school mostly rely on the observation of behavior and result of any activity that may indicate mental health concerns. The lack of a designated room or facility where mental health assessments can be conducted in public secondary schools can be a significant barrier to providing effective mental health services to students. Without a private and confidential space to conduct assessments, students may be hesitant to seek help or disclose personal information about their mental health. This can limit the ability of school staff to provide accurate assessments, make appropriate referrals for treatment, and develop effective interventions to support students' mental health needs. The inclusion of the mental health assessment in the School Improvement can pave way to the improvement of the service. As it will involve the school community in making the service in place. This will better support the mental health needs of their students and promote a positive and inclusive school culture.

Webinar/ Seminars on Mental Health- The schools fully complied (3.92) with the webinars and seminars on Mental Health especially during the pandemic. This was confirmed by our research participants where they give the service as very satisfactorily rating. However, the difference in ratings given by different groups of participants, the school head, guidance designates, and teachers, suggests a variation in their perceptions or experiences related to the topic being rated. In this case, it seems to be related to the overall rating of something within a school context. The school head gave the highest mean score of 4.47, indicating a more positive perception compared to the guidance designates and teachers, who gave scores of 3.57 and 3.72, respectively. The variation in ratings could stem from the different roles and responsibilities of these groups within the school. The school head typically has a broader oversight of the entire institution, including aspects such as overall performance, curriculum, and strategic planning. Their higher rating of 4.47 might indicate their satisfaction with the overall functioning of the school. Guidance designates may primarily focus on student support and counseling services. Their rating of 3.57 suggests that they might have specific concerns or experiences related to their area of expertise. They might have provided lower scores due to factors such as workload, resources, or the effectiveness of support systems. Teachers, being directly involved in daily classroom activities, might have a more focused perspective on teaching methodologies, classroom management, and student interactions. Their rating of 3.72 indicates that they might have identified areas for improvement within their own teaching practices or areas where they feel support is lacking. The rating differences might also be influenced by the level of communication and collaboration among these groups. If there are gaps or disconnects in sharing information or addressing concerns, it can lead to different perceptions and ratings. Improving communication channels and fostering collaboration between these groups could help align their perspectives and ratings.

Psychosocial Support- The respondents are well aware of the Psychosocial support being develop by the Department of Education. Teachers gave a lower rate compare to the guidance designates and school heads. The ratings regarding the administration of psychosocial support reveal differences among teachers, guidance designates, and school heads. Teachers gave a mean rating of 3.48, indicating a relatively lower perception of the support provided. In contrast, guidance designates rated it slightly higher at 3.68, while school heads gave the highest rating of 4.08. These variations may stem from teachers' direct experience and perspective, as they work closely with students and may perceive gaps in the support. Guidance designates, specialized in providing support, may have received specific training and thus view the administration more favorably. School heads, overseeing the entire school, may have a broader perspective and believe that adequate resources and programs are in place.

Counselling - The mean rating of 3.47 for counseling indicates that it is moderately compliant and meets the minimum requirements for satisfactory service. However, it falls below the average rating, suggesting that there is room for improvement. Both guidance designates and teachers gave the lowest mean ratings (3.11 and 3.26, respectively), highlighting their perception that there are areas in the counseling service that need enhancement. These areas include the counseling sessions themselves and technical aspects such as the use of a case note template. Their lower ratings signify the need for further improvements to better meet the needs of those seeking counseling support. In contrast, school heads perceive the counseling service more positively, providing a very satisfactory rating of 4.04. Their higher rating suggests that they view the service as meeting or even exceeding expectations. It is important to consider the perspective of school heads, as they have a broader oversight of the school and may have different levels of involvement in the counseling service. However, it is crucial to also consider the feedback from guidance designates and teachers, as they have direct experience and interaction with the counseling service and can provide valuable insights for improvement

Referral Program- In the area of the Referral program, guidance designates gave a rating of 3.68, school heads rated it 4.15, and teachers provided a mean score of 3.50. The overall ratings indicate that the Referral program is generally perceived as very satisfactory. It allows learners to access high-quality care by establishing linkages and partnerships with various institutions such as local government units (LGUs), non-governmental organizations (NGOs), and other agencies. The systematic flow of conducting referrals is also acknowledged. The implementation of mental health services, as evaluated by guidance designates, school heads, head teachers, and teachers, received an overall mean score of 3.67, indicating compliance. While the ratings are generally positive, there is still room for improvement in order to enhance the effectiveness and reach of mental health services within public secondary schools. Overall, the implementation of mental health services, as evaluated by guidance designates, school heads, head teachers, and teachers, has received a mean score of 3.67, indicating that it is generally complied with. However, there may still be areas where improvements can be made to enhance the effectiveness and reach of mental health services within public secondary schools

Services Needing Improvement in the Implementation of Mental Health Services

The implementation process for the assessment of mental health status and delivering counseling services within secondary schools has underscored a demand for improvement. This necessitates intervention in areas such as the utilization of standardized assessments, the scarcity of proficient professionals specializing in guidance counseling, and the deficiency of dedicated spaces for conducting such assessments. Concurrently, the evaluation of secondary school counseling services accentuates pivotal apprehensions. Principally, the absence of an apt evaluation instrument impedes the assessment of session efficacy and avenues for refinement. Subsequently, constricted time allocations for counseling sessions curtail the depth of meaningful interactions. The institution of consistent temporal frameworks would amplify the amplitude of support rendered and emblemize an institutional dedication toward student well-being. Lastly, the imperative for a holistic guidance program emerges conspicuously. Such a program would serve as a comprehensive framework catering to multifarious exigencies concerning mental health. By acceding to these exigencies, schools can efficaciously and systematically respond to the diverse spectrum of student well-being requisites.

Problems Encountered by the Guidance Designates in the Implementation of Mental Health Services in Public Secondary Schools

PROBLEMS ENCOUNTERED BY THE GUIDANCE DESIGNATES IN THE IMPLEMENTATION OF MENTAL HEALTH SERVICES IN PUBLIC SECONDARY SCHOOLS	Frequency	Percentage
1. Insufficient Mental Health Professionals (80.2%)	364	80.20%
2. Lack of Comprehensive Plan in Mental Health (77.6%)	353	77.60%
3. Inadequate Funding (62.9%)	286	62.90%
4. Inadequate Training (60.5%)	275	60.50%
5. Lack of Instrument/ Questionnaires (24.4%)	111	24.40%
6. Lack of Parent Involvement and community Support (23.3%)	106	23.30%
7. Environment of the School (23.3%)	106	23.30%
8. Burden of Collecting and Maintaining Data (18.1%)	82	18.10%
9. Concerns with Stigmatizing Students (10.1%)	45	10.10%
Others:		
1. Overloading of Work of Guidance Teachers Designate	227	50.10%
2. Information Dissemination	51	11.10%

The guidance designates responsible for implementing mental health services in public secondary schools face several challenges. The most prominent issues identified include a shortage of mental health professionals, a lack of a comprehensive plan for mental health, inadequate funding, insufficient training, a lack of appropriate assessment tools, limited parent involvement and community support, concerns with the school environment, and the potential for stigmatizing students. These challenges highlight the need for increased resources, improved planning, enhanced funding, comprehensive training programs, the availability of assessment instruments, increased collaboration with parents and the community, efforts to create a supportive school environment, and initiatives to reduce stigma surrounding mental health. Addressing these challenges can help improve the implementation of mental health services and support the well-being of students in public secondary schools

CONCLUSION:

- All mental health services were accessible within public secondary schools. The assessment of mental health status received a grand mean of 3.43, which is interpreted as a moderate level of compliance. The overall assessment of webinars and seminars on mental health yielded a grand mean of 3.92, reflecting a positive evaluation across all respondent groups. The implementation of the psychosocial report received a grand mean of 3.75, indicating a satisfactory level of compliance. The counseling services in the evaluated public secondary schools of Region III were perceived to exhibit a moderate level of compliance, as indicated by a grand mean of 3.47. Regarding the Referral program, guidance designates, teachers, and school heads collectively provided a grand mean of 3.78.
- The assessment of mental health status and counseling sessions are areas that require improvement. These improvements will lead to more accurate evaluations, better identification of mental health needs, and improved treatment planning and outcomes. By prioritizing these areas, schools can create a comprehensive and effective approach to assessing mental health status and providing counseling support to individuals
- The challenges identified in the implementation of Mental Health Services in schools require attention and action to ensure the well-being of students. The availability of mental health professionals needs to be increased to meet the growing demand for services. Developing a comprehensive plan for mental health will provide a framework for effective interventions and support. Adequate funding is essential to allocate resources and sustain mental health programs. Training programs should be implemented to enhance the skills and knowledge of staff involved in mental health services. Access to instruments and questionnaires will enable accurate assessment and evaluation of mental health needs. By addressing these challenges, schools can enhance the delivery of mental health services, promote the well-being of students, and create an environment that fosters their overall development.
- A proposed plan of action was developed to address these challenges, focusing on enhancing the Assessment of Mental Health Status and Counselling services. The plan includes measures to procure appropriate assessment tools, increase the availability of trained professionals, introduce comprehensive mental health training programs for staff, advocate for sufficient funding, and develop a well-structured mental health plan. Implementation of this comprehensive plan aims to create a supportive and nurturing environment for students' mental well-being.

RECOMMENDATIONS:

Based on the conclusions mentioned from the findings, the following recommendations can be drawn:

- Department of Education may develop a comprehensive mental health services plans that outlines clear guidelines and procedures for addressing mental health needs of learners and teachers. They could form a multidisciplinary team involving school administrators, guidance counselors, teachers, and mental health professionals to create a comprehensive plan. This team will identify the goals, objectives, and strategies for addressing mental health needs within the school community. And ensure the plan aligns with existing national or regional mental health frameworks and guidelines

- The Department of Education may also consider increasing the availability of mental health professionals. Or may collaborate with local mental health organizations and agencies to establish partnerships and provide additional support to schools. Regional Offices may advocate for increased funding and resources to recruit and retain mental health professionals in schools.
- Guidance and Counseling department of each division may provide adequate training for guidance teacher designate. They may organize regular training sessions and workshops for guidance designates, teachers, and other relevant staff members on mental health awareness, identification, and intervention strategies. They could collaborate with mental health professionals to provide specialized training on specific areas of mental health, such as trauma-informed care or crisis intervention. Encourage staff to pursue continuing education and professional development opportunities in mental health.
- Ensure access to instruments and questionnaires. The school may assess the current inventory of assessment tools and questionnaires available in the school and identify any gaps.
- The school may consider designating specific time slots during the school day when a classroom or other available space can be temporarily transformed into a counseling area..
- Monitor and evaluate the effectiveness of interventions. The school may implement a system for ongoing monitoring and evaluation of mental health services to assess the impact of interventions.

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Analysis of Process Innovation in Education in DepEd Region III: A Basis for a Model

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Abstract: This qualitative case study aims to identify and describe the innovations in education under the process category in Region III; describe the implementation process; identify and describe the challenges encountered in the implementation of the innovations; and propose an innovation model based on the study's findings. The participants were the 13 proponents of the five best educational innovations under process category in DepEd Region III in SY 2021-2022. Findings showed that Innovation 1 is the 3 o'clock RI-SEARCH Habit (Research and Innovation: Special and Enhanced Assistance, Review, Coaching, and Heartfelt Habit); Innovation 2 is the Enhanced SHS Immersion Learning Package Division: Balanga City, Bataan; Innovation 3 is Project AWESOME (Accessing Website on Educational Supervision Online for Management Efficiency); Innovation 4 is Project ON-AIR (Offering New Alternative to Instruction and Reading); and Innovation 5 is Project MODEL. The innovations were products of the collaboration of leaders, teachers, and other stakeholders. All innovations were implemented to a high degree. The challenges of the participants in implementing the innovation were the health protocol restrictions; limited resources; technical capability-building for the heads; and parents' inability to join orientation. The study concludes that the educational innovations were helpful not only during the pandemic but also during the resumption of in-person classes. The study recommends wider support for the dissemination of the innovations so that more teachers will adopt them for better quality teaching amid a changing educational landscape and the characteristics of learners. The Innovation Model for Crafting Educational Innovations developed in the study may be adopted by schools.
Keywords: degree of innovation, impact of innovation, key Elements of innovation, impact of innovation, innovations in education, process of education.

INTRODUCTION :

During the viral pandemic, the education sector demonstrated resilience and adaptability, enabling learning to continue despite health challenges. Teachers and school administrators have developed strategies to bridge learning gaps caused by non-face-to-face classes. Innovations in education are needed to maintain relevance and suitability in the external environment. School leaders must be creative, adaptable, and willing to learn new approaches to teaching and learning.

Global educators are aware of the United Nations' agreement to achieve Sustainable Development Goal Number Four (4) by 2030, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. School administrators must be open-minded, well-informed, and collaborative to explore various solutions for all learners. They must foster an environment of open input from all stakeholders and build trust to engage in meaningful feedback.

Education innovation is the incorporation of cutting-edge instructional knowledge into practice, fostering critical thinking, adventure, and adaptability. It benefits both society and education by promoting higher quality standards while addressing modern societal issues effectively. Despite the challenges faced during the pandemic, schools were able to successfully implement their learning continuity plan through innovation and cooperation.

Educational innovations require contextualization and application of learning standards, teaching standards, and pedagogies, feedback on teacher performance, learner achievement and performance indicators, learning assessment, learning environment, career awareness, and learner discipline. The implementation of Learning Continuity Plan, focusing on K-12 curriculum review and updating, improving learning environment, teachers' upskilling and reskilling, and engaging stakeholders for support and collaboration, was successful.

However, difficulties encountered during the introduction of educational innovations during the pandemic include internet connectivity, insufficient learning resources, a lack of understanding of module contents and assessment instructions, an unsuitable learning environment, too many remote learning activities, and mental health difficulties. Educational innovations appear to be unavoidable in a changing learning environment and in the face of unforeseen circumstances..

RESEARCH QUESTIONS

The study's primary goal is to describe and evaluate the innovations in DepEd Region III according to the process category.
Specifically, in this study, the following objectives were addressed:

1. To identify and describe the innovation in education under the process category of selected innovators in Region 3 public schools in terms of:
   1.1.Degree of innovation;
   1.2.Key Elements of Innovation; and
   1.3.Impact of innovation.
2. To describe the implementation process of the best innovations in education.
3. To describe the challenges encountered in the implementation of the best innovations in education.
4. To propose an innovation model based on the study’s findings.
5. To draw implications to Educational Management.

METHODOLOGY:

Research Design

This study utilized a qualitative case study design to examine the best innovations in the process category in DepEd Region III. Through face-to-face interviews, the researcher aimed to understand the innovation, implementation process, and challenges faced by participants. The findings were used to develop a process innovation model and draw conclusions about its relevance for educational management.

Respondents

The study involved 13 proponents of the five best innovations in the process category from various districts, clusters, and schools in Region III. The participants were selected based on their winning performance in the competition, with one respondent for Innovation 1, four for Innovation II, three for Innovation 4, and three for Innovation 5.

Instrument of the Study

This study used interviews and a semi-structured questionnaire to gather data on innovators. The questionnaire covered various aspects such as age, gender, education, and position. It also covered their innovation title, rank, purpose, degree, key elements, implementation process, and challenges encountered. Document analysis was also used to gather data on implemented innovations.

Data Collection Procedure

The researcher obtained authorization from the DepEd Regional Director and secured necessary documents before interviewing proponents. She submitted an Endorsement Letter, Ethical Clearance Certificate, and other necessary documents to the Research Ethics Review Committee (RERC). The researcher then received the Regional Director's Approved Letter and sent the questionnaire to the proponents' division offices. Data collection was done one at a time, with the researcher obtaining respondents' contact information and calling them to schedule appointments. The semi-structured interview guide was evaluated by District English Coordinators, Supervisors, and Head Teachers. Participants were given informed consent forms and recorded consent forms before the interviews. Each interview lasted around four hours, taking almost a year due to the researcher's ethical certificate requirements and proponents' busy schedules. Follow-up interviews were conducted through Google Forms, Google Meet, and Facebook Messenger.

RESULTS:

- **The Educational Innovations**

Innovation 1 is the 3 o'clock RI-SEARCH Habit (Research and Innovation: Special and Enhanced Assistance, Review, Coaching, and Heartfelt Habit); Innovation 2 is the Enhanced SHS Immersion Learning Package Division: Balanga City, Bataan; Innovation 3 is Project AWESOME (Accessing Website on Educational Supervision Online for Management Efficiency); Innovation 4 is Project ON-AIR (Offering New Alternative to Instruction and Reading); and Innovation 5 is Project MODEL.

➢ **Degree of innovation**

All the innovations developed were implemented to a high degree. This means that all the old strategies or approaches were replaced by the new strategy, approach, or program newly introduced. Moreover, most of the innovations were utilized by schools in the whole division. The narration of the innovators affirms the high degree that these innovations had replaced the old way of doing things in school.

➢ **Key Elements of Innovation**

All innovators claimed that collaboration with the school stakeholders made the innovations possible. The important collaborators were the school's division head, district supervisors, school heads, teachers, colleagues from other schools, and parents.

All the innovators expressed that in the development of innovation, ideas from the team were sought and discussed. The school leaders and teachers need to come up with original ideas. The findings of the study showed that in developing innovation in teaching, whether during a viral pandemic or not, new ideas need to be generated from concerned individuals. The ideas may be combined to produce pedagogical approaches or strategies that effectively address prevailing situations in the learning environment. The implementation of the innovation projects was successful since the participants claimed that all the objectives were achieved. This implies that the development of innovation in education must be accomplished by setting objectives as these are the basis of evaluation afterwards. This means that educators should have a clear end in mind of why such innovation is needed- or what is expected from the utilization of innovation. All five innovations' proponents claimed that the innovations they developed were not only useful during the pandemic but also when in-person classes resumed. The innovations were beneficial to the whole division.

- **Impact of innovation**

There were three themes extracted from the responses of the participants. One is the wide utilization of the innovation, which has reached not only the schools in the division but also the region-wide scope. The second theme extracted is "Supported effective learning amidst non-face-face learning." School Principals evaluated the innovative project to be very timely. The innovation project was viable. In terms of Responsiveness, evaluators commented that with the help of this innovation, they will know in a timely manner how they are doing, what is working and what is not. The third theme is "Cost-effective learning amidst non-face-to-face learning." According to the innovator, it served as a faster and inexpensive method of distribution of learning materials; aided teachers in the distribution of learning materials by significantly reducing work; saved the school expenses incurred in printing Learning Materials; and it provided less expensive implementation of distance learning system during the pandemic.

- **The implementation process of the best innovations in education**

The first step is Conceptualization or planning before the development of the innovation. However, only the first innovator has claimed that they first conducted a needs assessment before the planning. The second step was the actual development of the innovation. This was followed by pilot testing or a dry run. Then based on the result of the dry run, enhancements were introduced for better utilization of the innovation. After the enhancement, the innovative project was utilized. The last step was the evaluation of the utilization of the innovative project.

- **The Challenges Encountered in the Implementation of the Best Innovations in Education.**

The challenges of the participants in implementing the innovation were the health protocol restrictions; limited resources; technical capability-building for the heads; and parents' inability to join orientation.

- **Proposed Innovation Model for Crafting Educational Innovations**

The development of educational innovation begins with ideation, which involves creating an environment for educators, students, and stakeholders to think creatively and devise solutions to educational problems. This process promotes inclusivity and encourages the use of diverse viewpoints in brainstorming. The next step is nurturing, where educators carefully select and refine the most promising ideas, ensuring they align with educational objectives and needs. The "Navigate" stage involves identifying potential challenges and obstacles, such as resistance to change, technology limitations, or resource constraints. This involves a detailed examination of the educational landscape and planning ahead to build solutions. Continuous improvement and optimization through feedback, testing, and iteration are essential for maintaining relevance and relevance in education. The "Validate" step involves gathering feedback from users, stakeholders, and experts to validate the feasibility, viability, and desirability of the innovation. This involves seeking input from various stakeholders, such as students, parents, teachers, administrators, and researchers. Validation ensures that the innovation is well-positioned for effective implementation. Flexibility and adaptability are crucial throughout the innovation process, as external factors like technological advancements, pedagogical research, and shifts in student demands may require changes to the original plan. The refined idea is then transformed into a tangible product, service, or solution, ready for execution during the "Transform" phase. Regular assessments of the innovation's impact against set goals and metrics are essential for evaluating and improving ICT resources and capacity. This process is critical for effectively implementing innovation in the field of education.

CONCLUSION:

In this study, the innovations developed by selected schools in Region III are a manifestation of the proponents' resilience, creativity, and resourcefulness, which are necessary qualities to meet Sustainable Development Goal number 4, which is access to quality education (United Nations, 2023) regardless of the circumstances in the learning environment or the condition of the learners. In times of crisis, the method of teaching and learning changes. Schools must be resilient in order to continue teaching-learning activities in the aftermath of disasters and crises (both man-made and natural). Curriculum recalibration considers the issues created by the pandemic, as well as the content to be learnt and delivered, as well as how it will be assessed.

School leaders, teachers, and other stakeholders must collaborate to implement necessary changes or innovations to promote learning continuity in the event of an emergency. Identifying challenges, observing and learning from others, developing new techniques to dealing with these issues, and improving these approaches when first experiments do not provide the intended results are all examples of innovation in education.

The study findings demonstrated the value of collaboration in the midst of a significant change in the educational landscape as a result of COVID-19. School stakeholders from the division to the district and school level collaborated to design a strategy for the successful implementation of the Learning Continuity Plan. Ideation is required for the development of creative projects. Ideation is the process of generating ideas and solutions using numerous methods such as sketching, prototyping, brainstorming, talking, and a range of other ideation processes. Aside from ideation, value is a key component of educational innovation.

Another key facet of innovation is the requirements assessment, which was carried out by one of the participants. By completing a needs assessment, the district and school officials can gain a greater understanding of the interactions between the many components of their community's educational system.

Another component of innovation that should be explored before practical use is pilot testing. Pilot testing allows for an evaluation of the project's viability, efficacy, and prospective impact. The innovators can identify and handle any operational obstacles, user concerns, or technical issues that may arise when putting ideas into action. Participants in the current study stated that they performed a dry run of their innovation prior to implementation.

All stakeholders must be involved in monitoring during the implementation. Tracking progress and analyzing outcomes are critical for recognizing potential issues. Proponents can assess the effectiveness of their projects, find areas for improvement, and ensure that they are meeting their aims and objectives, as well as whether there are any disparities between the expected and actual results.

RECOMMENDATIONS:

- The innovations provided in this study demonstrated that they were effective in terms of supporting the Learning Continuity Plan and maximizing whatever resources were available. The report then suggests increasing policies, support, and incentives for schools and instructors who can develop educational innovations to make learning responsive and accessible to any student, regardless of their condition.
- Similarly, educational innovations should be provided greater dissemination support so that more teachers will use them for improved quality teaching in the face of a changing educational landscape and student characteristics.
- The innovators' challenges should be addressed. The problems were limited resources, the heads' lack of technological capability, and their parents' inability to attend orientation. The Department of Education may enhance budget allocation for innovative projects to address the difficulties of limited resources. Seminar workshops, particularly those incorporating current technology, may be presented to heads in order to develop their technical capabilities. Concerning parents' unwillingness to engage in innovation, seminars and meetings may be held to immerse them in the type of support they should provide to help their children succeed well in school.
- An evaluation study may be conducted in the future to determine the impact of the innovation on student growth.
- Schools may adopt the researcher's innovation model.

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Blended Learning Strategy for Fostering Conceptual Clarity of Under Graduate Students in Commerce

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Abstract: This study was based on quasi experimental research design. 32 Students of second year bachelor of commerce, from MPSPS College, Bandra, Mumbai participated in this project. There were two groups: one group was control group and other was the experimental group. The experimental group was chosen for instructional design based on Blended Learning Strategy (BLS). While content for control group was transacted by traditional lecture method. The intervention module lasted for 7 days. The intervention design comprised of several strategies based on BLS aiming at fostering conceptual clarity of under graduate students in topic of Banking Sector Reform in India. The pre and post test were administered to find the effect of the treatment. According to the statistical analysis of the result achievement level of the experimental group, BLS was significantly higher than the control group with a traditional teaching method. Hence it can be concluded that the BLS helps in enhancing the conceptual understanding of the Commerce content.

Key words: Conceptual clarity, BLS, Commerce.

INTRODUCTION:

The idea of blended learning is to synthesize a number of different approaches in order to create high impact learning. While a blended approach is not a new concept, many organizations are now combining on-line learning resources with classroom training or mixing the use of a self-paced workbook with one-to-one coaching. In this way, organizations are maximizing and optimizing the use of resources. Blended learning is important as it allows for a variety of different teaching modes and can address different learning needs and styles. Blended learning is not about providing learners with a number of choices on how to complete their training. Blended learning is mixing different kinds of media and resources in order to achieve an optimum training solution.

AIMS AND OBJECTIVE OF THE STUDY :

Aims of the study

- To develop blended learning strategies for teaching of commerce to under graduate student.
- To study the effect of blended learning strategies on conceptual clarity of commerce topics among the learners.

Objectives of the study

- To ascertain the pre test conceptual clarity scores of second year B.Com students;
- To design and implement of blended learning strategies for teaching of commerce to second year B.Com students;
- To ascertain post test scores of second year B.Com students;
- To compare pre test and post test of conceptual clarity scores of second year B.Com students.

RESEARCH QUESTIONS AND HYPOTHESIS :

Research Questions

In pursuit of the objectives of the study, the following research questions were raised:

1. What is the extent of effectiveness of Blended Learning Strategy (BLS) in developing the conceptual understanding & boosting the retention among under graduate students in commerce?
2. What is the perceived interest of under graduate students towards learning Commerce using blended learning strategy?

Hypotheses

H_o1 There is no significant difference in the between pre test scores of experimental and controlled group on the topic Banking Sector Reform in India.

H_o2 There is significant at both the level in the post test scores on the topic Banking Sector Reform in India.

H_o3 There is no significant difference between the conceptual Clarity of experimental and control groups as indicated by difference in their pre test and post test scores.

Methodology:

Research Design

The present study is a quasi experimental study following the Pre test-Post test non-equivalent group design.

O_1 C O_2

O_3 X O_4

Where O_1 and O_3 are the pre test scores and O_2 and O_4 are the post test scores

C is the control group and X is the experimental group

Participants

Participants of the present study comprised of 64 students. Out of which 32 students were part of control group and the remaining 32 were of experimental group. The participants were selected through Non probability sampling technique.

Tools for data collection

Following tools were formulated for data collection:

Criterion reference test: A pre test and post test was developed by the researcher.

The instructional intervention planned consisted a pre test, five sessions of one hour each followed by a post test for experimental group.

Days	Lessons	Topic of lesson
Day 1	-----	Pre test on *Banking Sector Reforms in India* (BSRI)
Day 2	Lesson -1	Banking System in India: video based discussion
Day 3	Lesson -2	Structure of Banking ; Power point presentation
Day 4	Lesson -3	Scheduled vs Non Scheduled Banks: debate
Day5	Lesson-4	Phases of banking ; Case study

Day 6	Lesson-5	Performance of Commercial Banks; fish bowl method
Day 7	---	Post test

DATA ANALYSIS :

Descriptive Analysis

They are used to describe they provide simple summaries about the sample and the measured. Together with simple graphic analysis, they form the basis of virtually every quantitative analysis of data. Descriptive statics simply describe what the data shows the statistical measured in describing and analyzing data were

Measure central tendency; Mean, Median, Mode,

Measure of variability: Standard Deviation

Measure of divergence from normality: skewness ,kutosis

Measure of probability: fiduciary limits of mean and standard deviation

Descriptive Statistics of Pre-test of Control and Experimental groups indicating the Conceptual Understanding about Banking Sector Reform in India

Group	N	Mean	Median	Mode	SD	Skew	Kurt	%mean
control	32	3.03	3.00	2.00	1.56	0.66	0.06	33.83%
Experimental	32	3.50	3.00	3.00	1.30	-0.29	-0.42	50%

Descriptive Statistics of Post-test of Control and Experimental groups indicating the Conceptual Understanding about “Banking Sector Reform in India”

Group	N	Mean	Median	Mode	SD	Skew	Kurt	%mean
control	32	13.22	13.00	12.00	3.21	0.35	-0.52	43.35%
Experimental	32	19.53	19.00	18.00	3.32	-0.09	-0.44	54.41%

Inferential Analysis

To find out the significance difference between the means “t” tests was used

To find out the extent of significance between the means ω^2_{est} was used

FINDINGS:

BLS has the potential to be used in support of these new educational methods, enabling students to learn by doing. BLS can make it possible for teachers to provide students with self-directed problem-based or constructivist learning experiences, as well as to test students learning in new, interactive and attractive ways that may better assess the depth of their understanding of content.

CONCLUSION:

The post –test scores could be observed after the instructional intervention for 7 days. A definite improvement in the performance can be attributed to the instructional module which was prepared for the participants. On the basis of this the researcher could come to the conclusion that the instructional module has had a definite impact on the ability of participants to gain conceptual clarity and can thus contribute to learning of new concepts in their regular classroom process more effectively and efficiently and add up to their long term memory.
Thus the instructional module prepared by the researcher helped the students to enhance their conceptual clarity for BSRI.

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HIGH ACHIEVERS AND THEIR CRITICAL THINKING ABILITY IN EDUCATION

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INTRODUCTION :

"High Achievers spot rich opportunities swiftly, make big decisions quickly and move into action immediately. Follow these principles and you can make your dreams come true."

-ROBERT H. SCHULLER

High achievers see things differently than most people. They are more optimistic and tend to work well, even in stressful environment. They are passionate and capable of directing energy towards the things that matter.

High achievers are the people who excel in terms of skills and responsibilities. They are result driven and motivated, they work to a high standard with little need for supervision or hand-holding and without appropriate support. They are true assets to their team or classroom. They are often externally motivated by the desire to get good grades or even high praise.

High achievers have proper and planned reading habits.[1]

In school, a high achiever would be a student who gets high marks and good grades. They do the work that is required and do it well. They tend to be well organizes, with good time-management skills, which helps them in neat and tidy work on time. They also tend to be well behaved, adjusting well to the classroom environment and participating in classroom discussions.[2]

High achievers take great pleasure in reaching their goals. They like to be one of the best at that they do and this helps them stay motivated through the hard work and disappointments that come with improving skills. Enjoying achievement may be partly due to basic personality and it is a matter of perspective.

High achievers are ambitious, goal-focused, self- disciplined individuals, who are driven by a strong personal desire to accomplish meaningful, important goals.

High achievers think critically about what they do. They are focused on knowing things in a deeper level. The ability to think critically about a matter-to –analyse a question, situation or problem down to its most basic parts is what helps us evaluate the accuracy and truthfulness of statements, claims and information.

"Critical thinking is skilful, responsible thinking that is conducive to good judgement because it is sensitive to context, relies on criteria and is self-correcting."

-MATTEW LIPMAN

Critical thinking is different from just thinking. It is Metacognitive, which means the process of thinking about one's own thinking and learning.
Critical thinking is an integral to problem-solving, logical inference, calculating probabilities and decision making [3].
Critical thinking refers to a form of reflective thinking directed towards the analysis and evaluation of existing communication, information and arguments through the use of logic and reason [4,5,6,7].
Critically thinking skills are a vital part of a student's academic life –when reading, when writing and when working with other students.
To think critically is to analyse and evaluate information, reasoning and situations, according to appropriate standards, for the purpose of constructing sound and insightful new knowledge, understanding, hypotheses and beliefs.
Critical thinking encompasses the subjects ability to process and synthesise information in such a way that it enables them to apply it judiciously to tasks for informed decision- making and effective problem – solving.

HIGH ACHIEVERS :

High Achievers are the people who excel in terms of skills and responsibilities. They are result driven and motivated; they work to a high standard with little need for supervision or hand-holding and without appropriate support and high achievers may struggle to realize their true potential.
High Achievers are ambitious, goal-focused, self-disciplined individuals. They are passionate and capable of directing energy towards the things that matter. They are driven by a strong personal desire to accomplish meaningful, important goals.

CHARACTERISTICS OF HIGH ACHIEVERS :

- High Achievers have strong long term focus and self-discipline. They like to set a goal and then they work persistently towards it until it has been completed.
- They take charge easily and display natural leadership qualities-often helping the team members to achieve their goals.
- They have a positive mind-set. They see challenging things as opportunities not threats. Their positive outlook helps them overcome setbacks and stick with a task until it's complete.
- They put full attention to achieve their goals. If they want to make things happen, they have to even sacrifice things so that they focus completely on it.
- They maintain their time; every minute is precious to them when it comes to pursuing their goals.
- They dream specific, plan smart and confidently strive toward success.
- They have always a good altitude they enjoy what they do and also remember that set backs are temporary.
- They are known for visualizing success, staying positive and continue to work hard.
- Learning is the part of life that High Achievers always want to make the most. They never say no to learning new things. This help them grow as a person and gain different skills.
- High Achievers are motivated from within. They have goal set and think of how they can achieve it.

CRITICAL THINKING :

According to **Michael Scriven and Richard Paul (1987) –**

"Critical Thinking is the intellectually disciplined process of actively and skilfully conceptualizing, applying, analysing, synthesizing and evaluating information gathered from or generated by observation, experience, reflection, reasoning or communication as a guide to belief and action." [8]

Critical thinking plays an important role in education. It helps students to think in an analytic and rational way. It encourages students to make life decisions and evaluate all aspects while solving problems. Critical thinking in education helps students think in different dimensions.

Critical thinkers are people who are self- evaluators, problem solvers,clear analysts, open to other's ideas, cautious-they think before acting, open-minded, good listener and eager to take a challenge.

A critical thinker is someone who thinks actively and interacts constantly with the world.

Critical thinking is that mode of thinking – about any subject, content or problem- in which the thinker improves the quality of his or her thinking by skilfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.

Critical thinking is a self – directed process by which we take deliberate steps to think at the highest level of quality.

"Critical thinking is thinking that assesses itself" [9]

Critical thinking is a self-directed process by which we take deliberate steps to think at the highest level of quality.

Critical thinking is a valuable ability as it is useful for innovative problem solving and the critical evaluation of ideas. This type of thinking is necessary in an academic context because it fosters an individual's will and ability to think. It is an ability to think clearly and rationally, understanding the logical connection between ideas.

Critical thinking is the ability to engage in reflection and independent thinking.

Critical thinking means reviewing the ideas produces, making a tentative decision about what action will best solve the problem or what belief about the issue is most reasonable, and then evaluating and refining that solution or belief. [10]

A critical thinker identifies, analyse and solve problems systematically rather than by intuition or instinct.

THE CRITICAL THINKING MIND IS AN EDUCATED MIND :

Critical thinking is not new, in 1605; Francis Bacon wrote the first book on critical thinking, The Advancement of Learning, in which he documented various forms of human irrationality and the need to establish new habit of thought through education.

Critical thinking is a widely accepted educational goal. It occurs when students are analysing, evaluating, interpreting or synthesizing information and applying creative thought to form an argument, solve a problem or reach a conclusion. In educational contexts, a definition of critical thinking is a “programmatic definition” [11]. It expresses a practical program for achieving and educational goal.
The main aim of critical thinking is to promote independent thinking, personal autonomy and reasoned judgment in thought and action.
Developing the ability to think critically is an important element for modern education. Creative thinking always involves logic as well as creativity.

CRITICAL THINKING ABILITY IN EDUCATION :

Critical thinking is a skill that is highly valued in education, in the work place and even in personal life. It is the ability to analyse information, evaluate arguments and make sound judgments based on evidence and reasoning.

Critical thinking is essential in education for several reasons:-

- It helps students to learn how to think independently, make informed decisions and solve complex problems. In today’s complex and ever changing world, critical thinking is necessary skills that can help students navigate through the challenges they may face in the future.
- Critical thinking is essential for academic success. It helps students understand and analyse information, evaluate arguments and make informed judgement basd on evidence and reasoning.
  The students who can think critically are more likely to excel in their studies and achieve academic success.
- Critical thinking is essential for lifelong learning. It helps students develop a thirst for knowledge, also encourage them to ask questions and teaches them how to find and evaluate information.
  Students who can think critically are more likely to continue learning throughout their lives and remain engaged in the world around them.

THE SKILLS NEEDED FOR CRITICAL THINKING :

The skills needed to think critically are varied and it includes observation, analysis, interpretation, reflection, evaluation, inference, explanation, problem solving and decision making.

We need to:-
1. Think about a topic or issue in an objective and critical way.
2. Identify the different arguments there are in relation to a particular issue.
3. Evaluate a point of view to determine how strong or valid it is.
4. Notice what implications there might be behind a statement or argument.
5. Recognise any weakness or negative points that there are in the evidence or argument.
6. Provide structured reasoning and support for an argument that we wish to make.

ADVANTAGES OF DEVELOPING CRITICAL THINKING SKILLS :

1. It improves life time skill.
2. It is a key to career success.
3. It helps in broad range of cognitive learning.
4. It improves relationships.
5. It enhances creativity.

CRITICAL THINKING IS IMPORTANT :

1. It helps to improve decision making.
2. It enhances problem-solving ability.
3. It refines your research skills.
4. It polishes our creativity.
5. It stimulates curiosity.

TYPES OF CRITICAL THINKING :

Critical Thinking involves analysing and evaluating information in order to come to a conclusion or make decision.

- **Analytical Thinking**

Analytical thinking is a key element in working through problems and coming up with the best plan of action for success. Analytical thinking involves being able to break a problem down into smaller bits and pieces, understanding how each piece interconnected and developing strategies for solving each individual piece by gathering information relating to it.

SOME KEY SKILLS NECESSARY FOR EFFECTIVE ANALYTICAL THINKING :

i. **EVALUATION :** Being able to review facts and make judgments about them depending on the situation at hand.

ii. **INVESTIGATING:** Means asking question about various aspects of a problem and doing research so that its root cause can be identified.

iii. **SYNTHESIZING:** Combining different pieces of data or information together to create new solutions or approaches to existing problems.

iv. **REASONING LOGICALLY**: Means connecting bits of data together in order to evaluate different possibilities that could help solve the problem or issue at hand.

With these analytical thinking skills we can start breaking down any problem into smaller, manageable parts, think logically through how they connect together, assess what evidence is needed to make decisions and draw conclusions based on facts rather than just opinions.

- **CREATIVE THINKING AND IDEA GENERATING**

Creative thinking is essential critical thinking tools that help you come up with fresh solution to problems and break out of that rut. Creative thinking helps you look at an issue from a different point of view or think of new ways to approach the problem.

CREATIVE THINKING SKILLS WHICH IS AN EXTRA BOOST :

i. **CHALLENGE ASSUMPTION:** Even if something seems obvious, take some time to question it and consider other possibilities.

ii. **BRAINSTORM DIFFERENT SOLUTIONS:** Try writing down potential solutions, no matter how wild they may seem and then look for patterns between them or ideas that can be combined into something new.

iii. **CONSIDER DIFFERENT PERSPECTIVES:** Even if the issue seems cut and dry from one perspective, try to imagine it from other angles and think about how the issue appears from those views.

iv. **TAKE A BREAK AND COME BACK LATER WITH FRESH EYES:** Sometimes taking a step away from the problem is enough to give you the necessary distance to discover new ideas or paths of exploration.

These strategies will help dramatically improve your ability to generate new ideas and jumpstart your creative thinking process whenever you need it.

- **DECISION MAKING**

In critical thinking decision making is an essential skill. It's not about being able to evaluate a situation; it's about being able to make a well-informed decision that will bring the best results.

THERE ARE FOUR KEY COMPONENTS OF DECISION MAKING :

i. **GOAL SETTING**

You should take time to first identify what you want to accomplish with your decision.

ii. **ANALYZING ALTERNATIVES**

You should evaluate the pros and cons of potential solution before choosing one.

iii. **RISK ASSESSMENT:**

Estimate the possible risk associated with each potential solution, based on current evidence.

iv. **IMPLEMENTATION:**

Once the decision is made, start working on implementation tasks and track results for on-going improvement or refinement.

By following these steps, we will be in a better position to make decision that have positive outcome for us and those involved in the decision making process.

The ability to think critically and make sound decision cannot help us to solve problems quickly but can also lead to more successful long term strategies for different fields of life.

- **PROBLEM SOLVING**

It is one of the most essential types of critical thinking skills. Problem-solving involves taking all the pieces of a problem and figuring out how to resolve it. This can involve coming up with new solutions, making decisions, devising strategies and identifying patterns and trends.

It's an invaluable skill in many aspects of life and can help you create effective solutions to a wide range of problems.

To use our problem solving skills effectively, keep these tips in mind:

i. BREAK THE PROBLEM DOWN INTO SMALLER, MANAGEABLE PARTS

Breaking down a problem into smaller chunks makes it easier to work on and understand.

ii. LOOK FOR CONNECTION BETWEEN PIECES

Try to identify any connection between different aspects or pieces of the problem to gain insights that may help us solve it more efficiently.

iii. DON'T GET OVERWHELMED

Don't get overwhelmed by the scope of the challenge at hand; take it one step at a time and remember that even small victories can help move you closer to find a solution.

iv. THINK CREATIVELY

When coming up with possible solutions or strategies; often the best solution is not obvious at first glance.

v. KEEP TRACK OF WHAT WORKS AND WHAT DOESN

This will give us valuable insight for future problem solving endeavours as well as feedback on our progress towards resolving the current one at hand.

- **REFLECTION AND ASSESSING EVIDENCE**

Now we look at cognitive activity. Reflection and assessing evidence are two types of critical thinking skills that help us make sure that we are not jumping to conclusions without considering the situation.

When it comes to reflection, this involves being honest with own self and taking a deep look at the way our thoughts, feelings and beliefs are informing our decisions. At its core, reflection allows us to objectively evaluate the evidence that's in front of us so that we can make an informed assessment about what the best next step is for a given problem or situation.

Assessing evidence is also critical for coming up with effective solutions. This means carefully examining the available data and making sure we have all of the necessary information before reaching an opinion or making a decision. It involves looking at multiple perspectives and interpretations of any given issue so that we can form an educated conclusion about how best to solve it.

- **OPEN MINDEDNESS**

It is a critical thinking skill that is all about trying to understand something from different perspectives and being able to appreciate the difference in opinions. Open-mindedness allows you to analyse a problem from multiple angles and consider different solutions or ways of approaching it.

Here are some tips for developing open-mindedness as a critical thinking skill:

i. LISTEN CAREFULLY AND ACTIVELY TO OTHERS-

Rather than just hearing words we should try to understand their point of view.

ii. ASK QUESTIONS WITHOUT JUDGMENT-

Questions should be asked without judgement and without assuming our own opinion is the right one.

iii. PAY ATTENTION-

We should pay attention to how other people view the same situation differently than we do.

iv. THINK CRITICALLY-

We should think critically and evaluate arguments objectively, without assumptions or preconceived ideas about what the answer should be or which course of action should be taken.

v. SUSPEND JUDGMENT-

We should suspend judgment until you have enough information about a topic or situation; don't jump to conclusions too quickly.

vi. PRIORITIZE RESPECT-

When engaging with others who have different perspectives. Be willing to put in the effort required to understand why they think that way and why that might be important to them in their lives or work.

vii. AVOID MAKING ASSUMPTIONS-

We should avoid making assumptions about what someone else believe; find out more first before passing judgment on someone's opinion or actions.

By developing this type of open-mindedness, you can become more aware of how your personal biases may impact your ability to think critically, improve your overall decision making skills over time and helping you become a more valuable asset as part of any team or organization.

- **GOOD COMMUNICATION**

Good communication is an important part of the critical thinking process. That's because having good communication skill helps us to be more persuasive, helping us convince people of ideas and solutions that are well thought-out. It also allows us to better explain and justify our reasoning to others, which is essential when looking at complex problems.

To have strong communication skills, it is important to think before we speak. We should also take the time to clearly articulate our thoughts, using simple yet powerful language. Additionally having an open mind is key. It allows us to consider different angles and perspectives on any issue or problem that we might face.

Here are some tips for good communication :-

i. Take a moment to formulate the thoughts before speaking or writing them down.
ii. We should ask questions when necessary, and also listen carefully to what others have to say.
iii. We should stay open-minded in conversations as this will help us to broaden our knowledge of the situation.
iv. We should speak clearly and use accurate language so that our message won't be misunderstood.

CONCLUSION:

High achievers always set goals, they learn from failure and disappointment, they show stubborn perseverance, they work hard, they pursue continuous improvement, they do not make excuse, they accept responsibility for their own performance, they maintain a sense of perspective, they maintain positive self-talk, they have a passion for what to do, they thrive on pressure, they are very consistent, they surrender themselves with positive people, they are hungry to know more, to do more, to achieve more and to be more.

Critical thinking is also essential for success in every field of life. Using critical thinking people may arrange and organize information, data and facts to identify and solve a problem. When students develop critical thinking skills, they have a variety of advantages, including increased learning capacity in order to empathize with the perspectives of others. A person with well-developed critical thinking will examine the facts provided, reject any inaccurate or unscientific reasoning and scrutinize the information sources. They will be well and capable of determining the value of a debate and drawing deliberate yet evidence based decisions. Critical thinking is one of the most crucial skills that each learner should learn.

It is very true that critical thinking skills cannot be taught in just a few days, plenty of work and practice can go a long way towards equipping us to think critically about the problems in our life. With the right practice and guidance we can become a master at analysing issues, discerning cause and effects and integrating facts to formulate our strategy.

While looking for hone for our critical thinking skills we start by breaking down our problems into component parts. Assess the evidence, identify assumption and determine the best course of action. With practice and dedication we can develop the analytical skills to resolve complex problems and make better decisions in the future.

The importance of critical thinking in education is often overlooked but it's a skill that will serve our students well throughout their lives. When we teach students to think critically they develop a habit of questioning what they read and hear and this make them understand the world more deeply.

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Relationship Between Geography Teacher's Competence and Students' Academic Achievement in Map Reading Among Secondary Schools in Nakuru County, Kenya

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Abstract: The proficiency of educators and the level of academic accomplishment have significant implications for the societal, political, and economic advancement of any nation. The prospects of a nation's advancement are contingent upon the academic successes of its young population. Consequently, the attainment of academic success necessitates the implementation of efficient teaching methods to bolster students' endeavours. Educators who possess a high level of competence are more equipped to successfully facilitate students' learning process. This study aimed to examine the relationship between the academic achievement of students and the proficiency of their teachers. The objective of this study was to examine the correlation between the proficiency of a Geography instructor and the academic performance of students in Map Reading. The research employed a descriptive survey methodology and utilised a combination of simple random and purposive selection techniques to choose a sample size consisting of seven public secondary schools, 194 students, 14 teachers, and 7 heads of the subject. The data-gathering instruments included interviews, tests, questionnaires, and classroom observations. The process of data analysis involved the utilisation of both descriptive and inferential statistics. The results suggest a statistically significant correlation between the competency of teachers and the academic accomplishment of pupils. This is supported by the estimated P-value of .001, which is lower than the predetermined threshold of significance (α=.05) at a confidence range of 95.5%. Educators possessing pedagogical expertise and subject knowledge, demonstrating awareness of current educational concerns, and effectively connecting students' personal experiences have a significant impact on their academic performance. Based on the empirical evidence, the study proposes that educational institutions and governmental bodies should consistently involve educators in substantive initiatives, such as in-service training, workshops, seminars, and both short-term and long-term courses, to enhance teachers' proficiency and ultimately promote academic attainment.

Keywords: Geography, Teacher's Competence, Students' Academic Achievement, Map Reading.

INTRODUCTION:

Academic achievement and teachers' competence cannot be ignored in a quest for quality education. Teacher competence is the ability or efficiency of a teacher in carrying out his/her tasks or the aptitude of a teacher to impart knowledge through education (Hanifah *et al*., 2019). A teacher also can carry out tasks excellently and effectively in terms of knowledge, personality, and skills. Possession of values and attitudes toward Geography are attributes that are offered through the acquisition of geographical knowledge. These attributes that are acquired through geographical knowledge enable the learner to be aware of the physical environments and resources; cultures, economies, and societies; people and places, and global trends and citizenship. The values and attitudes of geography help the teacher to be more passionate and observant of the difficulties that confront learners. On the other hand, Academic accomplishment, which is defined as measurable outcomes that reflect an individual's level of success in attaining specified objectives within educational settings, particularly in primary and higher education institutions, demands effective teaching to support the efforts of students (Jordan, 2018). The advancement of academic achievement begins with the development of a national policy on instructors' education that centred around training teachers, qualifications, educational programmes, curriculum, and professional development. This is so because teachers who are directly involved with learners' progress must be up to the task (competent) as they facilitate learning as asserted. Miller *et al*, (2017) and McCune (2017) described a competent teacher as someone who has undergone comprehensive education and training in the field of teaching, possesses the requisite qualities or aptitudes, and is capable of delivering instruction with effectiveness. In other words, a proficient educator actively participates in educational conferences, workshops, and seminars, demonstrating a commitment to ongoing professional development. They exhibit effective classroom management techniques, possess great communication abilities, and possess a comprehensive grasp of the subject matter. Additionally, they employ a diverse range of pedagogical tools to enhance the learning environment. Academic achievement can only be influenced when the teachers' competence is related to their academic and teaching experience, professional growth, students' engagement, and assessment (Rodrigues *et al.,* 2021) Students are likely to progress in their academic sojourn when they are guided by instructors who are prepared in terms of content, pedagogy, and the integration of technology in the classroom and have the appropriate attitudes and interest toward teaching and learning. According to (Murkatik *et al.,* 2020) academic competence (content knowledge) and pedagogical competence (method of teaching content) are significant in promoting academic progression. An education system that wants to produce useful and productive citizens will have to develop academic competence, that is the content knowledge and pedagogical content which deals with the art of teaching content from known to unknowledge, concrete to abstract, and simple to complex.

Academic achievement in Map Reading (Geography) remains a challenge among secondary schools globally though effort has been exerted in improving performance in the subject. For example, in China, some institutions have given up on Geography as a subject because of the decline in students 'outcomes. The poor performance in Geography was attributed to the incompetence of teachers which includes the low content and technology, knowledge, poor teaching methods, and lack of interest in the subject by both teachers and students (Fan, 2022). Inexperienced teachers are said to be competent while experienced teachers are said to be competent. According to Gess-Newsome *et al*. (2019), the longer a teacher remains in the classroom, the more knowledge he/she becomes in PCK and this knowledge gained puts the teacher in the position to be aware and understand the constraints confronting learners within the classroom environment. This experience could eventually help the teacher provide answers to some of the problems that confront learners in the learning environment (Kind, 2019). Additionally, Shulman (1987) argued that academic achievement is tied to teachers' competence because content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, knowledge of educational contexts, and knowledge of educational ends, purposes, and values which are all attributes of teachers were needed for productivity in learning outcomes. Also, teachers should take full responsibility for incorporating technologies in the classroom since they are the ones who design the learning activities and manage their development. Teacher technological knowledge in Geography can either motivate or demotivate learners' active involvement of learners if the process of selecting these technologies is not guided by a thoughtful interpretation of the subject syllabus. In Kenya, competent teaching is a concern among educational stakeholders because competent teachers manage classrooms, utilize a variety of resources for instructions, ensure teachers' efficiency, adjust to acceptable instructions, and employ effective techniques to enhance the performance of learners (Mutebi, 2019). Thus, a student's secondary performance shapes their professional route (Wanjiru, 2020). Momanyi *et al.* (2020) warned that the lack of core competencies possessed by teachers could be a contributing feature to teachers not adapting fully to the new pedagogies in the CBC in Kenya. These studies were focused on the preparedness of teachers to institute reform in the Kenyan education system and it implies that most teachers do not have the required skills and knowledge on those policies they opt to reinforce.

Statement of the Problem :

The importance of academic achievement in any nation cannot be disputed. Students' academic achievement is instrumental for the success of any academic institution and students' achievement is tied to teachers' competence. The level of competencies a teacher possesses such as content knowledge, pedagogical content knowledge, and technological knowledge among other competencies suggests high-quality education delivery and this would eventually lead to improving learners' outcomes according to professional experience. When students are guided by qualified, experienced, and competent teachers or by teachers who are trained and equipped with core competencies such as (attitude, knowledge, skills, and teaching methodology), increases learners' outcomes and makes them compete in a highly educated environment since academic achievement which is attained through quality education conveyance calls for greater competition. The Kenyan educational system being aware of the significance of academic achievement and teachers' competence has taken some measures to improve the competence of teachers and students' performance. The revision of the national curriculum every five years and teacher professional development to arm teachers in the provision of quality education at all levels are some of the measures the government of Kenya has embarked on to improve academic achievement and teachers' competence. However, as indicated by pupils' recent poor performance in the KCSE in Geography (2021), this endeavor to improve students' achievement has not produced the expected outcome. In terms of performance in the KCSE in Geography, Naivasha over the previous three academic years (2019–2021) has been at par with two other sub-counties (Kuresoi North and Kuresoi South), with a mean score ranging from 5.102 to 5.771 (C-). The table indicates that of the total number of students that sat the KCSE, a mean score of 50% has not been obtained for five years (2017-2021). The report further established that, most Form Four students still struggle to respond to questions on Physical Geography (paper 1) as opposed to Human Geography, which hurts the nation's overall outcome in Geography (KNCE 2020). Consequently, this study sought to investigate the link between Geography teachers' competence and students' academic achievement in Map Reading.

Purpose :

The study seeks to establish the relationship between teachers' competence and the academic achievement of learners in Map Reading.

Significance :

The study result is intended to increase consciousness among major educational stakeholders who are responsible for improving the standard of education, and teacher professional development at the Ministry of Education and the school levels about the importance of teachers' competence and academic achievement. This consciousness about the competence of teachers and the performance of learners in Geography will help policymakers in academia to make informed decisions to improve teachers' competence and students' performance.

Objective and Research Question

The objective of the study is to investigate the link between the competence of Geography teachers and learners' academic achievement in Map Reading. The objective develops a hypothesis statement: There is a relationship between teachers' competence and students' academic achievement in Map Reading.

Theoretical Review :

Goal-setting and task-performance theories of Locke *et al* (1981) and Shulman's teaching knowledge development model inform the study. Shulman's teaching knowledge development model directed

objectives one and two. The philosophy encourages teachers to think beyond material and create methods to teach it. Shulman focused on developing systems that depict, exhibit, explain, demonstrate, and adapt concepts to comprehend a situation. A teacher must be able to identify students' social standing and possible issues to be effective. According to Shulman (1987), learning is complicated, thus learners and teachers must employ effective and cognitive domains to grasp content. Teachers with wide, differentiated, and integrated knowledge in PCK, TCK, and CK will have a greater impact on student results than those with limited understanding. The idea applies to this study because students' academic achievement rises when teachers understand the content, use technology, have good attitudes towards tasks, are enthusiastic, and are professional in the classroom. Second, Locke *et al*. (1981) goal-setting and task-performance theory will inform the study. This theory supports the first theory by emphasizing the strong link between objectives and task performance. For instructors to be effective and for learning to occur, they must create clear, basic, and achievable goals, according to the notion. In any workplace, goals affect instructors' attitudes and job performance.
The foremost assumption in the theory is:

I. when students possess inherent psychological needs, (autonomy, competence, and relatedness) appreciated, and supported by social context (a setting where learners interact in the classroom) and by their teachers.
II. When teachers employ goal-setting and task performance strategies in the class, their learners become active in the learning process which improves their learning outcomes

Therefore, these theories fit the present study since they inform both the dependent variable (student outcomes) and independent variable Geography teachers' teaching competence). These theories were also helpful for the construction of the conceptual framework, research instruments, and discussion of study findings.

Related Literature Review :
Due to their crucial role in nation-building and sustainable development, teacher competency and student achievement cannot be overemphasized. Those who make crucial decisions for the state are frequently former pupils who were taught by competent or incompetent instructors. Extensive empirical evidence from prior studies demonstrates a correlation between the two variables. Fauth et al. (2019) found that teacher competence (pedagogical content knowledge, self-efficacy, and enthusiasm) is positively related to student achievement because these competencies motivate students' interest in the lessons. The study also revealed that teaching quality mediates relationships between teachers and students. The previous research was conducted in elementary school, while the current study will concentrate on Form Three students in secondary school. In addition, Adangab and Boateng (2022) observed that supervisor leadership's competence had a strong and significant correlation with boosting student achievement in school. The study also revealed that 72 percent of respondents believed that the leadership style of principals significantly influenced the academic performance of students. Teachers who employed democratic and transformational leadership styles improved student academic performance more effectively than autocratic leadership styles. The findings of the study were not sufficient to establish the influence teachers' leadership competence had on learners' performance because it was conducted in primary schools in Ghana using heads of subjects as respondents. Therefore, my investigation was conducted in secondary schools considering Geography teachers and heads of subjects in Kenya since doing so would have more detailed data to make an informed decision. Likewise, Dakur and Muwus (2021) examined secondary geography teachers' ability to execute the curriculum. Most instructors had modest proficiency, making curriculum delivery problematic. Teachers' insufficient curriculum topic understanding, lack of qualification, and incapacity to employ instructional materials caused students' poor performance, according to the results.

Similarly, Fwang'le (2016) hypothesized that teachers who are unable to explain and make the curriculum useful, fascinating, and effective not only hurt learning achievement but also ruin the lives of the students entrusted to their care. Therefore, a teacher who possesses these characteristics is said to be professionally trained, knowledgeable about the subject matter, employing engaging teaching methods, managing the classroom, planning lessons to satisfy the interests of students, and able to evaluate student achievement. The significance of teacher competence in the teaching and learning process is demonstrated by the fact that teachers are entrusted with interpreting the curriculum of any education system to students, and the level of teachers' competence is correlated with student achievement. In any given society, education outcomes cannot overestimate teacher competency; rather, student achievement will determine whether or not teachers are competent. In a recent investigation conducted by Dakur & and Muwus (2021), the objective was to evaluate the proficiency of Geography teachers in the implementation of the Geography Curriculum for secondary-level students. The findings of the study indicated that a significant proportion of Geography teachers demonstrated a moderate level of competence, thereby posing difficulties in effectively executing the geography curriculum within secondary educational institutions. The findings also indicated that teachers had deficiencies in curriculum knowledge, credentials, and the appropriate utilisation of teaching resources, hence exerting a detrimental impact on their students' academic performance. Furthermore, educators with the requisite qualifications demonstrated a greater capacity to effectively execute the Geography curriculum in comparison to their peers who did not possess those qualifications. The t-test was employed to evaluate independent samples consisting of 44 geography lecturers. This study will investigate the relationship between the instructional competence of geography teachers and the map-reading proficiency of their students. Both instructors and students will be included in the study. Multiple regression analysis and Pearson correlation will be used to determine the relationships between the variables in the study. Other research by Fauth et al. (2019) and (Jacob *et al*., 2020) found that pedagogical topic knowledge and other teaching qualities contribute to fostering good student attitudes about the subject. Teacher competency is strongly connected with student development because a competent teacher knows the subject, techniques, and technology to utilise in the classroom. GIS, GeeMap, Google Earth, games, and visualisations help students understand topography and other natural aspects (Healy & Walshe, 2019).

The use of the globe, map, thread, and protractor throughout the geography class had an impact on the student's academic achievement. The ability of an educator to effectively choose and use appropriate instructional resources may contribute to the improvement of educational pedagogy and the facilitation of information dissemination, hence engaging students' interests. This is significant as attitudes have a pervasive influence on several domains of life, including the realm of education. According to Cox et al. (2019), the utilisation of causal diagrams can be an effective strategy for fostering a system-thinking approach within the context of geography education. A quasi-experimental design was used and the results showed that the experimental group, which employed diagrams as a pedagogical tool to facilitate the understanding of system thinking in the field of Geography, demonstrated superior performance compared to the control group, which utilised causal diagrams.

In contrast to the view that competence is associated with academic achievement, other studies have contrary views. Damien and Claire (2022) disputed that competency affects performance. Teaching competencies were important, but only 26.2% of teacher preparedness or competence affected learning outcomes. Other variables like inadequate textbooks, the learning environment, students' interest, field trips, and parental support affected 73.8% of student academic performance. This confirms Sossion (2018) and Lawrence and Tar (2018) arguments that classroom ICT integration affects students' reactions and performance. The results indicated 70% of pre-primary teachers had never utilised ICT and were unprepared for CBC curriculum implementation. The CBC was expected to help Africa's learning problems, however, the lack of willingness, and motivation for ICT training for implementers demotivate teachers, parents, students, and education stakeholders to accept and encourage the integration of ICT in the T&L process. Teachers could have the PCK, TK, and CK skills and learning outcomes would remain low once the learning environment is conducive and teachers are unwilling to integrate ICT into the lessons. Classroom structure, students' motivation, and efficacy and availability of meaningful learning resources are other factors that affect academic achievement apart from teacher competence. KICD (2018) reported that 61% of instructors had limited training on how to incorporate technology in the classroom though they had content and pedagogical content knowledge. The use of Information and Communication Technology (ICT) presents a significant opportunity for educators and learners to enhance the educational experience and elevate the standard of instruction within the classroom setting. This technology offers enhanced possibilities for increased adaptability, interaction, and availability in facilitating educational instruction and knowledge acquisition at the individual, collective, and societal scales.

METHODOLOGY :

Qualitative and quantitative methodologies were used in the descriptive survey design for the study. Seen public secondary schools were chosen, with a sample size of 221 students, 14 instructors, and 7 heads of subject. Purposive and stratified random sampling was used to pick teachers and students, respectively. Data was gathered using questionnaires, tests, interview schedules, and observation plans. Data analysis comprised descriptive and influential statistics. To assess quantitative data, measures of central tendency were applied and qualitative data was obtained through content analysis which determines the existence of certain themes or concepts within qualitative data.

Results and Discussion :

Establishing the link between Teachers' competence and Students Achievement

This section encompasses responses on the link between the competence of teachers and the academic achievement of learners. Teachers' competencies are key in every education system because quality education is delivered on the platform of teachers' competence, which prepares learners to be significant contributors to society (Shulman, 1987).

Views of Students on whether their Achievement is linked to the Teaching Competence of their Teachers

The study sought to obtain views from students on whether the usage of the globe, map, and protractor influences their progress in Map Reading. They were also required to indicate whether their achievement in Geography was determined by the way their teachers taught. A summary of the results is presented in Table 1.1

Table 1.1: Students' views on the Link between Teachers' Competence and their Academic Achievement

Students' responses	The usage of globe, map, thread, and protractor by my teacher while teaching map reading influences my learning	The teaching competence of my teacher influences my performance in Geography.
Strongly Disagree	7.9%	4.2%
Disagree	10.0%	7.9%
Agree	46.8%	38.9%
Strongly Agree	35.3%	48.9%
Total	**100**	**100**

n=194

The findings in Table 1 indicated that almost half of the learners (48.9%) strongly agreed, while (38.9%) agreed that the teaching competence of their teachers was associated with their academic achievement. However, (7.9%) of the learners disagreed that their academic achievement was not influenced by the competence of their teachers. Likewise, (46.8%) of respondents agreed and (35.3%) strongly agreed that the integration of globe, map, thread, and protractor Map Reading influenced their learning. Few learners (10.0%) disagreed, and (7.9%) strongly agreed that the instructional materials indicated above influenced their Map Reading achievement. From the findings, the majority of the respondents indicated that Map Reading achievement was linked to the competence of their teachers. It was established from the findings that, although other factors determined the progress of learners, learners' achievement was linked to how competent teachers were to a greater extent. During the face-to-face interview, one of the teachers had the following to say:

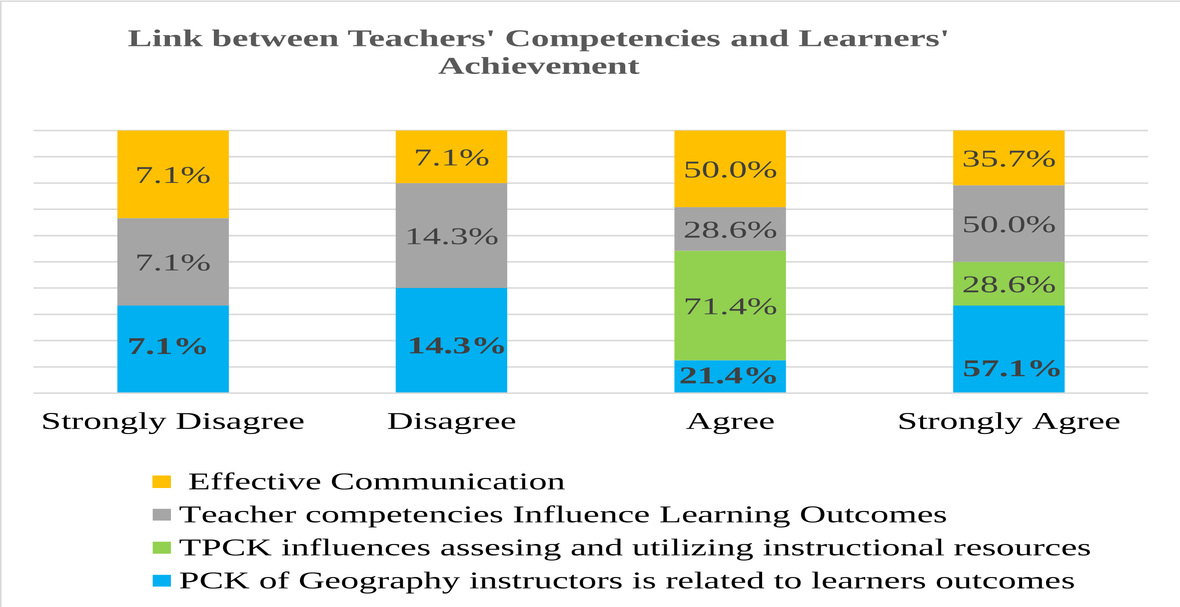
> *Because of the relationship between a teacher's competence and learners' achievement, teachers need core competence to deliver content and facilitate learning. Without competence, learners' outcomes will be impeded. Teachers must be equipped with pedagogical skills, be aware of emerging issues in education, and connect them with what is traditionally known and what the students have*

The statement raised by the respondent above is in alignment with Dakur & Muwus (2021) who examined secondary geography teachers' ability to execute the curriculum. They found that most instructors had modest proficiency, making curriculum delivery problematic. Teachers' insufficient curriculum topic understanding, lack of qualification, and incapacity to employ instructional materials caused students' poor performance, according to the results. Qualified instructors were better at teaching geography than unqualified ones. Other research by Fauth et al. (2019) and Jacob et al. (2020) found that pedagogical topic knowledge and other teaching qualities contribute to fostering good student attitudes about the subject. Teacher competency is strongly connected with student development because a competent teacher knows the subject, techniques, and technology to utilise in the classroom. Teacher quality is vital to student accomplishment, but it is not the only factor (Kim *et al*., 2001). Maphoso and Mahlo (2017) and Kimani *et al.* (2013) found that professional teachers' qualifications and experience were not significantly related to achievement, which was supported by (Koedel, 2007) Learning environments, texts, and student engagement influenced accomplishment. These results supported instructors' beliefs that competence impacted academic success.

The globe, map, thread, and protractor used in the geography lesson affected student performance. The capacity of a teacher to properly choose and apply relevant teaching materials may help enhance educational instruction and information sharing to capture students' attention, as attitude affects all aspects of life, including education. The results suggest using causal diagrams to promote system thinking in geography education. The research was quasi-experimental. The experimental group using diagrams to teach system thinking in Geography outperformed the control group using causal diagrams (Cox et al., 2019). One face-to-face respondent voiced worry regarding geography education. Geography is a practical topic; thus, instructors should use many techniques, illustrations, and technologies to engage students. As a Kenyan National Examination Council Geography examiner, another teacher said, "One of the difficulties learners encounter in answering questions from Paper One (Physical Geography) is a lack of understanding and inability to analyse some of those physical features." Teachers may not have used diagrams to explain the physical aspects of the tests. GIS, GeeMap, Google Earth, games, and visualisations help students understand topography and other natural aspects (Healy & Walshe, 2019).

Teachers' Responses on the Link Between Their Competence and the Academic Achievement of Learners

The study endeavoured to gather responses from teachers on the relationship between teachers' competencies and learners' achievement. The results of the investigation are presented in Figure 1.



n=14

Figure 1: Link between Teachers' Competence and Learners' Achievement

The findings in Figure 1 showed that (50.0%) and (37.5%) of the respondents agreed and strongly agreed, respectively, that the way teachers communicated with learners during and after instruction determined the performance of their learners, while 7.1% strongly disagreed that their performance was associated with the communication ability of their teachers. When probed about the correlation that exists between the teaching competence of teachers and the academic progress in Geography, as shown in Figure 1, the majority (57.0%) of Geography teachers strongly reported that, when they are prepared and have attained all required competencies in the field of education, they have the greatest chance to influence learning achievements. (28.6%) of the respondents also had similar views, while (14.3%) disagreed that teachers' competencies influence learning achievement. (71.4%) of the teachers agreed (28.6%) that TPCK plays an important role in assessing and utilising the instruction resources. The findings also revealed (57.1%) of the respondents strongly agreed PCK was linked to students' achievement, 21.4% agreed with a similar opinion, and (14.3%) felt PCK was linked to learners' achievement. Teachers believed their communication style affected learning success; as such, teachers must prioritise communication skills for successful teaching and better learning results. Even with the best learning environment and appropriate instructional resources, learning would be tough and academic attainment poor if instructors lacked the willpower to interact with students. According to Khan *et al*. (2017), teachers' clear communication skills in the classroom enhance students' academic success and make learning meaningful and motivating. Alahmad (2021) found similar results in UK research on teaching, learning, and communication in a heterogeneous context. The investigator concluded that a system of education that meets the essential physiological, pedagogical, inclusive of belonging needs and esteem, teacher communication skills, and system efforts to employ the best teaching strategies to manage the class, engage learners, and ushers' teachers and the education system efforts to achieve a motivational climate for participatory learning According to the research and other similar studies, communication skills are important in T&L and may increase academic performance. Understanding students' body language helps instructors engage them and get them to listen. This indicates that successful and efficient education relies not just on the teacher's topic understanding but also on their tactics and communication abilities.

As shown in Figure 4.1.2 above, a significant number (57.1%) of Geography teachers strongly agreed that when teachers are prepared and have all the necessary skills, they can have the greatest impact on student learning. Although some teachers disagreed that teachers' competence affected students' achievement, the data showed that most teachers believed that teachers' competencies influenced students' behavior, and performance, facilitating learning. Teachers' frames of reference need competence because incompetent teaching yields no results, according to many academics. Adangabe and Boateng (2022) and Filgona *at el*. (2017) argued that headteacher leadership and competency improve student results. The results revealed that most Geography instructors lack expertise in using varied teaching techniques and tactics, which demotivates students from participating in class and lowers performance. students are encouraged to take ownership of their learning where they are guided by teachers who portray competence and leadership in the classroom. However, Damien and Claire (2022) disagreed with the respondent that competence is connected to performance. they observed that, though teaching competencies were important in the learning process, only 26.2% of teacher preparedness or competence affected learning outcomes, while 73.8% of student's academic performance was affected by other variables like inadequate textbooks, the learning environment, students' interest, field trips, and parental support. These results acknowledged that though teachers' competence was important in the world of academia as reported by the respondents, competence was not the solitary determinant of students' academic success.

Teaching competence is crucial, but teachers need support from their instructional environment, materials, and students, coupled with outdoor learning to meet their goals. Teachers' technological knowledge is correlated with success. Thus, ICT integration by instructors boosts student performance over time. During teacher interviews, one instructor voiced anxiety about integrating significant technology into education to help students comprehend most physical feature themes. This supports Sossion's (2018) claim that ICT integration in the classroom has a significant influence on students' responses and performance. The results showed that 70% of pre-primary teachers have never used ICT and as such they were not prepared for CBC curriculum implementation. Though the CBC was thought to alleviate some of Africa's learning difficulties, the absence of ICT training for CBC implementers is demotivated and continues to demotivate teachers, parents, students, and education stakeholders. KICD (2018) reported that 61% of instructors had limited training on how to incorporate technology in the classroom, a 21st-century skill. Teachers can only impact learners' outcomes if they are well-versed in the technology they utilize in their classrooms (Marcelo & Yot-Domínguez, 2018). In furtherance, teachers' TK encourages or demotivates students depending on how they acquire and use these technologies. To make technology integration simpler, instructors should be educated to choose and apply educational technologies.

Teachers' Reponses Relationship between Geography Teacher Competence and Student Achievement

This section contains the views of the head of the subject on the relationship that exists between teacher competence and learners' performance in Geography. The results of the investigation are presented in Table 2.

Table 2: Heads of Subjects' Responses on Teachers' Competence and the Link it Has with Students' Achievement

The link between Teachers' Competence and Students' Achievement	
Students' geographical knowledge depends on teacher preparedness.	21.4%
Content delivery builds confidence in learners and stimulates their interest in the lesson	28.6%
Pedagogical skill improves learning outcomes	22.4%
Teacher mentorship improves learning outcomes	20.4%
Others	7.1%
Total	**100**

n=7

Per the results shown in Table 1, (28.6%) of the participants reported that the content delivery of teachers builds learning confidence in learners and stimulates their interest in the lesson; (22.4%) agreed that pedagogical skill improves learning outcomes, followed by teacher preparedness as a determinant of how knowledgeable a student is geographically (21.4%). And (20.4%) cited that teacher mentorship was associated with students' academic achievement. Mastery of content and teacher pedagogical skills, which help teachers adequately communicate information and engage learners, were highly recommended. There is a high possibility for learning outcomes to advance when content is presented with the ideal pedagogical skills employed. From the opinions gathered from teachers through interviews, it seems that students' geographical knowledge and the confidence needed to fully participate in Geography lessons are dependent on how knowledgeable the teacher is and the type of teaching methods and strategies they integrate into the lessons. The results were in concordance with the results of Kamamia *et al*. (2014) who observed that subject matter understanding of any discipline aids the teacher inappropriately preparing the lesson, employing diverse teaching and learning methods, and evaluating learners effectively. When teachers can explain content, it has a huge impact on the teaching and learning process, and learners can make meaningful contributions to the T&L process.

Teachers' preparedness in the areas of pedagogy, technology, and content is crucial because the general effectiveness of a country's education system is strongly influenced by the superiority of its teachers and the quality of the teacher development programme. However, teacher mentorship and their interactions with learners are essential. According to Adangabe and Boateng (2022), 72% of the respondents narrated that mentorship from teachers and the head of the subject greatly influenced students' academic performance. A teacher whose mentorship is based on independent and transformational leadership helps students improve their academic performance. They create an avenue for mentees (students) to freely express their thoughts and encourage them to go beyond their interests and embrace the interests of the school and the nation.

Students' Map Reading Assessment Test Score

Since students directly benefit from successful teaching, which results from instructors' competency, the researcher developed a test to evaluate learners' map-reading comprehension. The researcher conducted a test that was developed per the Major Field Test in Geography (MFTG) to gauge respondents' knowledge of reading maps. Because of the research's geographic emphasis, the geography exam was created. Table 2 displays the assessment's findings.

Table 3: Students' Mapping Reading Assessment Test Results.

Descriptive Statistics				
	Frequency	% Of Frequency	Mean	Std. Deviation
Pass	82	42.3	33.25	15.655
Fail	112	57.7		
Total	194	100.0		

n=194

The Major Field Test in Geography (MFTG) was intended to measure the Map Reading skills of the respondents. The test was concentrated on the map reading comprehension of the Form Three Geography students in Naivasha Sub-County. The test was administered to 200 students, and the researcher set a score of 40 and above as an equivalent successful mark, while a score of 40 below was equivalent to an unsuccessful mark. Of the 94 students who sat the test, 82 learners, which constitutes (42.3%) scored 40 and above, which indicates a passing mark, while 112 students scored below 40 (57.7%). From the overall findings of the test, the majority (5770%) of the respondents failed the test, as evidenced by the number of respondents that scored below 40, which was set as the benchmark by the research. The mean score of the students who took the test was 33.25. These results show that most of the learners had challenges analysing and responding to Map Reading questions. The findings are in line with the Kenya National Examination Council (KNEC, 2022) report, which states that most of the students sitting for the examination were finding it difficult to respond to questions drawn from the physical component (physical Geography) of Geography. The KNEC further recommended that teachers be trained in physical Geography to equip them with the necessary content and pedagogical knowledge to adequately facilitate learning.

The results of the assessment test raised doubts among teachers and heads of subjects who felt they were adequately prepared to facilitate learning for a productive academic outcome because academic achievement is the product of competent teaching. When a teacher is competent and does their work the way it ought to be done, learning advances According to Lekhu (2023), learning progress is enhanced when teachers possess content knowledge while at the same time having an understanding of how to teach the content. Academic achievement tends to progress when teachers' education incorporates post-human pedagogies that improve instructions and learning resources that buttress and promote future teachers' teaching skills (Hamman *et al*., 2006), as cited in Lekhu (2023). Teachers' competence, based on these findings, serves as a significant determinant of academic achievement. Learners depend on the knowledge teachers have about a particular subject coupled with their teaching skills to advance their learning; that is, the academic achievement of any country squarely lies in the preparedness of the current and future teachers. Amankwah *et al*. (2017) argued that teachers' competence should be given serious attention because the academic achievement of any country's future generations rests on a pre-service training framework. The findings further state that a lack of content knowledge and understanding of teaching methods by teachers impedes the performance of students.

However, the low performance of students as presented in the findings cannot solely rely on the preparedness/ competence of the teachers. Some factors have the potential to alter students' academic achievement. During the interview and from the findings other data collected, lack of field trips, availability of adequate instructional materials, attitudes of learners and teachers toward Geography, the status of Geography as an elective in the school system of Kenya, and learning environment factors that influence the academic progress of learners. Esfijani & Zamani (2020) observed ICT integration, teaching methods, teachers' motivation, and students' interest as factors that determine the achievement of the learners. They argued for balance in the teaching and the learning progress, that is, though the competence of teachers is a significant factor that influences learning competence has to be supported by essential learning resources, classroom climate, the interest of both teachers and learners and the using the right strategies and methods. In inclusion, academic achievement will remain an issue in the field of education when teachers' competence is not complemented by other factors as mentioned earlier.

One Sample T-Test of Leaners and Map Reading Scores

This section encompasses the one sample test result of learners' Map Reading assessment test and Geography teachers' proficiency. The results of the test explained the relationship between teachers' proficiency and students' achievement in Map Reading (Geography). The results of the test are shown in Table 4.15 below.

Table 4: One Sample-Test Results of Learning Map Reading and Teachers' Proficiency

One-Sample T- Test			
	Test Value = 0		
	t	df	Sig. (2-tailed)
Students' Scores	29.586	193	.001
Teachers' Proficiency	47.695	13	.001

* **Statistically significant at p-value *(p<0.05)***

Since the calculated P-value (.001) was less significant than the threshold of significance (α=.05) at a 95.5% confidence interval, as shown in Table 4.15, we refute the null hypothesis, which led to the conclusion that there is a statistically significant relationship between teachers' competence and student academic achievement in Map Reading. The one-sample t-tests look at within-group differences in a single group. As a result, the same subjects responded to both sets of measures, indicating that you have connected groupings of scores. What the findings postulate is that there is a statistically significant relationship between the proficiency of Geography teachers and the learner's academic achievement in Map Reading. Therefore, the performance of learners in Map reading depended on how competent Geography teachers were. The results are in agreement with Podungge *et al*. (2020) findings, which suggest that though there is no significant impact of teacher proficiency on students' extrinsic desire to engage in academic pursuits, the level of teacher competency has a direct impact on the academic accomplishment of pupils as it enhances their intrinsic drive to engage in study.

The findings support Channa and Sahito's (2022) claim that there is a clear relationship between students' academic achievement and the level of competence or skill displayed by their instructors. The enhancement of academic accomplishment is impeded when those responsible for education, namely instructors, lack competence. Therefore, it is imperative to prioritise the enhancement of teachers' professional development, the academic achievement of students, and the integration of technology in educational settings. Educators who demonstrate professional competence exhibit not just a comprehensive understanding of their subject matter but also exude confidence and vitality in their instructional delivery. These qualities play a pivotal role in fostering learners' confidence, self-efficacy, motivation, and passion. The heightened awareness and enthusiasm for learning that this engenders in learners leads to significant advancements in their educational pursuits. Consequently, the importance of instructors' expertise cannot be overlooked while striving to enhance learning outcomes. As Fernandes' findings, it is evident that the aesthetic appeal, spaciousness, and availability of costly instructional aids within a school environment do not guarantee favorable learning outcomes. Instead, the crucial factor is in the teachers' possession of the necessary abilities to effectively guide and motivate learners to actively engage in the learning process. This is because effective educator consistently enhances their abilities through participation in workshops, conferences, and seminars, possesses strong communication skills, demonstrates a comprehensive understanding of the subject matter, and employs diverse pedagogical approaches to enhance educational achievements.

CONCLUSION:

Teachers' competence was directly linked to academic achievement. Teachers who are equipped with pedagogical skills, and content, aware of emerging issues in education, and able to link learners' experiences influence the academic achievement of their learners.

RECOMMENDATIONS:

There is a need for schools and the Ministry of Education to continuously engage teachers with meaningful programs such as in-service training, workshops, seminars, and short-term and long-term courses of teachers to improve their competence.

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Factors Affecting the Investment ideology of Youth in Mumbai

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Abstract: With Mumbai being the financial capital of the country, we conducted a survey to identify the pattern and analyze if youth are aware (have knowledge) of Investment Ideologies, and if not, what are the factors that are affecting them. We rolled out a form to check whether any prior knowledge has helped the youth in their investment journey. If not then what are the factors that affect the ideology of the youth for not starting their investment journey. And to find out the goals of different youth in order to get a vision of their perspective who are already investing

Key Words: Mumbai, Investment, Ideologies, Youth.

INTRODUCTION :

With increase in per capita income and westernization in our country, the savings and investment pattern has gone under a drastic change. Robust savings rate coupled with capital mobilization plays a significant role in the economic growth. While the initial policies in India were socialistic in nature but the current policies are more market driven giving a free rein to the economy. The increase in per capita income and GDP growth were accompanied with improvement in rate of investment and savings. With the increase in standard of living, the youth have been empowered with more purchasing power. For many young adults, it seems easier to put off any investing decisions until their financial situation becomes, at least theoretically, more stable. The financial goals of Baby Boomers (1946-1964) and Gen X (1965-1980) were not very lofty, they aimed for job security and retirement benefits. Millennial have different aspirations and it is reflected in their investment savings pattern. Here are some reasons how millennial can benefit by starting investments early: 1. Investing when you're young gives your money more time to compound as you reinvest your earnings. 2. You can take on more risk with your investments when you're young because you have more time to recover if things go wrong. 3. Your generation's tech skills might come in handy. Hence for understanding the ideology of the young individuals towards investment and savings pattern, we framed a study. We created a questionnaire based on the objectives set for this study and distributed it by online means, using Google forms. The data collected through this Google form includes 202 responses which was then cleaned and prepared for further analysis. Using excel we started with visualizing the distribution of responses for each attribute as per the responses for other attributes. After analysis and visualization, we attempted checking the dependencies in the attributes of the data using the ChiSquare test for independency.

OBJECTIVES:

Objective 1 : To study the factors affecting the beginning of investment journey of the youth.
Objective 2) : To study the dependence between gender with respect to monthly savings.
Objective 3 : To study the difficulties faced by youth in their investment journey
Objective 4 : To understand if peer pressure affects the youth to start their investment journey.
Objective 5 : To understand the correlation of prior research of markets to get better understanding

LITERATURE REVIEW:

A nation's productive capacity depends on a healthy capital formation. Robust savings rate coupled with good capital mobilization are the key macroeconomic variables, which play a significant role in economic growth. A nation's savings and investment propensities also play a key role in achieving dynamic stability in the capital market. Per Capita Income in India has been on the rise since all of the last decade. With growth in the PCI, savings and investment in the country too has shown a northbound movement. At the same time, there has been a phenomenal rise in the youth population. This has made India the youngest nation with a demographic dividend appearing to be a reality. This young work force is expected to drive the engine of growth. In Economics, investment is generally held to mean formation of capital. As such, from a pure economics point of view, the formation of physical assets is important when considering investment. However this study focuses on what is referred to as Financial Investment i.e. investment in shares and securities aimed primarily at earning income rather than enhancing production. By virtue of this the words savings and investment come closer in meaning than traditionally seen. However a slight difference still remains which is that while savings is simply setting aside funds for future, investment also involves mobilizing them so that somebody else may use it for productive purposes. This study examines the savings and investment pattern of select college going students (Age: 18-29 years) in the city of Mumbai who has just begun to earn. The study also looks into the basic financial literacy amongst the youth; how they go about educating themselves, and how do they look at risk, returns and various modes of investments and what determines the same. Primary data was collected using a survey method. The information generated during data collection was both qualitative and quantitative.

The major objectives of the study were

- To understand the youngsters' income and saving pattern.
- To know their long-term financial goals.
- To find out risk appetite of youngsters.
- To find out whether the young investors are looking for long term growth or risk or return or liquidity.

The study finds that safety and security, which were always important reasons for investment, are still influential in determining the direction of investment. Respondents liked to keep multiple options while choosing their investment options. However, returns on investment were obviously the most considered factor followed by risk. Saving accounts in banks appears to be the most common way of saving and investing for the respondents. Mutual fund has gained the favor of young investors. Investment in mutual funds through the Systematic Investment Plan (SIP) is a favored investment option for the youngsters. This is especially true of the young salaried class, which has just started earning and does not have a fat bank balance as yet. Youngsters today do know about the options available to them due to the rapid spread of information in recent times; they are not always sure about how to go about investing in newer ways actively. An informed investor is a good investor; there is opportunity for providing them with guidance and information but it has to be done in a way that is in accordance with their lifestyle – seminars and workshops are no longer the kind of options to peruse. Podcasts, online videos, forums and tutorials are the way of learning of the young generation. The social media platforms specially Face Book, Twitter, LinkedIn along with e-groups and websites can be a medium to spread awareness about various options available for the young investors. Thus, investor education can play a vital role in improving the active participation of the investors in the market, which can help them in the informed investment and in getting good returns

METHODOLOGY:

We had conducted a survey using the questionnaire which was distributed using Google forms. The survey was conducted online, that is the form was shared through mails or messages online. While creating the questionnaire we had laid down few objectives:
Cleaning the data:

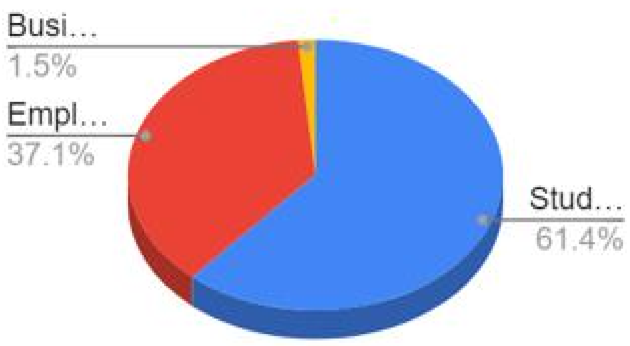
Once we had rolled out the forms and had collected the responses, it was time to explore the data and to prepare it for analysis. For the following we used:
- Microsoft Excel
- R Studio

Main Body – Analysis

Demographics:

	Male	Female
Students	58	66
Working Class	44	34
Total	102	100

We conducted a survey wherein we received a response from 202 participants out of which there are 124 students sub-divided into 58 male and 66 female students and 78 working class sub-divided into 44 male and female.



The above pie chart shows the composition of students , Employees and businessman where students are a major part of it.

The above pie chart depicts the division of responses based on gender wherein 50.5% are male responses and 49.5% female responses.

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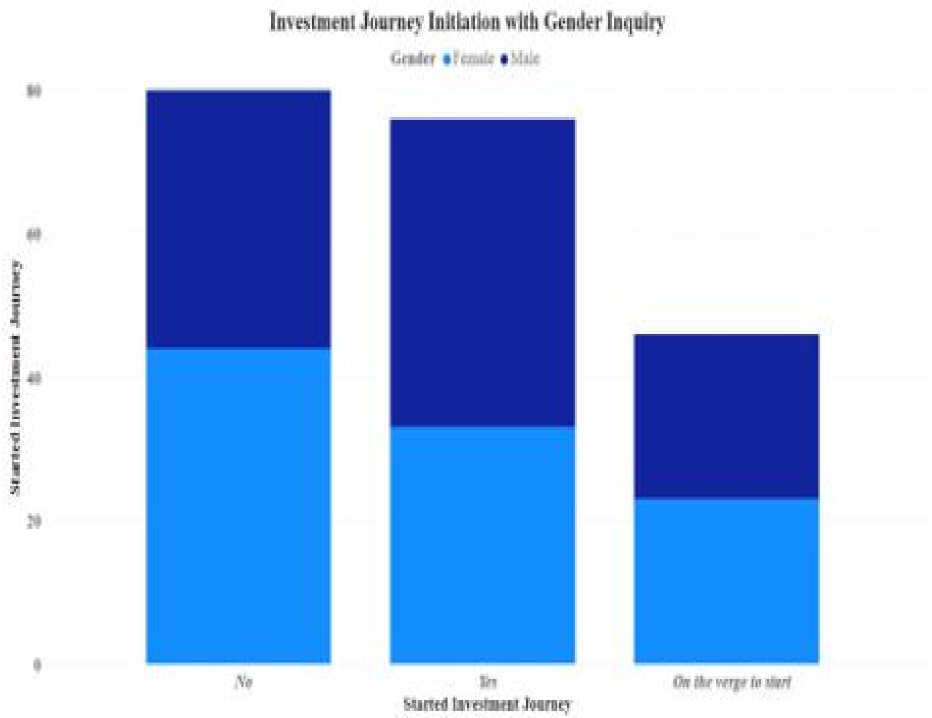
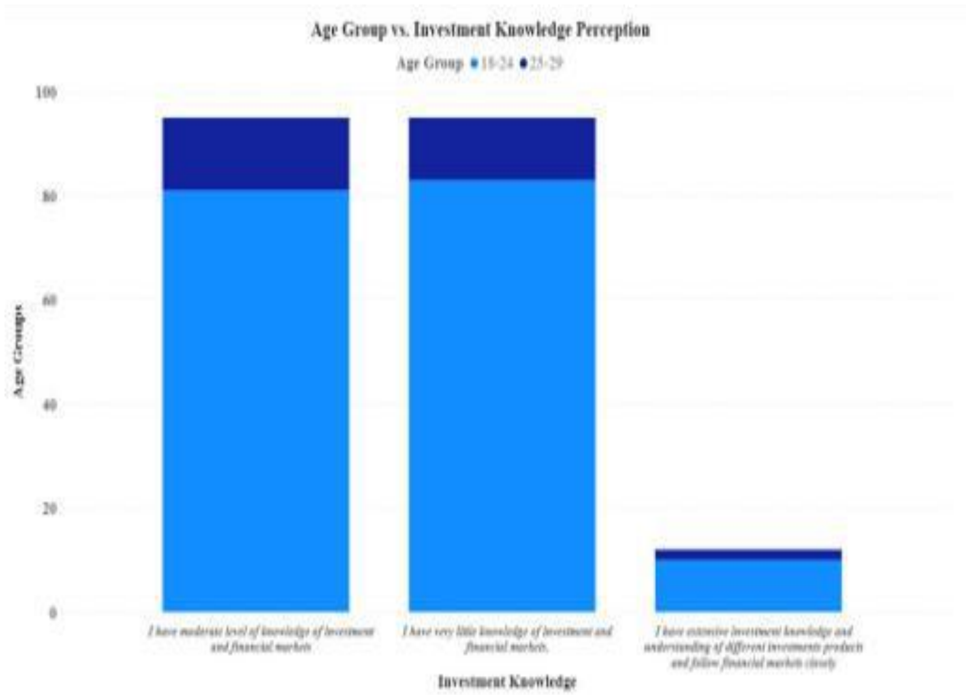
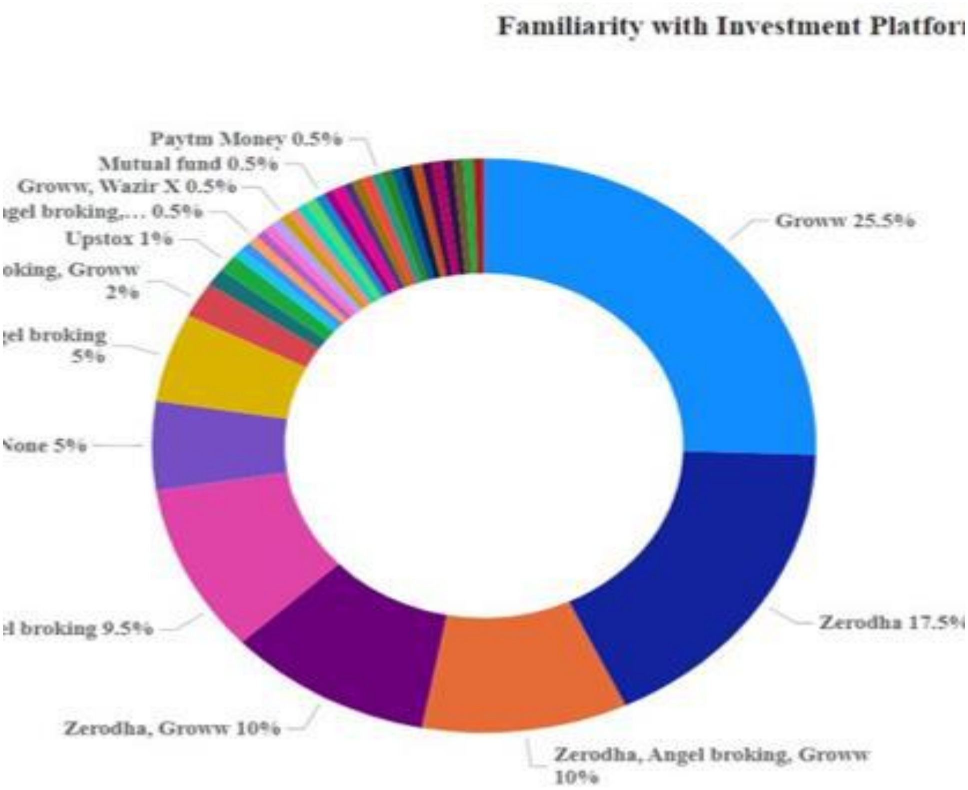


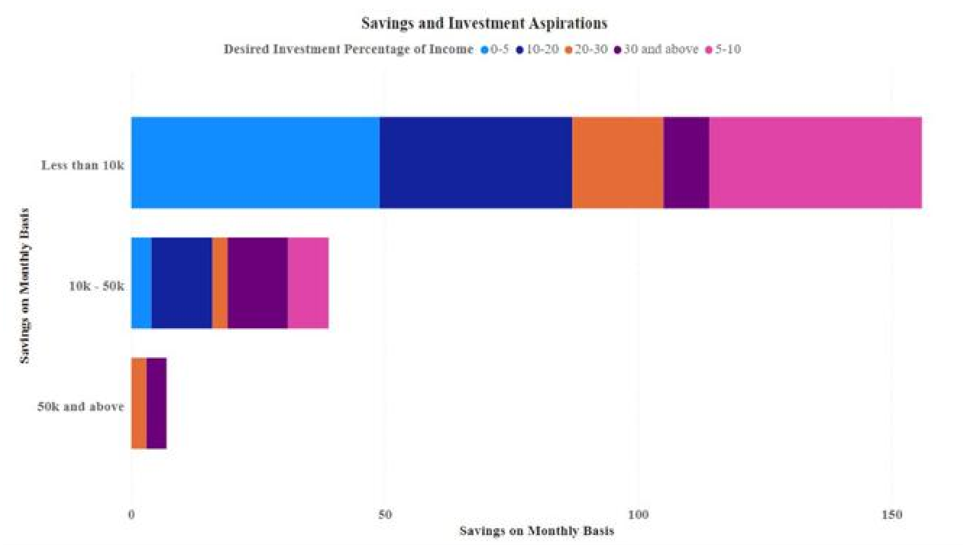
The above chart comprises of people casting out their views on their investment journey wherein 43 male and 33 female have already started investing and 36 male and 44 female haven't invested at all and 23 male and 23 female are on the verge of starting their investment journey.



The above graph may seem to be a little biased since the responses collected were abit more between 18-24 years of age which also shows that most of the students (18-24) agreed to have little knowledge of investment and very few tend to have extensive knowledge of investment.



When asked about the various trading platforms Groww leads the chart with 25.5% fame followed by Zerodha with 17.5% , Angel Broking with 9.5% and others comprising of Mutual Fund, WazirX, Upstox, paytm money, etc



The graph above represents the amount youth are willing to invest with less than 10K being the most common answer are inclined to invest 0-5% of their income

Chi Square Test:
Null Hypothesis Ho : 'Savings' and 'Percent of Investment' are independent of each other
Alternate Hypothesis H1; 'Savings' and 'Percent of Investment' are dependent of each other

```
                 0-5 5-10 10-20 20-30 30 and above
Less than 10k     49   42    38    18            9
10k-50k            4    8    12     3           12
50k and above      0    0     0     3            4
> MODEL1 = chisq.test(RESEARCH1)
Warning message:
In chisq.test(RESEARCH1) : Chi-squared approximation may be incorrect
> MODEL1

        Pearson's Chi-squared test

data:  RESEARCH1
X-squared = 45.592, df = 8, p-value = 2.842e-07

> |
```

Since 2.84e-07 < 0.05 we reject Null Hypothesis at 5% level of significance . Thus Savings and Percent of Investment are dependent of each other.

Chi Square Test
We are testing whether there is any association between gender and monthly savings done by the youth.
Null Hyothesis Ho: 'Gender' and 'Savings' are independent of each other
Alternate Hypothesis H1: 'Gender' and Savings' are dependent of each other

```
        Less than 10k 10k-50k 50k and above
Male               74      22             6
Female             82      17             1
> MODEL1 = chisq.test(t_gender)
Warning message:
In chisq.test(t_gender) : Chi-squared approximation may be incorrect
> MODEL1

        Pearson's Chi-squared test

data:  t_gender
X-squared = 4.6034, df = 2, p-value = 0.1001

> |
```

Since 0.1001 > 0.05 we accept H0 at 5% level of significance , we can conclude that Gender and Savings are independent of each other

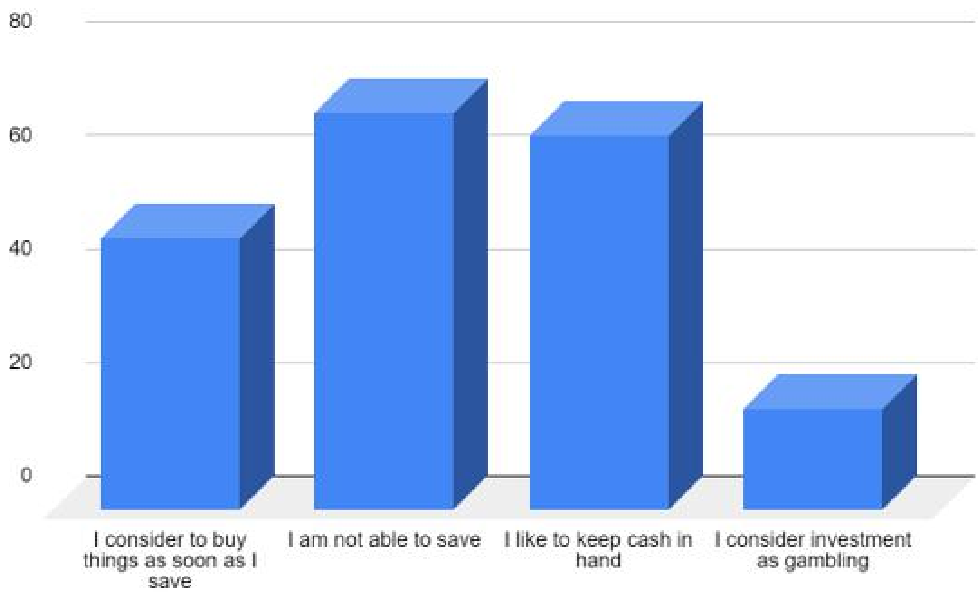
Chi Square Test
Null Hypothesis H0: 'Knowledge' and 'Age' are independent of each other
Alternate Hypothesis H1: 'Knowledge' and 'Age' are dependent of each other

```
          18-24 25-29
Little       83    12
Moderate     81    14
Extensive    10     2
> MODEL2 = chisq.test(model2)
Warning message:
In chisq.test(model2) : Chi-squared approximation may be incorrect
> MODEL2

        Pearson's Chi-squared test

data:  model2
X-squared = 0.26041, df = 2, p-value = 0.8779
```

Since 0.87 > 0.05, we accept the null hypothesis at 5% level of significance . Thus we conclude that prior knowledge and age are independent of each other .



The major factor which hampers the youth from investing is that they are not able to save, they also agreed that they tend to keep cash in-hand

When asked about their future goal of investment the most common answer that deemed out was be financially independent and to have a side income followed by early retirement and dream home .Many of them also have a combination of Early retirement and world tour

The youth is more inclined towards investing for long term rather than short term or intraday . A positive sign here is that the youth that invests is mainly into long term investments which helps them grow their money as well.

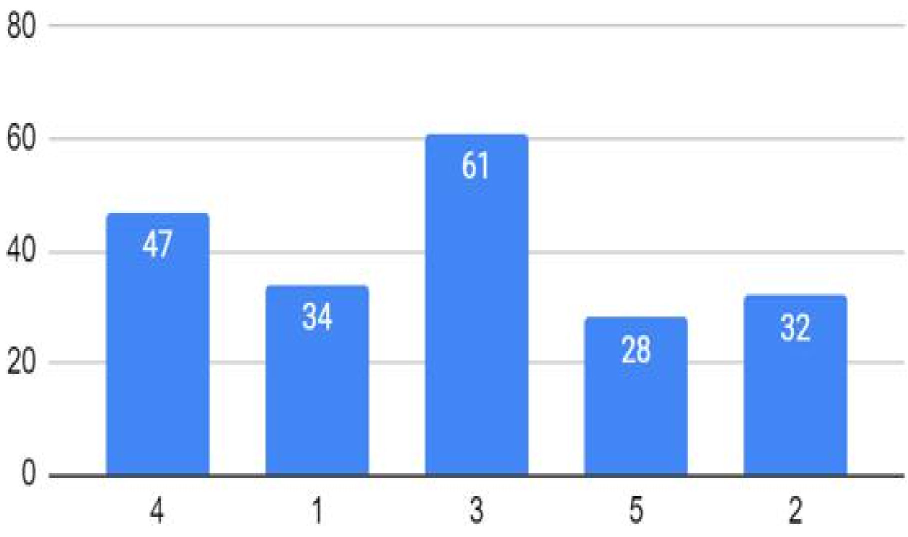
When asked about common securities to invest in the most common answer preferred by the youth stands out to be Mutual Funds followed by Fixed Deposit. We can see various combinations of securities selected which signifies that the youth are eager to get into various dilemma, prioritizing long term benefits which is the main reason for them to invest in many liabilities.

	ROR	LOWER RISK	LIQUIDITY	TAX BENEFIT
IMP	148 (73.26%)	109 (53.96%)	69 (34.15%)	103 (50.99%)
AVG	50 (24.75%)	79 (39.1%)	117 (57.9%)	84 (41.58%)
NOT	4 (1.98%)	14 (6.93%)	16 (7.92%)	15 (7.42%)
TOTAL	202	202	202	202

We observed that the youth while answering what parameters are they looking for, they chose Rate of Return as the most important parameter that they consider before investing in their respective securities followed by Lower Risk , Liquidity and Tax Benefit. We observed that the youth while answering what parameters are they looking for, they chose Rate of Return as the most important parameter that they consider before investing in their respective securities followed by Lower Risk , Liquidity and Tax Benefit.

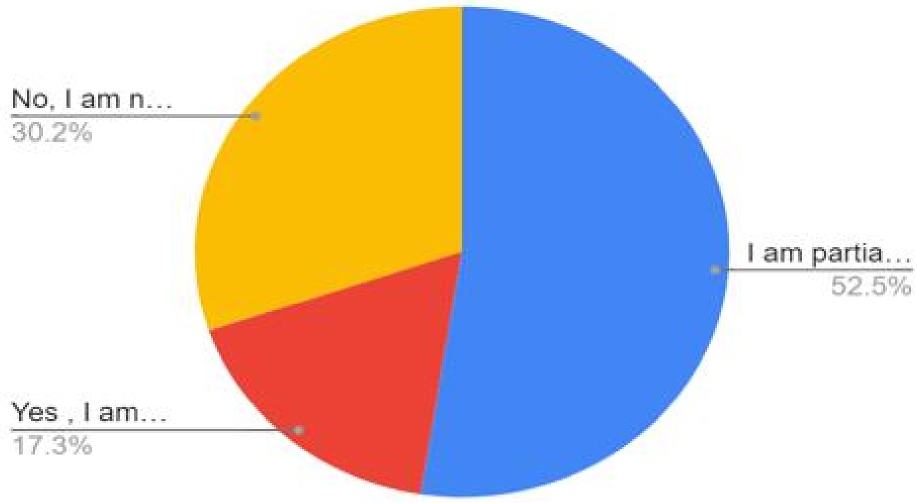
The various combinations of difficulties faced by people during investing in which lack of understanding stands out to be the main acumen, followed by inadequate time and terms and conditions.

The peak reason that would stop them from investing would be Risk appetite and insufficient knowledge They have also agreed that they don't have proper time and efforts to solicit and the fear of being Bankrupt, etc. were the other reasons to depreciate investing.



On a scale of 1-5 ,how much do you feel the peer...

In the survey carried out in this research, the respondents were asked to rate the effect of peer pressure on their investment decision on rating scale of 1- 5, with 1 being the least and 5 being the highest influence on their investment decisions. It was found that the mean for this data came up to 3 on a scale of 1 to 5. This shows a moderate amount of influence by the peer pressure on the investment decisions. This figure represents that the youth does not blindly get influenced by their peer's opinions.



When asked about the awareness of RBI schemes we got a majority of vote stating that more than half the seniority are partially aware of the schemes and 30.2% aren't aware at all .

Chi Square Test:
Null Hypothesis H0: 'Research' and 'Helpfulness' are independent of each other
Alternate Hypothesis H1: Research' and 'Helpfulness' are dependent of each other

```
          Yes Partially No
Yes        80        11 54
Partially   3         4  2
No          6         0 10
> MODEL1 = chisq.test(RESEARCH)
Warning message:
In chisq.test(RESEARCH) : Chi-squared approximation may be incorrect
> MODEL1

        Pearson's Chi-squared test

data:  RESEARCH
X-squared = 19.165, df = 4, p-value = 0.0007295
```

Since 0.00729 < 0.05 we reject Null Hypothesis at 5 % level of significance . Thus we conclude that 'Research' and 'Helpfulness' are dependent of each other .

A majority of people refer to YouTube videos while facing any difficulty, followed by Investment books, broker etc.

CONCLUSION AND RECOMMENDATIONS

The study undertaken has given greater insights about the investment behaviour of the youth in Mumbai. A clear observation was that most youth are not able to save due to a spend thrifty nature and a few who save are not able to have a substantial amount in hand after the month. The number of people who are able to convert their savings into investments are even lesser because most of the youth are not aware about how to go about investing. A major part of the population does not have knowledge which shows a clear opportunity for Investment Companies to tap into this segment and make the most out of it. Time frame of investment impacts the economy in a great way since higher the time period, the better it is for the growth of economy. A positive sign here is that the youth that invests is mainly into long term investments which helps them grow their money as well. Mutual funds have emerged as one of the most liked and used instruments among the youth. It is because of the constant awareness that has been created through advertisement campaigns. Equity shares are equally famous among the youth mainly due to a lot of exposure at the student level is given regarding the equities. Be it the seniors or youth, rate of return remains the priority parameter before investing. It is natural since investment is undertaken with a view to earn returns. An astonishing fact was that the youth also wants to be safe with their investments. Today, where the youth is seen as the powerhouse for the upcoming years and their natural behaviour of being risk takers and impulsive, "safety of investment" being one of the important parameters for them is something unexpected. Some interested youth are not able to invest due to several issues that they face. To get rid of it, the government can come up with more initiatives to make sure that youth is also getting involved in the investment industry. It will help the investors as well as the market condition due to inflow of capital. Financial literacy among the youth of Mumbai is lagging as compared to other cities of the world. One of the main reasons is lack of information in the academic syllabus of the students. Leave out science and art students, even commerce students are not well informed about financial instruments. The initiatives that government has taken so far are not really enough to generate awareness among the youth, the various initiatives 32 are good but mainly targeted at existing investors, nothing is being done greatly to bring in a new bunch of investors. Government should come up with new schemes to encourage the youth to invest, since most of the youth are partially or totally not aware. There should be Large scale advertisements of the various schemes so that the youth are aware of this schemes and it's benefits. Investment companies should come with more digital schemes for youth

LIMITATIONS :

- Responses collected are not guaranteed to be 100% true as respondents may not have been truthful while filling the questionnaire.
- The study is restricted to Mumbai students only, so the conclusions cannot be generalised.
- Non – probability sampling is used; hence the sample population may not be the true representative of the actual population.
- The study is cross-sectional in nature. Hence the relevance of the study is for a short period of time and may change in the future.

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LITERACY EXTERNALITY AND ITS RELEVANCE - A CASE STUDY OF BIHAR

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Abstract: Literate member in a society can be considered as a public good which is able to create positive externality to the illiterate members, by sharing the benefits of their literacy. Within a household with literate member(s), illiterate members will have access to information and they can complete the works that requires merely the literacy skill alone. This paper aims to study the relevance of literacy externality in measuring aggregate literacy rate in a more realistic way distinguished from the conventional crude measure of literacy like literacy rate, especially in those states like Bihar, where literacy rate is very low.

Key Words: Literacy externality, Effective literacy, Proximte illiterates, Isolated illiterates**.**

INTRODUCTION:

It is said that what gets measured gets noticed. The conventional indicator of measuring literacy is the literacy rate, indicating the proportion of adult population of a community who are literate and, therefore, the distribution of literates across households is ignored. This distribution is important since the illiterate people living in close proximity of literate person may be able to get benefit from the literate(s) in many directions. With an objective to take into account such positive externalities of literacy, Kaushik Basu and James E. Foster(1998) have suggested an alternative measure of literacy, called *effective literacy,* by introducing two different concepts of illiterates, namely proximate illiterate and isolated illiterate. To be specific, effective literacy takes into account the intra-household externality arises from the mere presence of a literate member within a family, thereby distinguishing the illiterate population into two broader sets, those living with at least one literate member within the family (termed as proximate illiterate) and those living even without that in their family (termed as isolated illiterate).S. Subramanian(2004) has further extended the concept to accommodate the possibility that the externality enjoyed by the proximate illiterates from the presence of a literate among them may positively depend on the proportion of literates within the household and, therefore, may vary from one family to another.
As is mentioned above, the distribution of literacy in the society gives rise to two kinds of scenarios. First, the entire population is distributed in only two types of families: families with all the members are literate and families with all the members are illiterates. Second, there are some families, if not all, having at least one literate member. Although the conventional measure of literacy indicates the proportion of adult literates in both the cases to be the same, the second case is capable to generate some positive externality among its illiterate members from the mere presence of some literate members among them. For instance, a literate person can read and write on behalf of illiterate members or illiterate members and can provide important informations which can further help in improving their standard of living.

In a country like India, literacy is the main component for social and economic growth.. Over the years, India has changed socially, economically, and globally. After the 2011 census, literacy rate India 2011 was found to be 74.04%. Though this seems like a very great accomplishment, it is still a matter of concern that still so many people in India cannot even read and write. The numbers of children who do not get education especially in the rural areas are still high. Though the government has made a law that every child under the age of 14 should get free education, the problem of illiteracy is still at large.

Now, if we consider female literacy rate in India, then it is lower than the male literacy rate as many parents do not allow their female children to go to schools. They get married off at a young age instead. Though child marriage has been lowered to very low levels, it still happens. Many families, especially in rural areas believe that having a male child is better than having a baby girl. So the male child gets all the benefits. Today, the female literacy levels according to the Literacy Rate 2011 census are 65.46% where the male literacy rate is over 80%. The literacy rate in India has always been a matter of concern but many NGO initiatives and government ads, campaigns and programs are being held to spread awareness amongst people about the importance of literacy. Also the government has made strict rules for female equality rights. India literacy rate has shown significant rise in the past 10 years.

The lowest literacy rate in India is seen in the state of Bihar. Bihar has a total literacy rate of 63.82%. Overall Males and Female literacy rate is 73.39% and 53.33% respectively. Total Rural literacy rate in Bihar is 43.9%. In rural areas of Bihar, Males and Female literacy rate is 57.1 and 29.6 respectively. Total Urban literacy rate in Bihar is 71.9. In urban areas of Bihar, Males and Female literacy rate is 79.9 and 62.6 respectively. Patna has highest Literacy Rate of 63.82% followed by Rohtas (62.36%) and Munger (60.11%). Kishanganj has lowest Literacy Rate of 31.02% followed by Araria(34.94%) & Katihar (35.29%). Even though males have higher literacy levels is most parts of India, male literacy level in Bihar is 73.39% which is less than overall literacy level of India (74.04%). There are many reasons for why Bihar has lowest literacy rate. Most important reason is poverty and rising population. Illiterate parents and parental attitudes towards education is ignorant which stops children to get proper education. Also there is very high gap between male and female literacy rate in Bihar.

LITERATURE REVIEW:

Kaushik Basu and James E. Foster (1998) in their paper "On Measuring Literacy" advanced the new measure of literacy, i.e., effective literacy rate. Basu and Foster present a new approach to evaluating the level of effective literacy in a region or country, one that takes into account the presence in a household of a literate person. They characterize the approach and give an empirical illustration of its use. They contend that literate household members generate a positive externality-a kind of public good-for illiterate members. They believe their new measures will be superior to R in predicting or explaining other achievements that depend on literacy. **Subramanian (2004)** in his paper "Measuring literacy: some extensions of the Basu-Foster framework" extends the Basu-Foster idea in his direction. Sabramanian assumes that the magnitude of such externality rather positively depends on the proportion of literates within a family. Instead of assuming a literate member as a public good within the family, he brings the concept of rivalry in extracting externality from the literate member(s) by the illiterates in the family. If there are too many illiterates in the family, each will get less externality benefit from the literate(s). Similarly if there is relatively more number of literates within the family, they can provide more time and effort for percolating benefits to the illiterates and, as an obvious consequence, illiterates in such a family will be able to extract more externality benefit. **Paola Maria Valenti** in his article "Should We Be Concerned About the Distribution of Literacy Across Households? An Axiomatic Investigation (2001)" proposed a literacy measure that takes into account the externality generated by the presence of literates in the household. He explained that such externality is increasing in the number of literates in the household, and has characteristics of rivalry in consumption, and therefore is a function of the distribution of literates and illiterates in the household. **Diganta Mukherjee and Manash Ranjan Gupta (2003)** in their article "Measures Of Effective Literacy: A Theoretical Note", discussed the measurement issue of intra-household externality of literacy They considered the determinants of externality that are several attributes of the members of the household such as age, sex, level of education etc. **L. Benham, (1974)** finds evidence of the husband's earnings being positively correlated with the wife's schooling. But he did not deal with the potential selective sorting that may result from marriage, thus it remains unclear whether that found effect results directly from educational externality or is the outcome of marital sorting. **Bryan Maddox & Lucio Esposito** in their paper "*Literacy inequalities, mediation And the public good: a case study of physical proximity and social distance in Nepal*" (2012) explains the sociological concept of social distance to examine how social stratification impacts the distribution of literacy and how it is shared within and across caste-based groups. . He observed significant inequalities of educational achievement and literacy. He used the term 'literacy mediation' for the externality generated by literate people. His study explains that literacy mediation is a widely spread phenomena and it is not restricted to the people who have lowest levels of education and literacy. His study also suggests that apparently women receive more literacy mediation than men. In his paper he has only stated that people receive more literacy mediation from the same caste than outside the caste. But he failed to explain the reason behind this, whether it is due to the proximity with the literate members or some other factors.

Research Objectives / Aims:

- To estimate district-wise effective literacy rate of Bihar.
- To examine the impact of literacy externality on aggregate literacy rate.

RESEARCH METHOD:

Basu and Foster (1998) first developed a literacy measure, called *effective literacy rate,* which took into account the externality aspects of literacy. Later various other versions of such new measures of literacy emerged. The common element in these new measures is that whereas in calculating the standard literacy rate a literate is assigned a score of '1' and an illiterate given a score of '0', in the new measures there are intermediate scores as well to account for proximate literacy. Thus, proximate literates are assigned values between 0 and 1 to account for the fact that these are neither fully literate nor totally illiterate. This value is assigned depending on one's assessment of the value that should be given to the externality of literacy on the proximate literate. One could, for example, assume that a literate person transfers 50% of the benefit of her literacy to the illiterates in her house. In such a case, if there is at least one household member who is literate, a value of '0.5' would be assigned to each of the proximate literates in the household

So, Effective literacy rate, i.e., E.L.R., can be calculated by using the given formula given by *Basu and Foster (1998)*:

$$E.L.R. = R + \alpha P;$$

Where, R is traditional literacy rate, P is proximate illiteracy rate and α is a measure of externality of literacy. As mentioned earlier the value of α lies between 0 and 1. When α =0, there is no isolated illiteracy and the value of e-literacy is the same as that for traditional literacy.

The working hypothesis for the estimation of E.L.R. would be:

$$H_o = E.L.R. \leq R$$
$$H_1 = E.L.R. > R$$

This hypothesis is derived from the assumption that E.L.R. which includes proximate illiterate is higher than the traditional measure of literacy, i.e., R. If the estimation result supports our assumption then we will reject our null hypothesis, i.e., Ho and our study will be significant.

Data source for estimation- We have estimated district wise E.L.R. for Bihar using recent data and our data source is secondary data which has been collected from Census 2011 of India. We have taken district wise data for the total population, total number of households with no literate person and total number of literates.

Later on, we have estimated district-wise gender-sensitive E.L.R. by calculating effective literacy rate for both males and females of Bihar. This estimation assumes that female generates more externality than male members of the household. Basu and Foster(1998) also indicated that their measure of effective literacy can easily be extended incorporating gender-sensitive effective literacy measure assuming that the literate females generate stronger externality than males, keeping in mind the usual stronger commitment towards family and social bonding by the female than male. So one can easily make a distinction between m-proximate illiterate and f-proximate illiterate. Since females generates stronger externality, $0 < \alpha_m < \alpha_f < 1$. Therefore the gender-adjusted measure of effective literacy can be denoted as

$$L^{**} = R + \alpha_m P_m + \alpha_f P_f$$

Where P_m and P_f are the proportion of proximate male and female illiterates respectively.

DISCUSSION AND ANALYSIS: For the estimation of effective literacy rate of all the districts of Bihar we have calculated literacy rate, proximate illiteracy and isolated illiteracy by taking recent census 2011 of India.Basu-Foster measure of E.L.R. has been used in the calculation. Literacy rate OF Bihar according to traditional literacy measurement is 63.82% and when we calculate the E.L.R. it increased to 67.44%. This result supports our hypothesis that *E.L.R. >R* ,hence we can reject the null hypothesis. Here value of externality α has been arbitrarily taken as 0.25. When value of α is increased to 0.75 E.L.R. increases to 74.69%. This result suggests that when externality received by illiterate member increases E.L.R. also increases. Same trend can be observed when E.L.R. of all the districts of Bihar is calculated.

Table (i): Estimated Effective Literacy Rates of Some of the Districts Of Bihar

Area	Literacy Rate, R	Effective L.R.(A=0.25)	Effective L.R.(A=0.75)
Bihar	63.821541	67.4458804	74.6945594
Rohtas	75.588145	80.34976368	89.873002
Patna	72.474613	78.94202724	91.8768553
Munger	73.298899	75.84456402	80.9358931
Gaya	66.346814	73.34967041	87.3553828
Darbhanga	58.262969	61.1943139	67.0570035
Sheohar	56.003699	56.43253157	57.2901962
Purnia	52.492541	54.9864561	59.9742863

Source: Compiled by the author.

Above table shows the estimated result of literacy rate and effective literacy rate of some districts of Bihar. Rohtas has the highest literacy rate (75.5%) and Purnia has the lowest literacy rate (52.5%) among all the districts of Bihar. Calculated effective literacy rate of both the districts are 80% and 54.9% respectively, which are apparently greater than the traditional literacy rate.When the value of externality coefficient increases from 0.25 to 0.75, then the E.L.R. of both districts increases to 89.8% and 59.9%.

6. RESULTS / FINDINGS:

Table (ii): Externality-adjusted effective Literacy Rates of some of the Districts Of Bihar

Area	Effective L.R.(A=0.25)	E.L.R.* = E.L.R.(1-I)
Bihar	67.4458804	52.82287
Rohtas	80.34976368	76.03869
Patna	78.94202724	77.63496
Munger	75.84456402	63.31622
Gaya	73.34967041	69.21146
Darbhanga	61.1943139	42.82889
Sheohar	56.43253157	32.57231
Purnia	54.9864561	34.34905

Source: Compiled by the author.

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A simple empirical illustration can be made employing the same data set on literacy presents district-wise estimates of the quantities E.L.R. and E.L.R*, where E.L.R* is the externality-adjusted effective literacy rate **(Subramanian,2004)** . As we can be seen from the table, E.L.R* is nearly 14 percentage points behind EL.R. for Bihar as a whole: an aggregate literacy rate of 63% plummets to a sadly undistinguished 52% when literacy is measured by the 'externality-adjusted'rate E.L.R*. The adjustment is less severe for the 'high E.L.R' districts than it is for the 'low E.L.R' districts: this is not surprising, since R and I are in general negatively correlated. The outcome of this fact is that inter-district disparities in literacy attainment are likely to be more pronounced when literacy is measured by E.L.R* than when it is measured by E.L.R. This is indeed borne out by a simple computation: the squared coefficient of variation for the E.L.R*series, at0.236021 is well over twice as high as it is for the E.L.R series, at 0.109134.

Table (iii): Ranking of Districts according to new measure of literacy and the traditional measure of literacy

Effective Literacy Rate (α=0.25)	Effective Literacy Rate (α=0.75)	Traditional Literacy Rate
Rohtas (1)	**Rohtas (2)**	**Rohtas (1)**
Patna (2)	**Patna (1)**	**Patna (5)**
Munger (6)	**Munger(12)**	**Munger (2)**
Gaya (10)	**Gaya(4)**	**Gaya (15)**
Darbhanga (30)	**Darbhanga (30)**	**Darbhanga (28)**
Sheohar (35)	**Sheohar (38)**	**Sheohar (32)**
Purnia (38)	**Purnia (36)**	**Purnia (38)**

Above table reveals that district-wise variation in P is sufficient to leads to a re-ranking of states using E.L.R. instead of L.R. Ranking of districts changes when effective literacy rate is calculated. Some districts like Munger, Darbhanga and Sheohar goes below whereas districts like Patna and Gaya goes above in ranking of E.L.R..Rohtas's ranking remains same sincethe percentage of the proximate illiterate (namely P/ (P + I)) is certainly higher in the most literate district. But the lower absolute number of illiterates restricts the magnitude of P and hence the potential importance of the intra-household externality in evaluating literacy in high literacy regions. In this sense, our effective literacy approach may prove to be less important for assessments in such districts. female is greater than that of male.(Basu-Foster 1998). So in the calculation of gender-adjusted effective literacy α for male is taken as 0.25 and 0.45 for female.

Table(iv): Comparison of R, E.L.R. & Gender-adjusted E.L.R.

Area	Literacy Rate, R	Effective L.R.(A=0.25)	Gender-adjusted E.L.R.
Bihar	63.821541	67.4458804	74.9
Rohtas	75.588145	80.34976368	90.76
Patna	72.474613	78.94202724	92.45
Munger	73.298899	75.84456402	81.11
Gaya	66.346814	73.34967041	87.85
Darbhanga	58.262969	61.1943139	67.18
Sheohar	56.003699	56.43253157	57.28
Purnia	52.492541	54.9864561	59.90

From this table we can compare the results of effective literacy rates. Here it is evident that districts like Rohtas, Munger and Patna with higher female population have the higher effective literacy rates as compared to Sheohar and Purnia where female population is low. The resulting index is a measure of overall achievement which, unlike R, is sensitive to the distribution of these achievements across the two genders. Even when there is no particular concern about gender inequality per se, if it so happens that females are more effective than males in generating literacy externalities in the household, then a general concern for greater effective literacy could translate into a specific concern for greater female

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literacy. Indeed, there are many studies which suggest the presence of a gender bias in the technology for creating externalities in the household, and hence that the set of functionings available to an illiterate person by virtue of having access to a literate female is larger than the set available when the only literate in the household is male.[2] The measure of effective literacy can be modified to take this into account.

7. CONCLUSION:

From the above analysis, it is clear that by taking into account the proximate and isolated aspects of literacy, the e-literacy measure can provide important information which otherwise may remain hidden under the standard literacy measure. Such information has important implications for devising effective and efficient policies for tackling illiteracy in resource-constrained state like Bihar.

Further refinements to the measure could be effected by bringing in inter-household aspects of the externality of literacy. For example, households of isolated illiterates located can benefit from a literate community, neighborhood or workplace in which they exist or move. These households would be in a better position than isolated households which are part of communities, neighborhoods or work environments where literacy levels are very low.

The traditional measure of literacy, the standard literacy rate, does not account for isolated illiteracy. It is determined simply by taking the ratio of the number of literates to the total population. So one reason why the problem of isolated illiteracy has remained unnoticed and stayed outside the range of public policy is the inability of the standard literacy rate to measure it.

6. Recommendation / Suggestions (if any):

These isolated illiterates are in greater need of attention from policy makers. Not only are they more vulnerable and deprived of their freedoms than the proximate literates, but can generate negative externalities on each other and on those outside their household. Moreover, given limited budgets available for education and literacy in states like Bihar, it makes more sense to target literacy policies at isolated illiterates so that by making one person literate in a household of isolated illiterates, the rest of the household could be turned into proximate literates. Overall effective literacy at national or sub-national levels could therefore be enhanced more rapidly within the same resources.

However, such externality is not independent of the other attributes of the literate members of the households, like age, gender, caste, level of education of the already literates, etc. Practically each of them may affect the externality of literacy. Incorporating one or more of them into the measurement of effective literacy will improve such new measure substantially and will be of even greater help in designing educational programmes and other major illiteracy-eradication policies.

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AN ACTION RESEARCH SURVEY ON ATTITUDE OF HIGHER SECONDARY STUDENTS TOWARDS DASS-21 BASED ON GENDER

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Abstract: Depression and anxiety are the extensively acknowledged mental issues affecting people of all ages. It is particularly important to examine the burden and associated risk factors of these common mental disorders to fight them. The Depression Anxiety Stress Scale-21 (DASS-21) is an instrument in the assessment of mental health status which has been used as a questionnaire to document the responses. Therefore, this study was undertaken with the motto to estimate the prevalence and identify factors related with depression, anxiety, and stress among Higher Secondary School Certificate students in the city of Mumbai, India. Moreover, the study also aims to find their way towards the DASS-21 Scale. A sample size of 60 students from the educational sector was taken including both male and female students.

Key Words: Depression, Anxiety, Stress, DASS-21, Higher Secondary students, Mumbai.

INTRODUCTION:

In order to prevent mental disorders and its hazards, the World Health Organisation has declared mental health as fundamental to human health. Still physical health is given primary and more important than mental health. Specifically, depression, anxiety and stress are reasoned crucial indicators for mental health which, if untreated, can have a negative impact on individuals (Al-Naggar R.A., 2012). According to the American Psychological Association, anxiety and depression are both emotional responses giving rise to a very similar set of symptoms, including difficulty sleeping, fatigue, muscle tension and irritability. Whereas stress is usually triggered by an external factor and can be short-term, anxiety at times prevail , even in the absence of a stressor. Everyone experiences sadness at times. But depression is something that's beyond sadness. Depression is extreme despair that persists more than days. It interferes with the activities of daily life, hinders daily routine and causes physical symptoms such as weight loss or gain, sleeping pattern altercations, or lack of energy. Most mental health problems unfold by early adulthood, yet young adults rarely get any support for their mental health (Sarokhani D., 2013). College students are at risk of experiencing stress, anxiety and depression, which cause psychological distress and may impact on their academic performance (Tosevski D.L., 2010). The college years are an evolutionally crucial period when students make the transition from late adolescence to emerging adulthood (Arnett, 2000). Epidemiological studies present that 12–50% of college students meet criteria for one or more common mental disorders (Blanco et al., 2008, Hunt and Eisenberg, 2010, Verger et al., 2010). Causes of stress during college life include academic pressure leading from factors such as exams and workload, lack of leisure time, competition, worries about not meeting parents' expectations, establishing new personal relationships and adapting to a new place altogether (N., 2013).students react in different ways. For some students its the abrupt change, for class 12th students its the crucial year of performance, evaluation and eventually hitting out at making at the top of the list. From Making it to pass the exam ,to topping the exam are all contributors of stress and anxiety to students. Another stress is struggle in achieving social intimacy, fear of academic failure is a definite stressor but in class 12th the fear is high as majority of the students shape their career as per their success score. Kumaraswamy(1998) discovered that stress was on top at the second year among the Medical science students of not becoming the doctor which in turns make the students anxious and depressed. The 21-item depression anxiety stress scale (DASS-21), developed by Lovibond and Lovibond (1995a), is a self-report measure that is reported to assess psychological distress along three dimensions: depression, anxiety, and stress. Items in the scale were selected by the authors to represent the three subscales of the DASS.The DASS-21 has been widely used in various studies to check the symptoms of psychological distress among both clinical and non-clinical samples (e.g., Antony et al., 1998, Brown et al., 1997, Henry and Crawford, 2005).

LITERATURE REVIEW:

Numerous studies have discovered that students' performance in academy, college and university are served by symptoms of depression (Stark and Brookman, 1994), anxiety (Anson et al., 1984) and stress (Dusselier et al., 2005) which may vitiate their academic achievement (Stewart-Brown et al., 2000),giving rise to deterioration in connections (Ali et al., 2002), marital problems and affecting unborn employment (Eisenberg et al., 2007). Bayram and Bilgel (2008) diagnosed high frequency of depression, anxiety and stress, 27.1%, 47.1% and 27.0%, independently, among a group of Turkish university scholars. Females are placarded to have advanced situations of depression, anxiety and stress which can be determinable to biopsychosocial factors similar as social places and physiological status (Bangasser et al., 2010, Dyrbye et al., 2006, Zaid et al., 2007). No studies have shown any particular race to be susceptible to depression, anxiety and stress. Still, the minority ethnic group may incline to these cerebral distress (Dyrbye et al., 2007). For Scholars belonging from a low socioeconomic background, the added element of fiscal vulnerability further aggravates depression, anxiety and stress (Andrews and Wilding, 2004). Interestingly, a previous study conducted on students in the United States diagnosed the students to screen positive for anxiety disorders among those with current financial struggles (Eisenberg et al., 2007). Family functioning does play a significant part in determining the emotional health status among children. Wadsworth and Berger (2006) delved that children from families facing disagreements such as divorce or nuclear and joint family conflicts were associated with apprehensive behavior and other psychological distress. College students who originate from rural areas were blazoned to score higher in depression, anxiety and stress scales compared to students with an urban background (Bayram and Bilgel, 2008). This can be illustrated by a profitable situation where students with rural backgrounds reported poorer family economic situations. Christie et al. (2002) scrutinized that students who lived in rented lodgings and poor quality housing were more likely affected with regard to psychological well-being.

RESEARCH OBJECTIVES / AIMS:

- The current study aims to study the prevailing level of depression, anxiety and stress, among Higher Secondary School students of Mumbai, India.

RESEARCH METHOD:

The present research study adopted a quantitative survey research methodology in order to collect data. Assessing Depression, Anxiety and Stress (DASS-21) developed by Lovibond, S.H. & Lovibond, P.F. (1995), was used and convenient sampling technique was adopted for the present action research. Table 1.1 below represents the sample size of the present study and Figure 1.1 represents a bar chart depicting the sample size diagrammatically.

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Table 1.1: Sample Size for the Present Study based on Gender

	N	Percentage	Total
Males	30	50%	
Females	30	50%	60

Total 60 students, out of which 30 were males and 30 were females, that is 50% were from both genders.

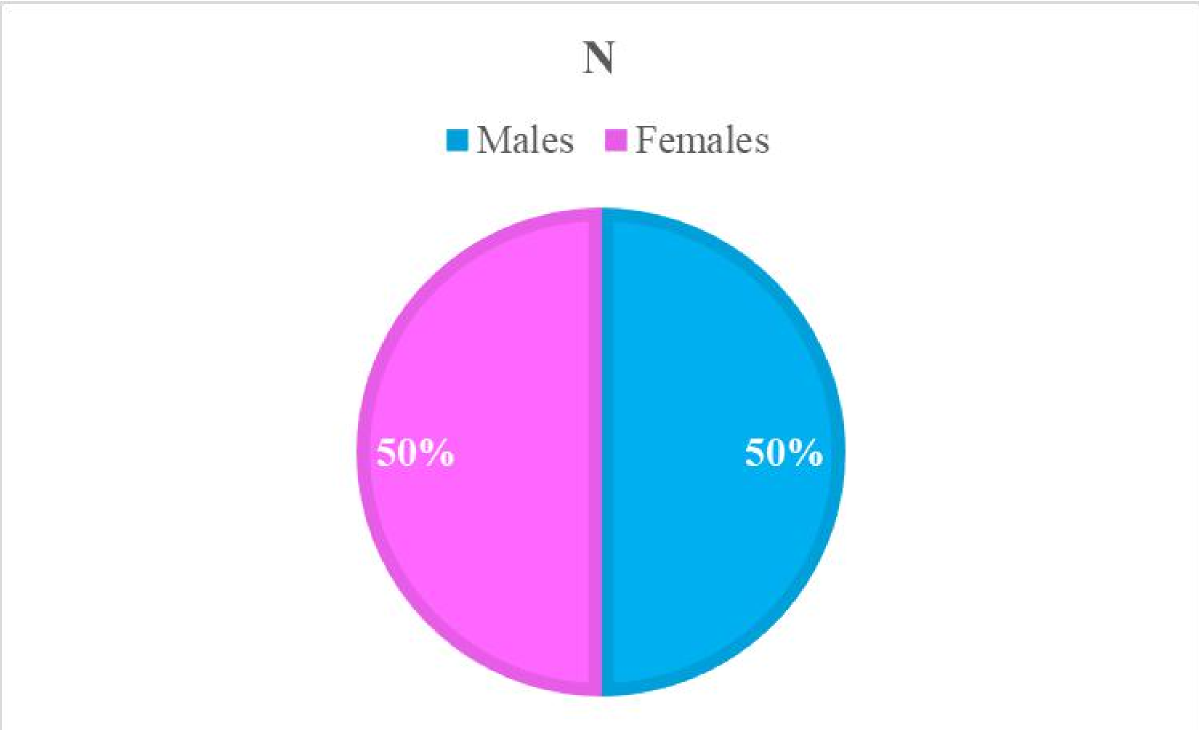

Figure 1.1: Pie Chart Representing Sample Size for the Present Study

SCOPE AND DELIMITATION OF THE STUDY

The study is restricted to only Junior College Students , thus not including the DASS-21 scores levels of School Students and Degree College Students. Geographically it is limited to Mumbai metropolitan . It is also restricted to English Medium students. As the present research is an action research paper, a small sample size as per convenience was considered.

HYPOTHESIS TESTING & INTERPRETATIONS:

Following Null Hypothesis was framed for the present study:

- There's no significant difference among the scores of male and female Higher Secondary Students towards DASS-21 scores.

Table 1.2: DASS-21 Range Table

	Depression	Anxiety	Stress
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely Severe	28+	20+	34+

The above table represents the standardized Dass-21 range table as mentioned in the tool.

A collection of three self-report measures known as the Depression, Anxiety and Stress Scale - 21 Items (DASS-21) is used to assess the emotional states of depression, anxiety, and stress.

The three DASS-21 scales each have seven items that are broken down into Depression ,Anxiety and Stress each. The scores for the relevant questions are added up to determine the scores for depression, anxiety, and stress.

Table 1.3: Observed DASS-21 Scores

	Depression	Anxiety	Stress
All Students	9.6	8.5	9.67
	Mild	*Mild*	*Normal*
Male	5.8	5	5.4
	Normal	*Normal*	*Normal*
Females	13.4	12	13.93
	Moderate	*Moderate*	*Normal*

The scores from the study revealed interesting findings regarding the levels of depression, anxiety, and stress in male and female students.

Overall, HSC students experienced mild levels of depression and anxiety, while their stress levels were within a normal range. However, when examining the scores separately for male and female students, distinct patterns emerged. Male students showed scores within the 'Normal' range for all three measures: depression, anxiety, and stress. Whereas, female students exhibited a range of 'Moderate' for depression and anxiety, while their stress levels remained within the 'Normal' range. This indicates that, on average, male students did not exhibit elevated levels of any of these psychological states compared to their female counterparts as far as depression and anxiety was considered.

DISCUSSION AND CONCLUSION:

Mental health is a condition of mental wellness that helps individuals to manage life's stressors, realise their potential, study and work effectively, and give back to their communities. It is a crucial element of wellness and health that supports both our individual and group capacity to decide, form connections, and influence the world we live in. The present study reports that all students suffer mild anxiety ,stress and depression on account of academic stress and possibly to outshine among others. It also reports that females suffer greater levels of anxiety and depression than their male counterparts. According to researchers, there might be a number of causes for why girls experience depression and anxiety at a higher rate than boys. This is in agreement with the studies of Enrique Ramón-Arbués at el (2020) and Kessler R.C. at el 2015, which also reported a higher prevalence of anxiety, stress and depression among women. The results of the study imply that there are gender-related differences in the experience of mental health issues among students. Possible factors contributing to these gender differences could include hormonal fluctuations, social pressures, interpersonal relationships, and individual coping mechanisms. Being Higher Secondary School student itself is a stress to appear for Board exams and clear out the exam with flying colors. Sharon Mitchell, Susan Abbott (1987) reported symptoms of depression and anxiety on 159 secondary school students from Kenya. It was scrutinized that female students reported more depression symptoms than males. Moreover it has been perceived that students are not willing to realize anxiety and also their struggles remain unnoticed, leading to further complications that are dangerous (Grills Taquechel et al., 2010). It has been perceived that the mean scores of depression, anxiety, and stress all educated downcast trends during council, which may be attributable to issues of adaptation when prospective scholars first enter university, which latterly ameliorate as scholars learn to manage better (Puthran etal., 2016; Liu, Ping & Gao, 2019). Still, there was an intimidating high degree of continuity for scholars who have suffered from depressive diseases as well as anxiety problems. This may be due to a lack of perceived need for help, or a lack of services used(Zivin et al., 2009). As for the further deterioration of manly scholars ' depression problems, it may be incompletely attributed to their negative station towards emotional openness, which meant that they might be reticent to use the internal services during council(Komiya et al., 2000; Rith- Najarian etal., 2019). Thus, sodalities should pay special attention to many scholars ' internal countries and encourage them to express their feelings and seek professional help if demanded.

Though in certain studies it has been reported that exam anxiety and stress is higher in boys than their female counterparts, the results obtained in current study are contradictory (Revina Ann Mary et al. (2014) .A study of 400 students in Kolkata reported high and very high levels of academic stress and exam anxiety among Higher Secondary students(Sibnath Deb, Esben Strodi, Jiandong Sun (2014)) When researchers asked some of the students regarding why they feel anxious being in Higher secondary, students gave various reasons for it. Some answered that due to lack of preparation. Some students had disturbance in their sleep pattern due to stress and anxiety so they are unable to perform well in exams. Females described that their reason for being anxious is that they feel fearful of not getting enough good marks and not being able to make their parents feel proud. The results of the study imply that there are gender-related differences in the experience of mental health issues among students. Possible factors contributing to these gender differences could include hormonal fluctuations, social pressures, interpersonal relationships, and individual coping mechanisms. Masculinity may be a defensive factor for anxiety development, while femininity can be a threat factor (Farhane-Medina NZ, 2022).

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Green Marketing Strategies: Enhancing Corporate Social Responsibility in the 21st Century.

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Abstract:
Purpose: *The study seeks to identify the rationale of corporates behind the up taking of green marketing measures in their operations, product design, development, distribution, promotion, and uncovers the benefits of these efforts to companies, society in general and the environment. The paper also seeps to explain various challenges and opportunities in adopting such measures.*
Design/ Methodology/ Approach: *The study is based on descriptive research design to describe the real-life examples of selected companies as a case study. The research design is appropriate where we are looking into a problem with the purpose of answering what, how and why regarding a situation or a phenomenon which is the case in the present study.*
Findings: *The paper provides examples of companies that have significantly invested in green marketing and have done remarkable efforts in the field of green marketing. The study reveals that there are various reasons of companies adopting green marketing efforts- consumers are keen to invest in green products even if the price is slightly higher than traditional products, to mitigate the harmful effects of their operations on society and ecology, companies by engaging in such efforts demonstrate that they are conscious about their impact on society and environment and that they are responsible corporate citizens.*
Limitations: *The study is based on secondary data collected from the company's websites and annual reports, magazines, published papers and government websites. No primary data is collected for the purpose of the study.*
Practical Implications: *Green marketing, also known as sustainable marketing or eco-marketing, has emerged as a crucial business approach in the 21st century due to growing concerns about environmental degradation and climate change. Businesses have integrated eco-friendly initiatives into their marketing strategies to appeal to this eco-conscious consumer segment.*
Originality/ value: *The paper contributes to the existing literature by providing real life examples and green marketing efforts of various leading companies which can be replicated by other companies by integrating green marketing in their CSR vision and mission.*

Key Words: *Green Marketing, eco- friendly products, Sustainability, Social Responsibility*

INTRODUCTION:

This paper has been designed to discuss the concept of green marketing strategies, and how it could be used as an effective tool for CSR to gain the competitive advantage. The concept of green marketing revolves around integrating environmental considerations into various aspects of marketing, including product development, packaging, promotion, and distribution. Green marketing recognizes the growing consumer demand for environmentally friendly products and the need for businesses to adopt sustainable practices to minimize their ecological impact. The primary goals of green marketing are to promote products that are better for the environment, address consumer concerns about sustainability, and contribute to long-term environmental conservation. Today's consumers are more environments conscious and discerning than ever about the products and services they buy. This holds certainly true when it comes to evaluating the environmental impact and sustainable practices of the brands they support. That's why many of the world's most valuable and successful companies are pursuing green marketing initiatives.

Green marketing:

Green marketing is the practice of promoting products or services that are environmentally friendly or have a positive impact on the planet. Green marketing, also known as environmental marketing or sustainable marketing, refers to the practice of promoting products and services that have minimal negative impact on the environment. The primary goal of green marketing is to align business practices with ecological and social responsibility, while also meeting consumer demand for environmentally friendly products. This concept has gained prominence as environmental awareness and concerns about sustainability have grown. It involves incorporating sustainability principles into various aspects of marketing, such as product design, packaging, messaging, and promotion. Some green marketing strategies include:

- Creating eco-friendly products
- Using eco-friendly product packaging made from recycled materials
- Reducing greenhouse gas emissions from production processes
- Adopting sustainable business practices
- Marketing efforts communicating a product's environmental benefits
- Investing profits in renewable energy or carbon offset efforts

Green marketing strategy:

Beyond making an environmentally friendly product, business owners can implement other tactics to create a business strategy that capitalizes on the benefits of green marketing. The following can all be part of a green marketing strategy:

- Using eco-friendly paper and inks for print marketing materials
- Skipping printed materials altogether in favor of electronic marketing
- Adopting responsible waste disposal practices
- Using eco-friendly or recycled materials for product packaging
- Seeking official certifications for sustainability and
- Using efficient packing and shipping methods
- Using renewable energy and sustainable agriculture practices
- Taking steps to offset carbon emissions via investment

Green companies take a long view of their businesses, prioritizing the well-being of the planet and future generations over short-term profits.

Greenwashing:

Some brands and marketers have tried to capitalize on consumer demand for environmental consciousness by taking a eco-friendly marketing approach to products or

services that are not necessarily eco- friendly or sustainable. This practice is known as "greenwashing."
Some popular examples of greenwashing include:

- Adopting unregulated terms like "green" or "natural" to describe products
- Using the environmental symbols like leaves or trees on packaging or color green
- Promoting misleading statistics or studies to support an eco-marketing message
- Portraying cost-cutting measures as motivated by ecological sustainability

Using green washing to falsely market products as environmentally conscious is not only red herring to consumers: it can also be dangerous to a company's health. For example, following its 2015 scandal involving falsified emissions reports for its vehicle, Volkswagen's stock price tumbled more than 50 percent—and took six years to completely recover.

Corporate Social Responsibility (CSR) and Sustainability: A Nexus of Positive Impact
In a world grappling with complex environmental, social, and economic challenges, the concepts of Corporate Social Responsibility (CSR) and sustainability have emerged as powerful drivers of positive change. Together, they form a nexus that propels businesses toward responsible practices, ethical conduct, and a long-term perspective. This essay explores the interconnectedness of CSR and sustainability, their significance in shaping the business landscape, and their potential to foster a more equitable and sustainable global society.

Defining CSR and Sustainability:

CSR refers to a company's commitment to operating ethically, contributing to social well-being, and engaging in activities that benefit society beyond profit-making. It encompasses initiatives related to philanthropy, community development, employee welfare, and environmental conservation. Sustainability, on the other hand, refers to the capacity to endure over time while maintaining balance and harmony with the environment, society, and economic factors. It involves responsible resource management and minimizing negative impacts to ensure a healthy planet for future generations.

Interconnectedness of Green Marketing, CSR, Sustainably and its Significance:

Adopting green marketing is a powerful way for a firm to demonstrate its commitment to being socially responsible and practicing sustainability. Green marketing goes beyond traditional marketing practices by integrating environmental considerations into the company's core values, operations, and communication strategies. Green marketing involves offering products and services that have a reduced environmental impact. By developing eco-friendly and sustainable offerings, a firm demonstrates its commitment to practicing sustainability and catering to socially responsible consumer preferences. Green marketing encourages transparency about a company's environmental practices and their impact. Firms that adopt green marketing strategies are more likely to be open about their supply chain, sourcing methods, production processes, and waste management practices. Green marketing encourages companies to minimize their carbon footprint by using renewable energy sources, optimizing transportation logistics, and reducing energy consumption. This demonstrates a firm's proactive stance toward mitigating climate change and promoting sustainability. Green marketing drives firms to source materials and products responsibly. By ensuring that suppliers adhere to ethical and sustainable practices, a company contributes to social responsibility by supporting fair labor practices and sustainable resource management.

Green marketing often includes educational campaigns that raise awareness about environmental issues among consumers. By educating consumers about sustainable practices, a firm encourages positive behavior change and fosters a more environmentally conscious society. Companies adopting green marketing are more likely to engage with local communities on environmental initiatives. This could involve clean-up campaigns, tree planting, or supporting local conservation efforts, enhancing the firm's social involvement. Green marketing encourages companies to consider the long-term impact of their actions on the environment and society. This long-term perspective is integral to sustainability and helps firms plan for a more sustainable future. Firms that embrace green marketing often invest in innovative solutions that address environmental challenges. These innovations can extend beyond products to include processes and technologies that promote sustainability. Green marketing often involves adhering to environmental regulations and standards. By complying with these regulations, a firm ensures that it operates within legal boundaries while contributing to sustainability. Adopting green marketing can enhance a firm's reputation as an environmentally conscious and socially responsible entity. Such a positive image attracts environmentally conscious consumers and stakeholders, contributing to the firm's overall brand value.

In essence, adopting green marketing is a strategic approach that goes beyond superficial claims of environmental friendliness. It signifies a firm's genuine commitment to social responsibility and sustainability, making a positive impact on the environment, society, and the company's bottom line. By aligning business practices with environmental and social values, a firm can contribute to a more sustainable and equitable future while building a strong and trustworthy brand.

LITERATURE REVIEW:

Vijai, C., & Anitha, P. (2020). In this paper an attempt is made to describe the concept of green marketing including its definition, scope and 4p’s of green marketing. Then an effort is made to describe the importance of green marketing.

Bashir, M., Yousaf, A., & Wani, A. A. (2016). This paper is based on a conceptual model that defines the proactive and reactive strategy of companies to address environmental issues through green marketing efforts. It also explains how diffusion of innovation theory can be related to the green marketing to address various environmental concerns and how green marketing can be used as a competitive strength. The paper also provides some of the managerial implications which can be used effectively.

Mishra, P., & Sharma, P. (2014). This paper sheds light on the concept of green marketing and describes how companies have increased the rate of targeting consumers that are environmentally friendly and discusses challenges and opportunities companies face in their way of green marketing. The paper then describes the future of green marketing in Indian context.

Mishra, P., & Sharma, P. (2010). The paper describes the significance of companies going green in Indian perspective. The paper also discusses how the companies have targeted consumers those who are environmentally concerned and how to address the needs and demands of those consumers. The paper also discusses the present trends of eco marketing in India and explain the reason why companies are up taking it and future of green marketing and concludes that green marketing is something that will continuously grow in both practice and demand.

OBJECTIVE OF THE STUDY:

1. To understand the relationship between green marketing, CSR, and Sustainability.
2. To understand the initiatives taken by the firms in the area of green marketing.

TATA MOTORS:

Sustainability is at the center of business strategy at Tata Motors. Stakeholders of the Tata Motors have increased focus towards business practices which are sustainable. As part of the TATA Group TML is committed to significantly reducing its GHG emissions to ultimately achieve Net zero emissions. TML has set a target to achieve a Net Zero GHG Emissions by 2045. A robust product strategy has been adopted by TML for transitioning to a greener portfolio. As part of their green strategy the company has developed vehicles which are energy efficient are based on electronics and CNG. Additionally, the TML has developed a roadmap for transitioning to 100% renewable electricity, across our operations by the end of the decadent's Lucknow plant became the first-ever Tata Motors plant to achieve 'Water Positive' rating under the CII GreenCo guidelines. Pant Nagar plant was certified 'Water Neutral' under the CII-GreenCo guidelines.

While the TMC is working aggressively to scale up electronic vehicle penetration and exploring options of using cleaner emission-based vehicles, there are challenges to meet net zero emissions for the commercial vehicles business especially due to the presence of higher tonnage vehicles.

MARUTI SUZUKI INDIA LIMITED:

The Company utilizes state of the art facilities, and the manufacturing process of the company is highly efficient and produce reliable and quality products. The company creates value through the increased use of green energy (solar and non- solar) for its manufacturing process. The company has zero consumption of ground water and it water requirement of around 65% are met through recycling. The company has avoided 1.92 (cumulative) million tCO2e emissions since 2005-06 by using green vehicles. The contribution of sales from green vehicles (CNG+ Hybrid+ Intelligent Electric Hybrid) in overall sales have increased from 27% in FY 2022 to 37% in FY 2023. The company has 26.3 MWp solar power capacity installed by 2023. The company has also attempted to use rail transport over road transport to dispatch vehicles to dealerships that has enabled the company to save 6,700 MT of CO_2 emissions in the past nine years as it saved over 204,522 truck trips and over 227 million liters of fuel.

ASHOK LEYLAND:

The company has taken specific initiatives in energy as part of its strategy towards continuous contribution/ efforts towards sustainable operations, usage of alternate/renewable resources, green energy, optimizing power consumption, etc. The company has successfully saved about 12.60 million electrical units this year to significant savings in energy cost of around 10.70 crores. This was possible due to high degree of awareness, energy audits, power quality audits and brainstorming. The usage of wind energy which was around 20% of the total power consumption was at 65.03 million Units. Similarly, the usage of solar energy was 37% of the total consumption at 118.33 million units this year. Your Company's Green Energy initiative realized significant operating cost savings to the tune of ` 36.54 Crores. While also making a very impressive reduction in emissions by 1,30,186 t CO2 e.

TATA CONSULTANCY SERVICES:

In response to its customers consciousness towards climate change actions, the company is seeing opportunities to provide technology-led solutions to enable them to achieve their sustainable goals. TCS's Green Procurement policy outlines its commitment to making its supply chain more responsible and sustainable. One of the major considerations in procurement process of the company is energy efficiency in all the company's IT and other infrastructure assets as this is directly linked with the company's emission profile. The company is working with its suppliers to implement improved carbon performance as the climate related risk play a very important role in the company's supply chain.

TCS' campuses are designed to withstand extreme weather events and the business continuity plans are tested periodically to ensure continued operations without any disruption. Green buildings, efficient operations, green IT, the use of renewable energy to reduce carbon footprint; adoption of newer technologies and methods to manage waste in line with circular economy principles are integral to the company operations. All these initiatives are helping TCS achieve its Net Zero target by 2030. Climate risks and opportunities are the key factors while making financial considerations especially while making investments in offices, equipment, and renewable energy. Investment in these areas constitutes a substantial share of the company's overall capital investment. Major investments are in green buildings, roof top solar and other energy efficiency initiatives.

WIPRO LIMITED:

Green building and green IT initiatives of the company has helped reduce emission for customers. The company has also adopted for hybrid working model leading to a lower environmental footprint. The company has adopted an environment integrating green building and ecological sustainability principles provide a healthy work environment and avenues for education and engagement. Here are some of aspects that Wipro takes into account while procuring: The company prioritizes eco- friendly cleaning by utilizing biodegradable products that are free from any harmful chemicals. These products are effective in cleaning and sanitizing surfaces and at the same time keep environmental impact minimal. Wipro uses cooling system that is energy efficient cooling systems and consume less power with a reduced carbon footprint. These systems use eco-friendly refrigerants that do not harm the ozone layer. Wipro maintains its landscapes and gardens using natural and organic fertilizers which are derived from renewable resources and are chemical free. Drip irrigation systems and rainwater harvesting are promoted to conserve water. Employees at Wipro are also encouraged to reduce waste and conserve energy. By adopting such practices, the Company not only reduces its impact on the environment but also ensures a healthier and safer workplace for its employees. Wipro has a lower environmental impact as being a part of the service sector industry. Environmental Sustainability and Net Zero continues to be a focus area particularly for investors and customers.

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HCL TECHNOLOGY:

HCL makes efforts to ensure that every resource is used efficiently to garner the maximum value. HCL work in synergy with its partners, clients, communities, and other stakeholders for sustainable future. HCL focuses on achieving a sustainable impact through all their initiatives and activities as the company target to achieve a net zero reduction in emission by 2040. The company has achieved 17.7% increase in renewable energy consumption in FY2023 compared to previous FY2022 and 22% reduction in per capita greenhouse gas emissions since the base year FY20. HCL is the first Indian MNC to join the Water Resilience Coalition and endorse the CEO Water Mandate. HCL's 12.45 million square feet office space is LEED Platinum rated. While transitioning to a low-carbon economy requires initial investment, it offers a favorable return on investment in many regions. As part of its net zero strategy, the company has committed to limiting greenhouse gas emissions and aligning with the 1.5ºC pathway by 2030, with the goal of achieving net zero target by 2040.

OIL AND NATURAL GAS CORPORATION:

ONGC is charting a roadmap for opportunities in renewable energy and low carbon sectors. The company has a plan to scale up its portfolio of renewable energy to 10 GW by 2030. The company has a commitment to spend around 1 trillion on multiple green initiatives by the end of this decade. The company is actively exploring collaboration on various low carbon energy opportunities including renewables, green hydrogen, green ammonia, and other derivatives of green hydrogen with leading players in the energy space. Cleaner fuels like natural gas continue to play an important role for balancing variable renewable energy at scale, while reducing carbon emissions in the short term. Petrochemicals demand is expected to remain strong and will continue to be a key driver of oil and gas demand in the future. With this objective, ONGC is collaborating with other entities to explore opportunities in the Oil to Chemical (O2C), refining, and petrochemicals. The company is also planning to establish two greenfield O2C plants in India.ONGC aims to reduce GHG emissions by focusing on improved energy efficiency.

Climate change is the most important strategic issue faced by the oil and gas industry in recent years. The risks associated with climate change require a coordinated global effort to reduce greenhouse gas emissions, transition to renewable energy sources, and implement measures to adapt to the changing climate. Given this threat, governments are increasingly enacting policies to mitigate greenhouse gas emissions, and investors in companies are putting increasing pressure on management to show how they will navigate an energy system in transition.

INDIAN OIL CORPORATION LIMITED:

Indian oil corporation has a commitment to achieve net zero operations by the year 2046. The plan of the company to decarbonize involves both scope 1 and 2 emissions. The Chairmen of Indian Oil, Mr. Shrikant Madhav Vaidya, made the announcement during the Company's 63rd annual general meeting (AGM), held on 25th August 2022. The company has seven focus areas:

1. Achieve net zero operational emissions.
2. Meeting electricity requirements of expansion projects through renewable energy
3. Increase the proportion of greener fuels in the product mix.
4. Invest in low carbon energy technology and undertake partnerships.
5. Engagement with value chain partners to reduce emissions across the current network.
6. Bring greater linkages between employee skills & company climate goals.
7. Establish Indian Oil as a leader in environment sustainability.

BHARAT PETROLEUM CORPORATION LIMITED:

Bharat Petroleum has made many efforts towards harnessing renewable energy in a big way as an energy responsible company. There will be a time when Solar, Wind, Biofuels, Tidal, Geo-thermal, Fuel Cells, Hydrogen will be an integral part of our lives. The Bharat Petroleum Mumbai Refinery (BPCL - MR) was one of the first refineries to have got accredited with ISO 50001 (Energy Management System) in the year 2014 and will be migrating to ISO 50001:2018 in Jan-2020. The Bharat Petroleum Kochi Refinery has a unique bond with its environment evident in the green blanket carefully nourished right around it. Kochi Refinery is recertified for Integrated Management System (IMS) by M/s Bureau Veritas Certification for having complied with the requirements of best standards and practices in the areas of Quality Management, Environment Management and Occupational Safety and Health Management. Kochi Refinery is certified to Environment Management System - ISO 14001:2004

CONCLUSION:

The study reveals that there are various reasons of companies adopting green marketing efforts- some of the consumers are keen to invest in green products even if the price is slightly higher than traditional products, to mitigate the harmful effects of their operations on society and ecology, companies by engaging in such efforts demonstrate that they are conscious about their impact on society and environment and are responsible corporate citizens. While companies are taking all possible initiatives the majority of the consumers still need to be educated about the green products and their benefits. Educating consumers about green marketing is a catalyst for positive change. It empowers individuals to align their choices with environmental values, fosters responsible consumption, and drives businesses toward more sustainable practices. Ultimately, educated consumers play a pivotal role in shaping a greener and more sustainable future for the planet.

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Study of effect of organizational climate on job satisfaction among teacher educators in B.Ed. colleges of Savitribai Phule Pune University, Pune

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Abstract: Job satisfaction of a teacher educator related to the mind condition about their nature of work. Different factors influencers to the job's satisfaction such as type of supervision, work given to them and so on. The feelings about the teaching learning process shows teacher educator job satisfaction, on the other side dissatisfaction shows effect on the working of teacher educator's different skills and knowledge for teacher learning process in the classroom and other activities. For that positive attitude necessary for teacher educators otherwise its negative effect in the teacher training program. In this research work researcher done the work which is related to teacher educators of training colleges of B.Ed. around the various regions of Maharashtra. Different types of teacher educators were selected according to the research objectives and the required process of the work. During these selections creation issues were created such as continues working of employees in the same college up to complete of researcher work. Some employees were left out during their personal reason, so to contact them is difficult and time consuming. But researcher tried to contact them and collect their response.

Key Words: Organizational Climate (OC), Job Satisfaction (JS), Teacher Educator (TE).

INTRODUCTION:

In our education system, especially B.Ed. colleges in the country various personnel were working in the present days. The personnel include the Administrators, Principal, teaching staff, non-teaching, support staffs etc. which were having different duties and responsibilities according to their qualification and post. All the personnel were performing their duties in different working conditions, the nature and various facilities available at the working place, the status of the staff and their relationship with administrative organization. Along with these other things were also important which includes employee's specialized training, experience of the work, skills, habits, health standards and behavioral traits. To do their work effectively and efficiently the studies of these factors were important.

LITERATURE REVIEW:

- **Alexandra Marcos er.al.(2020)**:The main aim of the study was to find out the influence of organizational culture, demands, work resources on job satisfaction, citizenship organizational commitment of the Spanish Police officers. The conclusion from the research there were relevant difference according to the employees age organizational tenure and gender. Also effect of job demands and resources on the organizational and personal development, on the other hand occupational stress damaging for the employees.

- **Haipeng Wang et.al.(2020):**The researchers studied about primary Care Centre's from rural China relating to burnout, turnover and job satisfaction. The background of the study was high turnover, low job, satisfaction and severe burnout were found among the primary Care Centre's in the township health centre. The main objective of the study was to find out relationship between turnover intentions, burnout and job satisfaction in the views of primary care centre in the rural China. The conclusion from the study shows that low job satisfaction severe burnout made high turnover intentions .The suggestions given by the researcher targeted strategy must be taken to motivate and improvement in primary care providers in the China
- **Herranen, et al. (2015):** The researchers examined measurement of primary teachers' interest in the subject of teaching chemistry. The main objective of the study to create instrument to measure primary teacher's interest related to chemistry subject. According to the result of this research due to different analysis primary teachers' interest had been two types of important factors value related and personal. The conclusion from the study indicated that there was positive correlation between primary teachers' interest with the help of ICT tools and enquiry related methods, creative problem-solving method and laboratory method. The ICT tool was very useful to evaluate and develop both the pre-service and in-service teacher training colleges.

RESEARCH OBJECTIVES:

- To find out joint contribution of Organizational Climate in predicting Job Satisfaction of Male Teacher Educators.
- To study Individual contribution of Organizational Climate in predicting Job Satisfaction of Male Teacher Educators.
- To study joint contribution of Organizational Climate in predicting Job Satisfaction of Female Teacher Educators.
- To study Individual contribution of Organizational Climate in predicting Job Satisfaction of Female Teacher Educators.

RESEARCH METHOD:

- For the research work descriptive survey method was used. The organizational climate independents variables such as Academic, Financial, Professional, Administrative, Physical and Miscellaneous were used to study its effect on the dependent variable Job Satisfaction
- Standard questionnaires were used for the data collection with Google form and through speed post to fill questionnaire manually.
- The data were collected through Google form responses and manual filled response sheet from the respondents.

DISCUSSION AND ANALYSIS:

- After collecting the data it's tabulated in to two groups namely, Teacher educators (Male), Teacher Educators (Female)

- The data were analyzed with the help of SPSS software to find the effect of organizational climate different factors on job satisfaction.

Male Teacher Educators

1. All six Organizational Climate factors i.e. Physical Climate, Administrative Climate, Financial Climate, Academic Climate, Professional Climate and Miscellaneous Climate in Predicting Job Satisfaction of Male Teacher Educators.
2. Administrative Climate, Professional Climate and Miscellaneous Climate are very high compare to Financial Climate is very high. Whereas percentage of Physical Climate and Academic Climate which are very low in predicting Job Satisfaction of Male Teacher Educators.

Female Teacher Educators

1. All six Organizational Climate factors i.e. Physical Climate, Administrative Climate, Financial Climate, Academic Climate, Professional Climate and Miscellaneous Climate in Predicting Job Satisfaction of Female Teacher Educators.
2. Miscellaneous Climate and Administrative Climate is very high compare to Financial Climate and Professional Climate. Whereas percentage of Physical Climate and Academic Climate which are very low in predicting Job Satisfaction of Female Teacher Educators.

RESULT:

Descriptive Statistics of Male and Female Teachers				
Gender		Mean	Std. Deviation	N
Male	Job Satisfaction	293.6757	29.79472	25
	Physical	78.5405	5.36757	25
	Administrative	114.5946	8.41447	25
	Financial	68.1892	5.46117	25
	Academic	108.3243	5.76895	25
	Professional	65.3514	4.32188	25
	Misc.	67.7027	4.13565	25
Female	Job Satisfaction	286.8496	20.60263	25
	Physical	77.1327	4.77064	25
	Administrative	107.7257	6.90011	25
	Financial	67.8938	4.36578	25
	Academic	108.8053	6.67332	25
	Professional	63.2743	4.77577	25
	Misc.	68.1858	3.47066	25

CONCLUSION:

- In case of percentage of joint contribution is 19.65 percent which is moderate between Organizational Climate and Job Satisfaction of Male Teacher Educators.
- For individual contribution of Organizational Climate in predicting Job Satisfaction in percentage of Administrative 5.76, Professional 5.83, Miscellaneous 5.12 and Financial 3.34 are very high. On the other side percentage of Physical Climate 0.07 and Academic Climate 0.47 which are very low in predicting Job Satisfaction of Male Teacher Educators.
- In case of percentage of joint contribution is 23.57 percent which is moderate between Organizational Climate and Job Satisfaction of Female Teacher Educators.

- In case of individual contribution of Organizational Climate in predicting Job Satisfaction in percentage of Miscellaneous Climate 8.52, Administrative Climate 6.46, Financial Climate 4.27 and Professional Climate 3.09 are high. Whereas percentage of Physical Climate 0.54 and Academic Climate 0.68 which are very low in predicting Job Satisfaction of Female Teacher Educators.

RECOMMENDATION:

- Educational Policy Maker and Educational Institutions at Government and Private Level should take cognisance of finding of present study that contribution of Organizational Climate i.e. Physical Climate, Administrative Climate, Financial Climate, Academic Climate, Professional Climate and Miscellaneous Climate are good predicting Job Satisfaction of Teacher Educators.
- A similar study may be conducted on Teachers who teaches to students belonging to different age groups.
- A similar study may be conducted on different Psychological Variables.
- Sample size can be increase to get more precise output.

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Impact Of Training And Development In Corporate Structure Vis A Vis Method Of Adaptive Theatre And Skill Learning-Case Study Of GSFC Ltd.

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Abstract: Training and Development is one of the most important sub systems of Human Resource Management. The newer age technology has shown great results but poses its own challenges to make training and development more and more effective and impactful. The managers face a constant challenge to upgrade newer methods for training the human resource. From lectures to presentations and presentation to gamification, training styles have developed and evolved for better effectiveness but what next? Theatre is a very live and adaptive medium for recognizing one's own skill set and talent. Such a cumulative model for behavioral training in the corporate is developed by Aniradichita Theatre and Films. A new dimension of theatre training was conducted at GSFC LTD at Vadodara that gave a new dimension to experiential learning. This paper attempts to assess the impact of training via the theatre method on the employees of GSFC Ltd and to know and understand the new methods for skill development.

Key Words: Impact, Training and Development, Skill development, Experiential learning, Adaptive Theatre

INTRODUCTION:

In today's rapidly evolving global landscape, organizations face constant challenges in maintaining competitiveness, adapting to technological advancements, and meeting the ever-changing demands of the workforce and consumers. In this dynamic environment, the role of training and development has emerged as a critical strategic imperative for organizations of all sizes and industries. Training and development initiatives are not only essential for enhancing the skills and knowledge of employees but also for fostering innovation, driving employee engagement, and ultimately achieving long-term business success.This research paper delves into the multifaceted domain of training and development via the role of theatrical activities. Exploring its significance, methodologies, and impact on individuals and organizations. Through a comprehensive examination of the latest research findings, practical case studies, and emerging trends, we aim to provide a comprehensive understanding of the pivotal role played by training and development in contemporary business contexts. As we embark on this journey of exploration, it is important to recognize that the landscape of training and development is continually evolving, shaped by factors such as technological advancements, demographic shifts, and changing employee expectations. Drama and theatre have always been seen as tools for entertainment only. The process for theatrical activities is a tedious scientifically driven process of making a person realise their potential inculcate discipline and a sense of team work. In a typical outset of a theatrical performance one cannot expect only the central characters to perform, the entire play is performed by the conjoined efforts and strategy of all the team players. Similarly, in an organizational setup the important factor is to work simultaneously towards an envisioned goal with the team. Typically a crucial factor by the human resource management therefore to train and develop their human resources.

Therefore, this research paper seeks not only to elucidate new current practice but also to anticipate and prepare for the future challenges and opportunities that organizations will encounter in their pursuit of effective training and development programs. By the end of this paper, readers will have gained valuable insights into the evolving field of training and development, empowering them to make informed decisions, develop innovative strategies, and contribute to the success of their organizations in an ever-changing business environment.

OBJECTIVES OF THE STUDY:

- To study the impact of training and development on employee performance.
- To study the impact of theatrical practices on training and development
- To study the adaptability of newer training methods on employee satisfaction

REVIEW OF LITERATURE:

Training and development have undergone significant transformations in recent years to meet the evolving needs of organizations and their employees. In this review of literature, we explore recent practices in the field of training and development, focusing on emerging trends, innovative approaches, and their impact on organizations and employees. The reviewed literature underscores the dynamic nature of training and development, emphasizing the importance of staying abreast of current practices to maximize their effectiveness.

- Technology-Enabled Learning:One of the most prominent trends in recent training and development practices is the integration of technology. E-learning, mobile apps, virtual reality (VR), and augmented reality (AR) have revolutionized how organizations deliver training content. These technologies offer flexibility, accessibility, and personalized learning experiences. Studies (Brown, 2020; Smith et al., 2021) have shown that technology-enabled learning not only enhances knowledge retention but also reduces training costs and increases engagement among learners.
- Microlearning: Microlearning is gaining traction as an effective training strategy. Organizations are breaking down training content into bite-sized, easily digestible modules. Recent research (Johnson, 2019; Patel et al., 2022) suggests that microlearning improves information retention and application in the workplace. Employees can access brief, focused lessons on-demand, aligning training with their busy schedules and the demands of their roles.
- Gamification: Gamification involves incorporating game elements, such as points, badges, and leaderboards, into training programs to increase engagement and motivation. Recent studies (Anderson et al., 2020; Kim & Jo, 2021) have demonstrated that gamified training enhances learning outcomes and encourages healthy competition among employees. Organizations are increasingly adopting gamification to make training more enjoyable and effective.
- Personalized Learning Paths: Personalization is another key aspect of contemporary training and development. Recent literature (Kaplan & Haenlein, 2020; Mitchell, 2021)

highlights the importance of tailoring training content to individual learner needs and preferences. Artificial intelligence (AI) algorithms can analyze employee data to recommend relevant courses and resources, creating a more individualized learning experience.

- Diversity, Equity, and Inclusion (DEI) Training: The social and cultural shifts of recent years have placed a spotlight on DEI training. Organizations are recognizing the importance of fostering inclusive workplaces. Research (Robinson & Rosenbaum, 2022; Williams et al., 2023) indicates that effective DEI training programs improve employee awareness, reduce bias, and promote diversity in leadership positions. Recent developments in DEI training emphasize a holistic approach that goes beyond compliance and focuses on fostering a culture of inclusion.

Recent practices in training and development reflect a dynamic and adaptive field that responds to the changing needs of organizations and employees. Technology, microlearning, gamification, personalization, and DEI training have emerged as key components of modern training strategies. Staying current with these practices is essential for organizations seeking to enhance their workforce's skills, engagement, and overall performance in today's competitive landscape. As this review demonstrates, the evolving nature of training and development requires a commitment to innovation and a deep understanding of the diverse needs of today's workforce.

RESEARCH METHODOLOGY:

Sample and data collection: 10 questionnaires were distributed among the different employees in the organization.10 questionnaires were completed information required. The response rate was agreeable. Convenience sampling technique was used for this study. The data was gathered by using self-administered questionnaire and the participation was voluntary.
Measures and Scales: Two variables were used in this study i.e. Training and development, employee performance and job satisfaction. Equally 10 questions of training and development and employee performance were used. Job satisfaction had 2 questions which were adopted from the study of (Cook and Heptworth, 1981). All variables were measured using a 5-point liker scale in which 5 represented strongly agree to 1 which is strongly disagreeing.

ANALYSIS AND RESULTS:

The main purpose of this study is to evaluate the impact of training on the employee performance in the organization with the medium of theatre. Here data have been gathered on the sampled respondents on the impact of training and development on employees' team building, communication, self-confidence, Emotional understanding and emotional quotient, managing stress, etc of the organization. The findings of this research study and the subsequent evaluation carried out on the responses reflect the key areas of training and development and its challenges on employee performance, motivation, growth mindset, creativity and mental health. Findings from Employees a total number of thirty 10 employees were selected to provide answers to the structured un-disguised questionnaire. Analysis of survey data is given bellow-

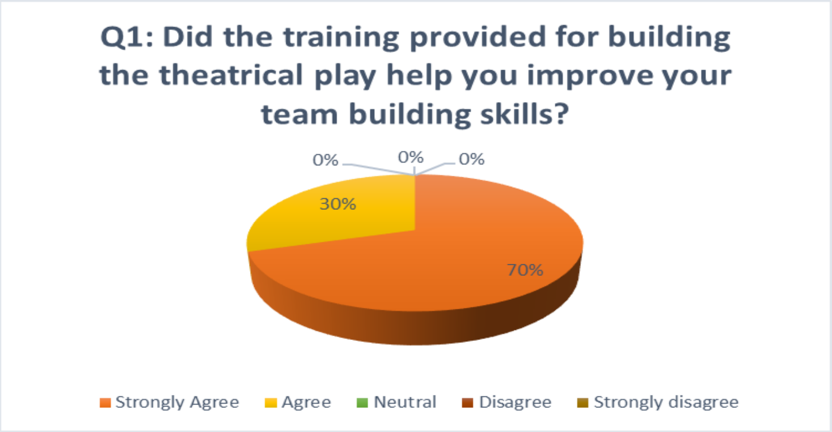

Figure:1

This chart shows that 70% of the respondents strongly agree that training provided via theatrical play helped them build team building skills. Where as 30% of the respondents agreed to the same fact.

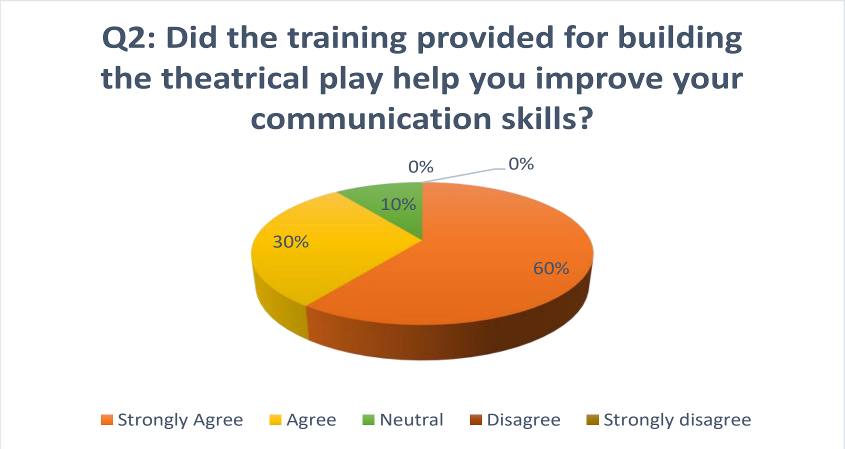

Figure:2

This chart shows that 60% of the respondents strongly agree that training provided for theatrical play helped them improve their communication skills, where as 30% agree and 10% are neutral.

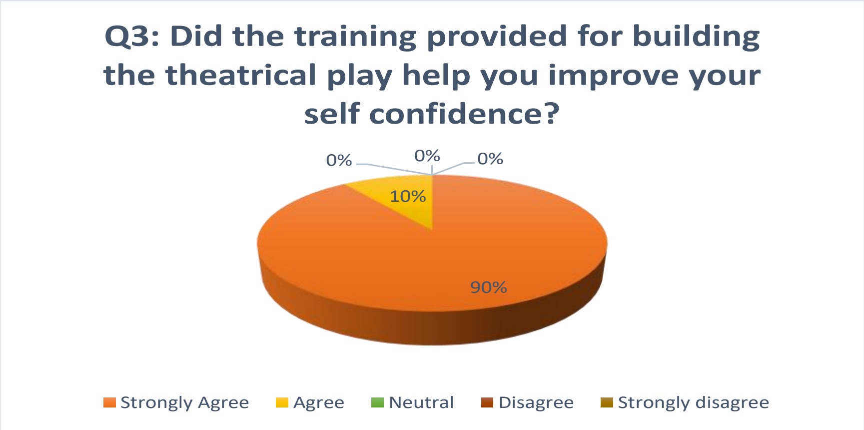

Figure:3

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This chart shows that 90% of the respondents strongly agree that the theatre training helped them improve their self-confidence, where as 10% agree for the same.

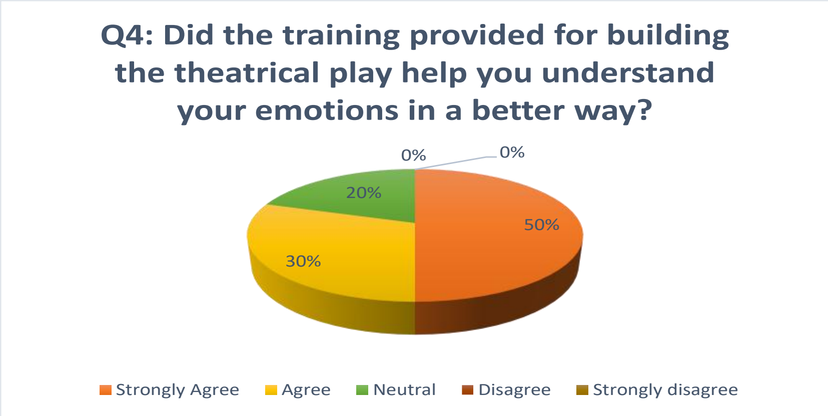

Figure:4

This chart shows that 50% of the respondents strongly agree that theatrical training helped them understand their emotions in a better way, 30% of the respondents agreed to the same fact and 20% were neutral to vote for the same.

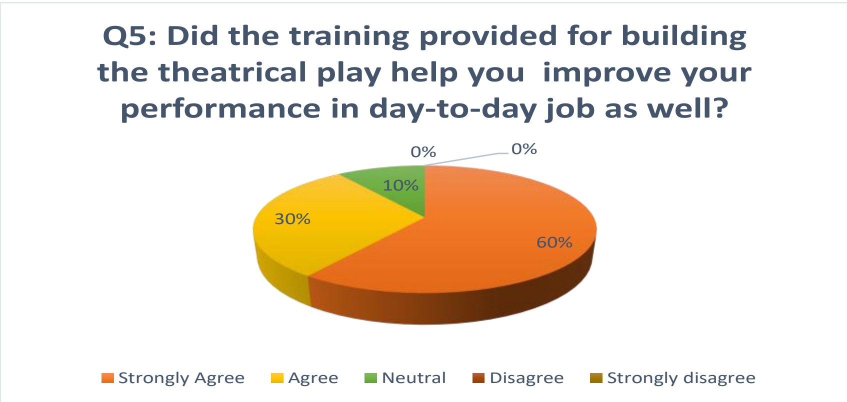

Figure:5

This chart shows that 60% of the respondents strongly agree that the theatrical training helped them improve their performance in their day to day job, where as 30% of the respondents agreed for the same and 10% were neutral to vote for the same.

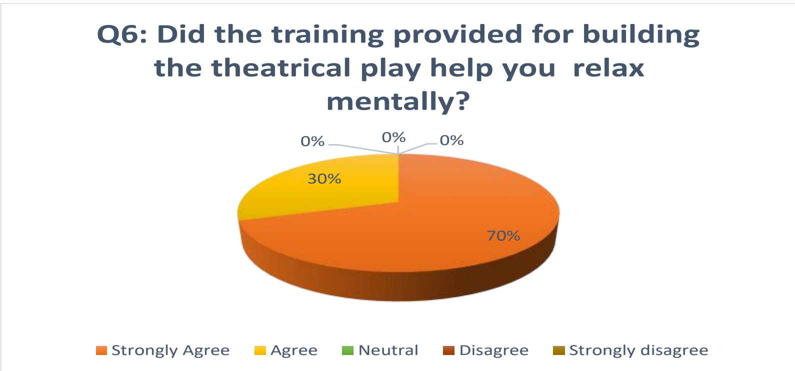

Figure:6

This chart shows that 70% of the respondents strongly agree that theatrical training provided to them helped them mentally relax themselves, where as 30% agreed for the same.

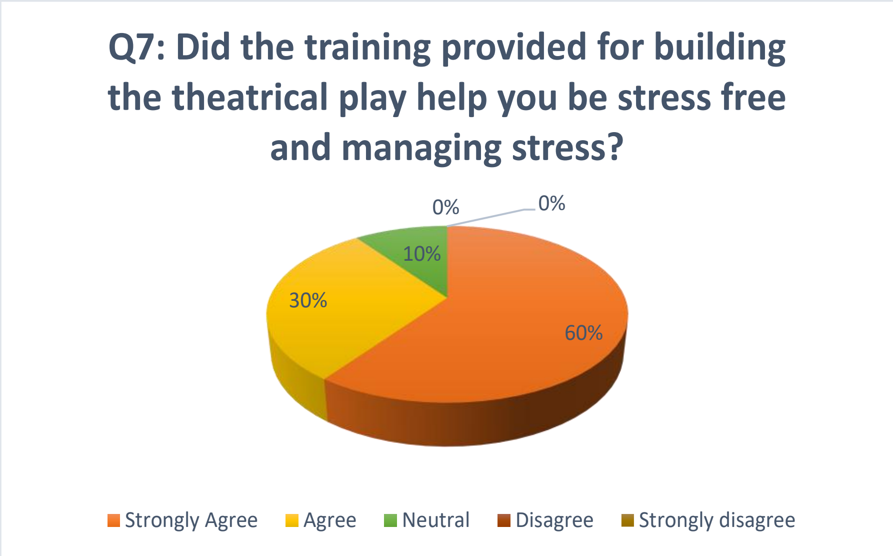

Figure:7

This chart shows that 60% of the respondents strongly agree that theatrical play helps them be stress free and helps them manage stress, where as 30% of the respondents agree and 10% chose to vote for neutral for the same.

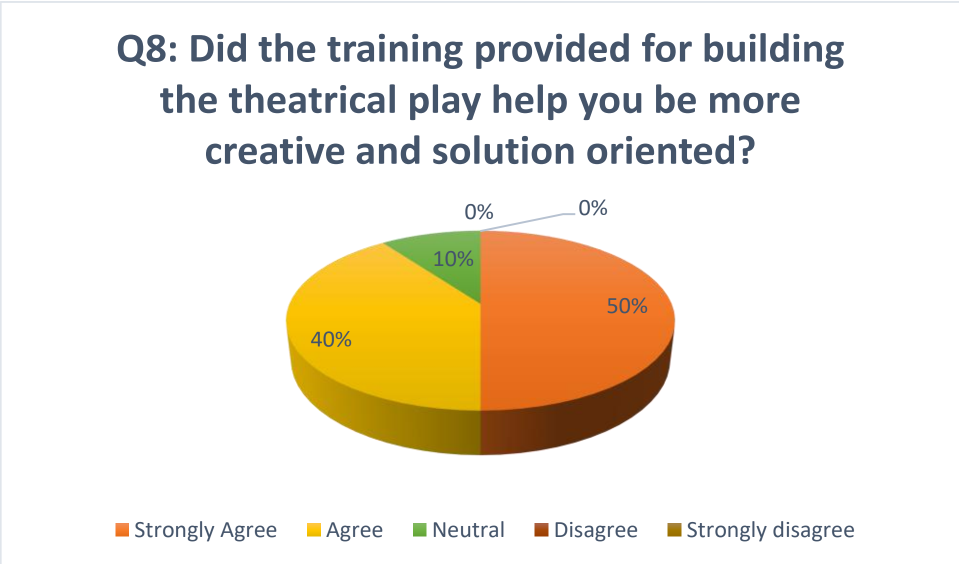

Figure:8

This chart shows that 50% of the respondents strongly agree that theatrical training helped them be more creative and solution oriented whereas 40% agreed and 10% chose to remain neutral.

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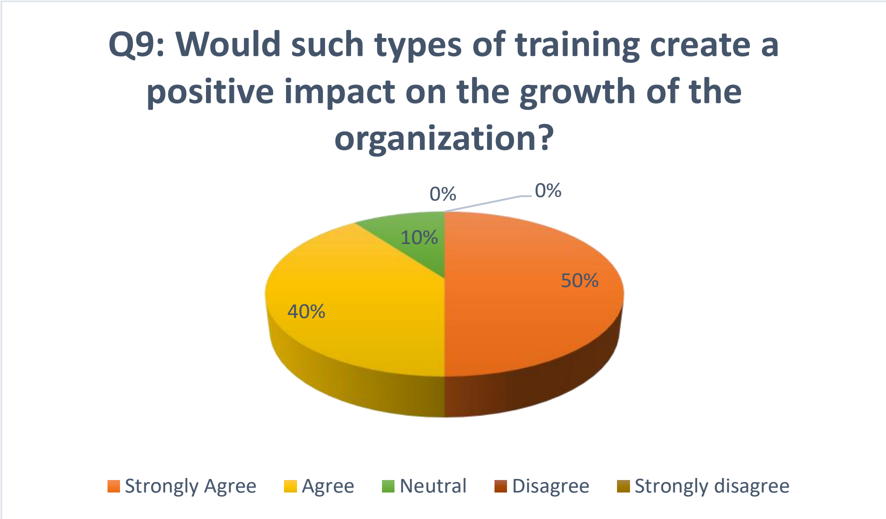

Figure:9

This chart shows that 50% strongly agree that the training did create a positive impact on the growth of the organisation, where as 40% agreed for the same and 10% chose to remain neutral for the same.

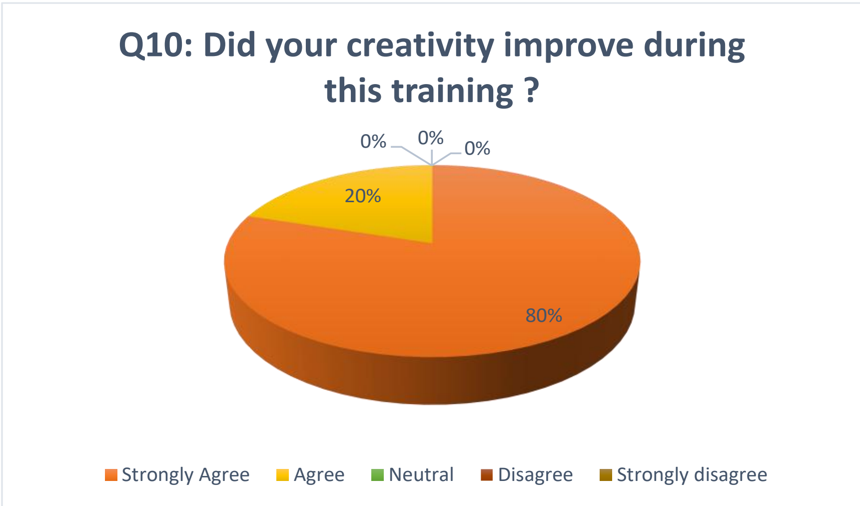

Figure: 10

This chart shows that 80% of the respondents strongly agree that their creativity improved during this training, where as 20% of the respondents agreed for the same.

DISCUSSION AND FINDINGS OF THE STUDY:

One of the strongest motivators is training, which has a wide range of potential advantages for both individuals and the organisation, contributing to the latter's achievement of its goals. This study used theatrical training, a new approach used by human resource professionals, to investigate the effect of training and development on employees' performance. The goal is to assess and examine how theatrical training has impacted employee performance and creativity. A sample of 10 respondents was chosen to help with these goals. The study's conclusions included the average employee's fervent view that theatre training enhances abilities, creativity, and performance in the workplace and contributes to workers' job happiness. This assertion is comparable to the idea that new dimension for training the human resources of an organisation. Most of the respondents seem assertive and agree that theatrical training provided to them was helpful and impactful in their team building and creative skill set.

RECOMMENDATION:

Many organizations have come to the realization of the importance of the role of training and development programs as it increases the organization's staff efficiency, skills and productivity. In order to achieve the benefits of training initiative. The research shows that there is strong impact of theatrical training and its impact on the employees of the organisation (GSFC LTD). All Employees of the organizations find their training and development beneficial for their performance. Employers should be provided with more training programs in order to reduce the cost of recruiting and training new staff members.It is also beneficial for motivation, creativity and positive impact of training. On the other hand, the provision of feedback to employees after training is recommended in order for employees to become aware of areas where they can improve their performance.

CONCLUSION:

Training and Development is an important aspect of human resource management. It is important for organization to get skilled and capable employees for better performance, and employees will be than competent when they have the knowledge and skill of doing the task.It is imperative and needful of the HR department to try to train the employees in different ways which are out of the box. Theatre as a tool is beneficial and extremely impactful for the employees as it is a live medium as well as it is conceptualised for knowing oneself and one's emotions. Ancient Indian texts such as "Natyashashtra" also depicts how one can use the science of theatre and its display of navarasa to know oneself and display a balanced version of emotions and creativity. Training and Development would provide opportunities to the employees to make a better career life and get better position in organization. Therefore, the purpose of this study is to analyse the impact of theatrical training and development on employee performance. HR Department is continuously hiring skilled people from wide market and thus provides trainings to cope with global challenges. Through various HR activities and training programs they retain talents in the organization, ensure career path for performers to perform more efficiently and effectively to contribute more and more.

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Revolutionizing Horticulture: Utilizing Waste Florals for Sustainable Planting Solutions

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Abstract:
Purpose
The research aims to create eco-friendly, biodegradable pots using waste floral materials for horticultural purposes. It promotes sustainable gardening practices by reducing waste, promoting recycling, and enhancing plant container aesthetics. The initiative encourages individuals and gardeners to adopt sustainable, eco-conscious approaches to plant cultivation, while enhancing the beauty and ecological impact of their gardens and green spaces.
Method
Experimental research design was conducted. The research aims to create eco-friendly, durable pots using biodegradable materials like bioplastics, organic fibers, and natural binders. It explores various ratios and combinations of waste florals and biodegradable materials to determine the optimal mixture. The goal is to pioneer a holistic approach to horticulture, utilizing the beauty of waste floral materials to create innovative, biodegradable pots.
Results
Revolutionizing Horticulture uses waste florals for biodegradable pots, improving plant growth and aesthetics. This innovation promotes sustainability, fosters biodiversity, and empowers communities to embrace eco-conscious gardening, contributing to a greener future.
Conclusion
The integration of waste florals into biodegradable pots marks a significant stride toward sustainable horticulture. This transformative approach not only beautifies our surroundings but also exemplifies our commitment to environmental preservation, inspiring a shift towards mindful gardening practices for a more harmonious and greener world."

Keywords: Waste Florals, Biodegradable Pots, Eco-friendly Gardening, Environment

Introduction- The proper handling of floral waste produced by various ceremonies, festivals, and flower enterprises has become a critical environmental issue. Because of poor plant selection or a lack of knowledge about plant care, gardeners who attempt to grow plants indoors or in the garden frequently fail at this [1]. These once-vibrant blooms are typically disposed of in landfills, contributing to pollution and resource waste, mirroring greater societal problems with waste management and sustainability. However, the creative notion of using leftover flower materials to create biodegradable containers and ecological planting solutions offers a tempting alternative. We can develop eco-friendly planting options that not only minimize trash but also promote the growth of green areas and biodiversity by utilizing the beauty and organic character of flower waste. Because they lessen plastic waste and environmental damage, biodegradable pots are a sustainable and ecologically responsible alternative to plastic pots [2].

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The potential for environmental harmony and resourcefulness in our world of transient beauty is highlighted in this inquiry as we dig into the exciting possibilities of converting discarded floral materials into priceless resources for sustainable planting techniques and the production of biodegradable pots. Numerous organic wastes, such as tomato and hemp fiber [3], textile and paper waste [4], cattle manure and wood waste [5], cassava starch containing various agro-industrial residues [6], banana peels combined with biomaterials [7], and paddy straw and starch [8], have been used to make biodegradable pots.

Objectives:

- To promote waste reduction and recycling
- To create functional and aesthetic planting solutions

Materials and methods:

The current study was conducted in Udaipur city of Rajasthan. Temple was randomly selected for collecting the floral waste from Udaipur city. Experimental research design was applied. Experiments was done in 3 treatments with 3 replications in each treatment. Biodegradable pots were made in 3 different ratios under 1 treatment. Cow dung powder, paper messe, saw dust, flower powder, gum powder, neem oil was used for fabrication of pot. For measuring plant height measuring tape was used. Plants height was measured in every 5th day after planting date. Mean and SD was applied for statistical analysis.

Results:

Table:1- Analysis of Plant height in Biodegradable pot based on data.

Statistics	Set -1 (Height in cm)			Set-2 (Height in cm)			Set-3 (Height in cm)		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
Average	20.9	21.75	22.6	21.25	21.35	24.95	21.85	22.5	32.04
SD	0.14	0.35	0.52	0.35	0.63	2.01	0.21	0.70	4.59

The results of the study reveal interesting patterns and variations in the mean values across the three distinct sets, namely Set 1, Set 2, and Set 3. These sets represent different conditions or groups within our research, and the calculated mean values provide critical insights into the central tendencies of the data. In Set 1, it was observed that the mean value was approximately 21.75. This suggests that the measurements within this set tend to cluster around this central value. It's important to note that the values in this set, ranging from 20.9 to 22.6, are relatively close to each other, indicating a relatively low level of variability. The consistency in the measurements within Set 1 might be attributed to common factors or conditions that influence the observed values.

Moving to Set 2, we found a mean value of about 22.15. Compared to Set 1, Set 2 has slightly higher mean values. This increase in the mean suggests that the measurements in Set 2 tend to be higher on average compared to Set 1. Additionally, the range of values in Set 2, ranging from 21.25 to 24.95, is wider than that in Set 1, indicating a higher level of variability. This increased variability might be indicative of differing conditions or influences present within Set 2.

Finally, in Set 3, we found a significantly higher mean value of approximately 25.13. This substantial increase in the mean value compared to Sets 1 and 2 suggests that the measurements within Set 3 are considerably higher on average. Furthermore, the range of values in Set 3, spanning from 21.85 to 32.04, is notably wide, indicating a high degree of variability. This substantial variability could imply the presence of unique factors or conditions that lead to the elevated measurements within Set 3.

In conclusion, the analysis of mean values across these three sets provides valuable information about central tendencies and variability within each group. These findings may have implications for understanding the underlying factors or conditions influencing the data in each set. Further investigation and exploration of these factors would be essential to gain a deeper understanding of the observed differences in mean values across the sets.

The SD value of 4.591571 in Set 3, pertaining to biodegradable pot analysis, signifies moderate variability. This insight is crucial for assessing the consistency of pot characteristics, informing manufacturing improvements, and enhancing their suitability for sustainable agricultural practices.
It was found that T1 and second T2 (pots) take long time for degrading process (15days) than T3 (12days).

Conclusions : In conclusion, using leftover flowers to create biodegradable pots and sustainable planting options demonstrates how environmental responsibility and inventive creativity may coexist together. We can lessen pollution, save resources, and advance biodiversity by rethinking garbage as a resource. These methods enable people and groups to actively engage in sustainable gardening and make a positive impact on the environment. We move closer to a day when even the transient beauty of flowers may have a lasting, good effect on our earth as we continue to research and adopt these eco-friendly substitutes.

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Assessing the Post-Pandemic Impact of Spiritual Health in Urban Middle-Class Families

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Abstract: Background: The COVID-19 pandemic has posed previously unheard-of difficulties that have profoundly impacted many parts of human life, including psychological, social, and physical well-being. This study evaluates how urban middle-class families (male and female) spiritual health has changed since the pandemic.
Methodology: Methods: Purposeful selection was used to choose the sample of respondents for the current investigation. The study was undertaken in Udaipur Rajasthan. Data were collected using an in-depth interview with 30 male and 30 females live in Udaipur city. There were 15 questions in the spiritual health scale for respondents.
Results: The study's results uncover the diverse effects of the pandemic on the spiritual well-being of families. Analysing the data affirmed a noteworthy and favourable correlation in spiritual health among middle-class between males and females. Interestingly, the average score for male spiritual health was notably higher (22.13) compared to females (19.9), and the p-value (1.96) indicated a significance level of 0.5.
Conclusion: In conclusion, this research sheds light on how spiritual health has evolved and adapted within urban middle-class families, offering insights into strategies for enhancing spiritual well-being and its broader impact on overall family functioning and resilience in a post-pandemic world.

Key words: Post-Pandemic Impact, Spiritual Health, Urban Middle-Class Families, COVID-19, Well-being, Resilience.

INTRODUCTION:

After the unprecedented global epidemic, there have been significant changes in many facets of life. The effect of this turbulent time on spiritual health inside urban middle-class families is one particularly fascinating and understudied aspect. Various issues have arisen due to the epidemic, from social isolation and lifestyle changes to health issues and economic uncertainty. The significance of faith in coping, resilience, and general well-being has received more emphasis as people and families learn to navigate this new environment. The post-pandemic impact has affected the spiritual well-being of urban middle-class families. We want to comprehend how these families have reevaluated, reaffirmed, or even reinvented their spiritual beliefs and practises in reaction to the epidemic by exploring the diverse aspects of spirituality and its increasing significance. This study attempts to provide light on the complex interplay between spiritual well-being and the problems posed by the pandemic through a rigorous investigation of qualitative and quantitative data, shining light on potential long-term repercussions for the dynamics of urban middle-income families. Untangling the complex connection between faith and family life is essential to understanding the pandemic's overall impact and promoting resilience in the face of future challenges as we go ahead in this new era.

After the unprecedented global epidemic, there have been significant changes in many facets of life. The effect of this turbulent time on spiritual health inside urban middle-class families is one particularly fascinating and understudied aspect. Various issues have arisen due to the epidemic, from social isolation and lifestyle changes to health issues and economic uncertainty. The significance of faith in coping, resilience, and general well-being has received more emphasis as people and families learn to navigate this new environment. This essay begins a thorough investigation of how the post-pandemic impact has affected the spiritual well-being of urban middle-class families. We want to comprehend how these families have reevaluated, reaffirmed, or even reinvented their spiritual beliefs and practises in reaction to the epidemic by exploring the diverse aspects of spirituality and its increasing significance. According to Visser & Law-van (2021) The COVID-19 pandemic and subsequent lockdown deeply impacted lives. This study delves into how South African university students were affected emotionally and mentally three months into the pandemic. Data from 5074 students via an online survey revealed challenges in coping with psychological issues, with 45.6% reporting anxiety and 35.0% reporting depression. Findings supported Keyes' two-continuum theory, highlighting factors influencing emotional difficulties and mental health. The study underscores the need for university support services, especially for at-risk groups, to enhance students' adjustment and well-being during this crisis. This study attempts to provide light on the complex interplay between spiritual well-being and the problems posed by the pandemic through a rigorous investigation of qualitative and quantitative data, shining light on potential long-term repercussions for the dynamics of urban middle-income families. Untangling the complex connection between faith and family life is essential to understanding the pandemic's overall impact and promoting resilience in the face of future challenges as we go ahead in this new era. According to Jia et.al (2023) The COVID-19 pandemic led to global sports cancellations, impacting athletes' mental health. Investigating this, 35 studies were analysed, revealing worse mental well-being among athletes. Home training and quarantine camps mitigated effects, yet female athletes and higher levels of play faced increased risks.

OBJECTIVES: The purpose of this study was to investigate how covid-19 affected the spiritual health of urban middle-class families **(male and female)**.

MATERIALS AND METHODS:

Purpose

Purposeful selection was used to choose the sample of respondents for the current investigation. The study was undertaken in Udaipur Rajasthan. Data were collected using an in-depth interview with 30 male and 30 females live in Udaipur city. There were 15 questions in the spiritual health scale for respondents. Urban middle-class families were selected for the investigation, encompassing different income groups: Middle-middle income group (annual income range of 6,00,001-12,00,000) (UIT 2021). Only those people were selected for the present investigation who either themselves suffered from COVID-19 infection or any of their family members did after the pandemic.

Questionnaire:

Spiritual health encompasses elements of self-development and self-realization, emphasizing personal growth and self-understanding. The questionnaire is divided into two sections: the first section consists of seven questions related to self-development, and the second section contains eight questions focused on self-realization. In this questionnaire, general information about the respondents was requested, including their names, ages, genders, marital status, work status, annual income, addresses, and contact information, as well as the number of respondents who were affected by COVID-19 and the size of their families. This facet consisted of 15 statements, with each statement being associated with four options and their respective scores: always (4), often (3), sometimes (2), and never (1). The scale's score ranged from a minimum of 15 to a maximum of 45. These scores were subsequently categorized into three ranges: Excellent (45-35), Average (34–25), and Limited (25–15). A higher score within the spiritual health dimension denotes a robust spiritual well-being level, an average score implies a moderate level of spiritual health, while a lower score indicates insufficient spiritual well-being.

Statistical method:

After discussing the study's objectives and the satisfaction of the samples under the questioner's instruction and in the form of a self-report, male and female respondents who are husband and wife filled out the questionnaires. Microsoft Excel were used to analyse the data. The study's threshold for significance was set at 0.05.

RESULTS & DISCUSSION:

Results:

According to the Table 3.1 demographical details the gender distribution among the participants was evenly split, with 50% identifying as male and 50% as female. The results indicate that among the participants, 53.3% fell within the age range of 21-25, while 46.6% were in the age bracket of 25-30. The participants' educational backgrounds were distributed as follows: 40% had education levels below matrix, 33.3% were undergraduates, and 26.6% were postgraduates. In terms of work status, 63.3% of participants were employed, while 36.6% were not working. Regarding family types, the distribution was equal, with 50% belonging to joint families and 50% to nuclear families.

Table 3.1 Respondents demographic details

Demographic details		**%**
Gender	Male	50
	female	50
Age	21-25	53.3
	25-30	46.6
Education	Less than matrix	40
	Undergraduate	33.3
	Postgraduate	26.6
Work status	Working	63.3
	Not working	36.6
Family types	Joint family	50
	Nuclear family	50

Regarding the **table 3.2** impact of COVID-19 on families, 58.3% of respondents reported that their entire family had experienced COVID-19, while 41.6% indicated that only one family member had contracted the virus.

Table 3.2 Respondents Response about covid

Response about covid	**%**
Full family were suffered from covid-19	58.3
One member of family was suffered from covid-19	41.6

Table 3.3 comparative analysis of spiritual health

N=60

Spiritual health	**Mean**	**SD**	**Z value**	**'r'**
Male	22.13	5.38	**1.77***	0.19*
Female	19.9	4.30		

*= Significant at 5% level of significance

A comparative analysis of spiritual health between males and females reveals interesting findings. The male participants exhibited a mean spiritual health score of 22.13, with a SD of 5.38. On the other hand, the female participants had a slightly lower mean spiritual health score of 19.9, accompanied by a SD of 4.30. These results indicate that, on average, males demonstrated a higher level of spiritual health compared to females, as evidenced by their higher mean score. However, it is important to note that the relatively wider spread of scores among males (higher SD) suggests greater variability in their spiritual health levels compared to females. Further exploration into the factors influencing these differences could contribute to a more comprehensive understanding of spiritual well-being. A significant value of 0.5, a Z value of 1.77, and a correlation coefficient (r) of 0.19 are taken into account when comparing the spiritual health of male and female participants. With a correlation coefficient of 0.19, the results show a weakly positive relationship between gender and spiritual wellness. This shows that there is a small gain in spiritual well-being on average as gender changes from male to female. Additionally, the calculated Z value of 1.77 when compared to the statistically significant value of 0.5 shows that the observed association between male and female spiritual health is statistically significant. This indicates that it is implausible for the association between gender and spiritual health to have developed by accident. Essentially, the findings imply that gender does influence spiritual health, albeit with a modest impact size. The underlying causes of this link and its possible implications for fostering spiritual wellbeing among different genders could be explored in further detail in future research.

Discussion:

Rababa et.al (2021) In this study of 248 older adults during COVID-19, the link between death anxiety, religious coping, and spiritual well-being was explored. Using scales, results revealed low religious coping and spiritual well-being, high death anxiety. Females exhibited higher religious coping and lower death anxiety than males, while married participants showed greater death anxiety. Accounting for demographics, religious coping and spiritual well-being emerged as significant predictors of death anxiety in older adults. Roberto et.al (2020) This study examined how spirituality affects resilience during the ongoing pandemic. Using mixed methods, correlations between spirituality and women's resilience were explored. Significant correlations (-.450 at 0.001), CD-RISC (M ¼ 77.94), and DSES (M ¼ 39.74) indicated spirituality's positive influence. Qualitative responses further supported this impact, suggesting spirituality's significance during the global pandemic.

Tavan et.al, (2015) the spiritual growth of nursing students and their capacity to offer spiritual care to patients are strongly correlated. Using the Palutzian and Elison questionnaire, the current study examines the spiritual well-being of students at Iran's Ilam University of Medical Sciences. demographic, religious, and existential health are the three sections. There are four categories of spiritual health: low, low-moderate, high, and high. ANOVA, Two-way, and Factor analysis of the data showed a positive association (84.3%) between religious and existential health. To improve students' ability to provide spiritual care, nursing curriculum should incorporate spiritual health education.

CONCLUSION:

After the epidemic, spiritual well-being became a crucial pillar for urban middle-class families, providing consolation, resiliency, and a fresh sense of purpose. Its beneficial effects on psychological health and family harmony highlight the necessity to continue paying close attention to spiritual practises as an integral part of holistic urban living.

RECOMMENDATION:

Promote inclusive discourse on spiritual health in urban middle-class families by engaging males in open dialogues. Encourage diverse spiritual practices that resonate with their preferences, fostering emotional well-being and family unity. Emphasize its relevance in navigating post-pandemic challenges, enhancing male involvement for holistic family resilience. Psychological support and healthy coping strategies were recommended.

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"Advertisements with core successful elements: A strong medium available to businesses for capturing customer's attention effectively"

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Abstract: Advertisements are an essential paid-form of communicational tools available to the businesses for their effective promotion. An effective ad displayed in a media involves various aspects or elements such as product or service images, functionality and benefits, quality ad contents, media choices, creative design, brand logo, etc. that captures the customer's attention towards the brand and its products or services that are being advertised. An effective ad comprising of core successful elements make customers remember the advertisement as well as the brand in the long run. For advertisements to be effective and meaningful, quality elements are the key.
In this qualitative research study, all the elements that contribute towards the effectiveness of advertisements are identified, studied and analyzed so as to provide assistance to the advertisers in formulating attractive advertisements, in turn helping businesses in gaining customers. Secondary sources studied, show the significance of all the elements of advertisements in attracting customer's attention, which means no single ad element solely contributes towards the advertisement's success but a combination of them. This study will help big advertising brands such as Nike, Coca-cola, McDonald's, Ariel, Dove, Apple, and many more, to have insights with regard to all the elements that can work best for their success, keeping in mind the nature of their offerings, which in turn will help them achieve competitive advantage through customer attention leading to purchase action.

Keywords: Advertisement, Creativity, Customer Attention, Competitive Advantage, Promotion, Communication, Advertising media, Brand Image.

INTRODUCTION:

Advertisements are an essential paid-form of communicational tools available to the businesses for their effective promotion and advertisements with core successful elements become a strong medium available to businesses for capturing customer's attention effectively. It is a crucial part of contemporary business since it allows organizations to tell potential customers about their goods, services, and brand. Advertising is all around us, competing for our attention and affecting our purchasing decisions, whether it is through traditional channels like television, radio, and print media, or through various digital media platforms which include social media, search engines, and mobile applications. All the elements that contribute towards the effectiveness of advertisements are identified, studied and analyzed so as to provide assistance to the advertisers in formulating attractive advertisements, in turn helping businesses in gaining customers. This study shows the significance of all the elements of advertisements in attracting customer's attention, which means no single ad element solely contributes towards the advertisement's success but a combination of them. The nature of the target audience is changing quickly, so should your message and manner, so as to meet their changing needs and preferences effectively.

- **ADVERTISEMENT ELEMENTS:**

An effective ad displayed in a media involves various aspects or elements such as product or service images, functionality and benefits, quality ad contents, media choices, creative design, brand logo, etc. that captures the customer's attention towards the brand and its products or services that are being advertised. Advertisers must comprehend the core elements of advertising, including the target audience, message, medium, budget, and assessment, in order to develop successful marketing campaigns. A compelling commercial arouses desire in the listeners, readers, or viewers. It also offers guidance on how to satisfy a customer's desire and make them feel positive about the merchandise. Consumers will only want to buy a product if they know about it, which is why exposure to information is so important. Multimedia advertisements typically include non-auditory elements (music, sound effects, etc.) as well as non-auditory visual elements (pictures, logos, etc.), and these elements become the primary reasons for selecting a product.

Thereby, usefulness of advertisements, good exposure to information, quality features of the Ads, etc. are some of the elements responsible for successful ads in turn capturing customer's attention. Some major aspects such as a competitive strategy, creativity in content and communication as well as execution as per plan, is required in order for an ad to be effective. The elements should be such that they help your advertisement stand out from the competition, include knowing your audience, what they want to see, and even what they haven't seen before, on so on. Therefore, the key elements of advertising are responsible for creating successful ad campaigns. These elements are Target audience, Unique selling proposition (USP), Effective branding, Call to Action (CTA), Headline, Visuals, Metrics, Smart Ad placement, Budget, etc. which are utilised to grab customer's attention towards advertisements.

Deciding and understanding the target audience helps businesses in customizing their message to the needs, interests, and preferences of the target market. Customers are more likely to recognize and be loyal to a company that stands out from the competition, all because of distinctive and appealing features or benefits of a product or service. Call to action element intends to elicit a prompt reaction or action from a prospective customer. Every form of visual element that is utilized by advertisers to convey a message to an audience requires headlines that are engaging and persuasive. This can apply to pictures, films, graphics, animations, and other visual media. Effective metrics helps advertisers understand the effectiveness of their ads and make data-driven decisions to optimize future campaigns as well as Smart Ad placement helps strategically choosing the most relevant and effective platforms, media channels and places to display the ads.

- **CUSTOMER ATTENTION:**

An advertisement is said to be effective if it attracts the attention of the customer, has a lasting effect on the customer, encourages the customer to make a purchase decision, changes the emotions of the customer, and such can only be achieved by involving strong and successful elements of advertisements. Attention-getting Advertisements should be incongruent with what consumers expect, Entertain consumers, use media choice to your brand's full advantage, as well as involve content people want to share. Utilize advertising elements effectively, which are the most inventive aspect of marketing, a business can easily grab customer's attention in turn facilitating the purchase action.

LITERATURE REVIEW:

Advertising is a method of communication used to inform viewers and persuade them to make a buying choice regarding a good or service (Niazi, Siddiqui, Alishah et al, 2012). If there is no advertisement people will never ever be able to know about variety of excellent products that are available in the market and this is the core reason for the huge investment made on advertisements (Eram, 2020).

Thereby, strong emphasis should be made to make the advertisements as effective as possible, for which such elements should be considered that prove to be successful. Advertisers use a variety of media platforms to influence consumer behavior and maintain customer loyalty in the market (Fan, 2022). The effectiveness of advertisements affects how customers behave and make decisions and the customer's perception of an advertisement's effectiveness is resulting in the purchase of the advertised product, to their liking. The efficiency of advertisements is affected by a number of variables, including the medium's quality, the media outlet's preference, and the content's quality (Fan, 2022).

Also, In order to capture customer’s attention, the successful elements used by a company to persuade on advertising platforms require the affirmation of their professionalism. Presently, successful media advertising is delivered by affluent individuals who naturally attract a large following. It is also expertly scripted and elegantly packaged to impact a strong demand among the target consumers (Jan, Haque, Abdullah, 2019). The most significant aspect impacting advertising effectiveness is the choice of advertising media, which has the strongest correlation with brand advertising success and effectiveness (Ansari and Riasi, 2016). Advertising appeals are the persuasive communications which try to change how consumers see themselves and how purchasing particular products might be advantageous to them. Advertising appeals to people and has an impact on their purchase behavior (Lakshmanan and Basariya, 2017).

Therefore, advertisements with strong advertising elements can be seen as capturing the customer’s attention in turn achieving competitive advantage. The advertising industry has undergone radical changes in modern times and plays a key role in influencing consumer purchase decisions, by capturing customer’s attention.

RESEARCH METHODOLOGY:

RESEARCH DESIGN-

The research design used for this paper is qualitative in nature so as to gain deeper understanding of the relevance of advertising elements in advertisements so as to capture customer’s attention.

DATA COLLECTION-

The research study is based on the secondary data sources including articles, websites, published books, etc. to gain insights on the elements of advertisements and their effectiveness in capturing customer’s attention.

RESEARCH OBJECTIVES-

- To identify the various elements of successful advertisements.
- To study the relevance of successful advertising elements in capturing customer’s attention.

RELEVANCE OF ADVERTISING ELEMENTS IN CAPTURING CUSTOMER’S ATTENTION:

Attention-grabbing advertising has to be risk-averse. And, you have to do something creative that’s outside of what consumers expect, it uses the media, and can be shared with consumers so they can influence others. Awareness and Utility of sound advertising elements for capturing customer’s attention to facilitate advertisement effectiveness are as follows:

- Effective communication with the target audience
- Increased brand awareness
- Greater revenue and profits
- Help businesses reach new customers
- Build brand loyal customers
- Competitive Advantage in the long-run, etc.

CONCLUSION:

An effective ad comprising of core successful elements make customers remember the advertisement as well as the brand in the long run. For advertisements to be effective and meaningful, quality elements are the key. This study will help any and every big advertising brand such as Nike, Coca-cola, McDonald's, Ariel, Dove, Apple, on so on; to have insights with regard to all the elements that can work best for their success, keeping in mind the nature of their offerings, which in turn will help them achieve competitive advantage through customer attention leading to purchase action.

To sum up, advertising is an effective strategy to capture customer's attention and is used by companies to market their goods or services to a specific audience. The target market, the media, the message, and the budget are some of the effective elements of successful advertising, which combine to persuasively communicate a message and elicit the desired response from the audience. An effective advertisement must take into account the audience's needs, have an engaging message, be distributed through the right channels, and have a strong call to action that will result in the intended results.

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Enhancing Customer Experience through Multisensory Marketing by Food Chain Outlets

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Abstract: Do you believe flavour is the only factor in food? Although we may have previously believed this, the shifting paradigm has shown that food is no longer just determined by taste; other aspects also have an impact on consumer behaviour. Due to this, the food industry is undergoing a significant transition.
This research paper will offer a theoretical viewpoint on the evolution from using a single sensory signal to multi sensory cues that leads to consumer experience. Customers take into account the visual (aesthetics, colours, light brightness, and so on), aural (music, voice, etc.), olfactory (air quality, freshness, aroma of food, artificial scent, etc.), and tactile (temperature, texture, smoothness, so on.) aspects of dining out at a restaurant for tremendous experience. The consumer mind inconspicuously and unconsciously monitors all factors. These unconscious influences are so powerfully at play that they convinced the retail establishments to employ several senses. In order to survive in this fiercely competitive era, it is of the utmost importance for retailers to use a unique concept to entice customers into their stores, which raises the flag for the application of multi- senses. The simultaneous use of multi- senses produces a more vivid and vigilant image of a company's intent since customer purchasing decisions are governed by their senses, which contribute to the creation of emotions, feelings, and perceptions for the product and service. Consumer behaviour is changing due to hectic lifestyles, rising incomes, and nuclear families are a few factors that force people to eat out in order to satisfy their emotional needs through multi- senses. The study makes an effort to comprehend the function of multi-sense in retail food establishments and will assist food establishments in figuring out the way to improve customer experiences through the senses.

Key Words: sensory, multisensory, customer experience, food outlets, consumer behavior.

INTRODUCTION :

We have witnessed a significant transition in the retail business due to globalization (Tsaiet al., 2011) from a product-driven to a service-driven model, and now consumers are searching for unique experiences (Pine and Gilmore, 2008). Therefore, the market is now geared towards the customer experience (Schmitt, 2009). The customer engages as a partner in production to obtain unique and tailored services and goods (Gronroos, 1982). For a business to thrive, it is imperative to emotionally connect with the consumer (Krishna, 2012), which is accomplished by emotionally engaging them through an exceptional experience. The Indian food sector is expanding and is likely to expand rapidly in the next few years, while competition is intensifying. This rivalry is giving rise to new strategies to target customers. Food is about more than just flavour; it is also about how it looks and smells. It is now more than that. So many studies have been conducted to examine the influence of single stimuli on customer's connections to food. Even now, many researchers are working with many senses to examine the effect since we can't estimate the impact separately because food can't be eaten without other sensations. In the food sector, all senses complement each other. That aims to investigate the way multisensory marketing enhances the consumer experience in retail food chain outlets.

Research Objectives :

- To know the effect of multi-senses in food industry.
- To study the way multisensory marketing is affecting consumer experience in food chain outlets.

Multisensory Marketing :

Consumers are thought to be rational, yet being individuals with relationships, they are also sensitive. Companies are now attempting to treasure their customers through emotional connection in order to compete in this highly competitive environment. This notion gave rise to sensory marketing (Hulten, 2017), in which consumers are targeted by appealing to their senses (Randhir, 2016). The phrase multisensory marketing" refers to the use of more than one sense in marketing. Consumer senses, their perception, and customer experience are viewed as important underlying issues in developing multisensory marketing paradigms (Achrol and Kotler, 2012). Whenever customers visit a restaurant, they employ all of their senses; some researchers claim that their impression is transmitted simultaneously, while others claim that it is imparted sequentially (Biswas and Scozs, 2016) . The pivotal role of sensory signals and stimuli is made apparent by the fact that consumers feel brands or service environments with all senses: visual, auditory, olfactory, haptic, and taste. Retail environments, which serve as sensory stimulants, are well documented to affect customer behaviour in stores (Bettman et al., 2008). The senses have been identified as the primary means by which a person experiences a retail environment since retail environments have a sensory character (Kotler, 1973). Retailers may attract customers and boost their profit margins through the development of an attractive environment that is interesting and enticing to them. (Kaltcheva and Weitz, 2006). The first thing that customers notice and are drawn to when they enter a store is colour, design, (Erenkol, 2015) light, (Rieunier, 2002) figures, and flooring. In a retail setting, cleanliness is also one of the factors that fall under the category of sight or the visual (Ritmala, 2019).

Typically, hearing and sight are regarded as the most crucial senses in a retail setting. However, scent is the one sense of the body that cannot be controlled and that cannot be disregarded. In the case of food, it is the only sense that genuinely allows the consumer to experience the flavour of the dish. The smell plays a role in persuading the customer. It takes into account ambient smell, product smell, and smell that is natural or developed (Hulten, 2011; Sayed, 2023).

Consumer experiences are improved by sound, which may influence mood. Numerous studies indicate that the sort of sound—which can take the shape of music, noise, etc.—affects consumers' buying behaviour and length of stay (Areni and Kim, 1994; Hul, Dube, and Chebat, 1997).

The term "haptics" or "tactile" refers to a way for a customer to judge quality and experience a sense of ownership. Food matters in terms of warmth, comfort, texture, weight, and stability. The organisation wants the consumer to relax and enjoy their food while working on their sensory experience; therefore, if there is a sofa provided, that is exactly what they want. The size of cutlery and comfort of the sitting place all depend on touch sense.

Taste, or the gustatory sense of flavour, doesn't function on its own; it works with the help of the olfactory senses, especially. However, without this, humans are unable to evaluate the various tastes. In this sense, culture and geographical borders play a key role for firms in enhancing the customer experience. A good example are MNCs like McDonald's, Pizza Hut, Subway, and Domino's, which serve food based on cultural taste preferences.

Customer Experience

Customer experience is a component of the whole experience, which begins before the purchase and continues with post-purchase services (Brakus et al., 2009; Schmitt,1999). A collection of signals, messages, and recommendations are used in retail stores to connect with customers. Designers, planners, and merchandisers of retail stores form the space, which in turn influences and determines consumer experience. The consumer's perception, which is produced with the use of sensory receptors, determines whether an experience is favourable or negative. Utilising multisensory marketing strategies boosts the consumer's experience by collaborating with additional senses.

In order to encourage mobility and the pleasure of meals, McDonald's restaurants use bright light as well as brilliant red, yellow, and spatial service scapes. Their storefronts now include touch-screen technologies that enable clients to place purchases and make payments without the need for a human middleman, in addition to simple packing. McDonald's does not use any in-store music for sound. Burger King, a rival business to McDonald's, uses the slogan "Fresh for you" in their advertising, with a focus on freshness. Their establishment draws customers with the use of orange and red colours combined with black. Their whopper-sized burger is the clearest illustration of how shape and touch can entice customers and provide them with a distinctive experience. The subway restaurant chain offers healthy quick food options, and if we look at their emblem, it connects with the ideas of sight and taste. The subway's logo uses the colour green to represent health and is a representation of vegetation. Orange is an appetite-stimulating hue, whereas green represents health. And this connection improves the consumer's experience by providing them the impression that they are going to have healthy before they consume it. Domino's and Pizza Hut are two further examples of multisensory marketing; whereas Domino's focuses on rapid service, Pizza Hut provides fresh, delicious, and—most importantly—authentic pizza. The cuisine at Domino's, such as parathas pizaa, has a regional texture that combines flavour, cultural effect, and sight sensation. The beep sound when your order is ready by Domino's is another good combination of using your senses.

Conclusion and Future Research Prospect: -

This theoretical review of the subject demonstrates that effective multisensory marketing techniques have a memorable impact on consumer experiences, assisting consumers in emotionally engaging with brands and establishing a relationship with them through their senses. Based on the results of this study, we may carry out more research to quantitatively assess this research topic and attempt to demonstrate the link between customer experience and behaviour.

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Brumiputra Biju Pattanaik-adventurous, freedom fighter and his contribution towards vocational and technical education for Orissa

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Abstract : Biju Patitnaik was and undoubtedly a great intellectual legislator, Political leader and above all a reformer of Odisha. Everything about him has become a legend and perhaps no other leader of Odisha has ever occupied the imagination of the people like known as Biju Patnaik, a great freedom fighter, Pilot, industrialist, politician and philanthropist. He was a brilliant student. His hobby was aeronautics and industry. He Visited different countries like U.K, U.S.A, U.SS.R, Paris and Indonesia etc. He was engaged in different adventurous work. During his student life he had gone cycle expedition from Cuttack to Peshwar with two friends named Amar Dey and Bhramanber Sahoo. He joined Indian National Airways and became its ace Pilot . Loka nayak Jay Prakash advised Bilu Babu to assist the freedom fighters without loosing his Job. In this way he proved his patriotism as a great solider of freedom movement . He established some industries in Odisha. As a Matter of fact he had taken an active role in the freedom movement in Indonesia . He was elected as the Chief Minister of Odisha in 1961, as the Junior Chief Minister. He established many Vocational and technical in institutions in Odisha. He was a great politician in India. He is called a first male runner in Indian politics and it is indeed a record. Biju Babu breathed his last on April 17, 1997 at New Delhi"

Key words: Intellectual , adventurous, patriotism, expedition.

INTRODUCTION:

A Short Life History of Bhumiputra Biju Pattanaik

Biju Pattanaik was born on 5th March 1916 at Tulashipur, Cuttack. Laxmi Narayan Pattanaik, the father of Biju Pattanaik was a brilliant student. He passed his B. A. from Christ College of Madras in 1886. After the completion of his education he worked as a clerk in the civil court of Sambalpur. Later on he was appointed as a Munsaf in Cuttack. The mother of Biju Pattanaik was bom at Chittagong and her name was Ashalata Devi. Biju Babu had two brothers and one sister. George Pattanaik, his elder brother was a leading eye specialist of Orissa at that time. Sukruti Devi, the sister of Biju Pattanaik was the first Oriya lady to be M. A. His youngest brother was Jayananda Pattanaik and he was an officer of Indian Air force.

Biju Pattanaik needs no introduction to the Indians. He was a chip of the old-block, worthy son of a worthy father. He had his early education at Mission Primary School at Cuttack . After his primary education he studied at Mission High School. During the student days he won the appreciation of one and all for his academic excellence. On the advice of his father, B Pattanaik left Mission High School and took admission in Ravenshaw Collegiate High School. He passed the matriculation examination with a first division in 1932 when he was 16 years . He passed the Entrance Examination of Patna University and got through it with a first class a result he took admission in Ravenshaw College. He passed I. Sc. From Ravenshaw College flying colours but he dropped his B. Sc. When he was selected for training as a pilot.

In 1924, Biju Babu was nine years old. A small helicopter alighted on the Balijatra ground. Biju Babu ran towards the helicopter and touched it for which the policeman deployed there whipped him. On that day Biju Babu promised to land a helicopter there as a pilot.

Mahatma Gandhi came to Cuttack in 1926. A large number of people were there to see him. The Biju Babu pushed his way through the crowd to see Mahatma Gandhi. Hargivre Saheb, the S.P. didn't like this and gave a great blow on the head of Biju Pattanaik with his stick. His head bled profusely and the people assembled there got angry with the S. P. Mahatma Gandhi criticized the S.P in strongest terms for rude behaviour and blessed Biju Pattanak, Such incident inspired him to take part in freedom movement of India

There was a severe flood in Orissa in 1930. Ukamani Gopabandhu had visited flood affected areas with some students. When he was ferrying about in the river, a gust of wind took the umbrella off his hand. Biju Babu was there in the boat among the students. Suddenly he jumped into the river, caught the umbrella and came back swimming to the boat. This was indeed an adventurous act and Utkalmani blessed the boy who had performed this.

In the year 1932, Biju Babu had gone cycle expedition from Cuttack to Peshwar with his two friends named Amar Dey and Bhramanbar Saboo. He reached at Pestwar after one month and four days. In 1934 he took training as a pilot. He and his father took great strains for the materialisation of his irresistible desire to be a pilot. He proved his ability as a great pilot and carmed the epithet of dare and devil. He has carved a niche in the history of the world as a leading pilot

In 1939, he got married to a girl of the Kashmir Valley who belonged to a Punjabi family. Her name was Gyana Devi. At that time he was the chief pilot of the Governor General . Wife Gyana Devi encouraged him to perform adventurous acts.

Lokanayak Jayaprakash advised Biju Babu to assist the freedom fighters without loosing his job. There after Biju Pattanaik took Jayaprakash, Aruna Asaf Ali, and some other leaders in his plane and left them at a safe place. In this way he proved his patriotism as a great soldier of freedom movement.

The activities of Biju Pattanaik enraged the Britishers and they were suspicious of him. After death of his parents he was arrested on 30 Jan 1943 in New Delhi by the Britishers. He spent 2 years in jail and came from jail in 1945.

After he came out of prison on parole he established some industries named O. T. M. Kalinga Tubes, Kalinga Refrigeration etc. by his personal efforts.

During 1947, Biju Babu had gone to Indonesia on the advice of Neheru and he brought the rebelions of Indonesia to New Delhi in his aeroplane. As a matter of fact he had taken an active role in the freedom movement of Indonesia. It was indeed an adventurous work of Biju Pattanaik. During Indo-Pak work and Indo-China war the contribution of Biju Pattanaik was emarkable and also notable. He had great during nature, without any fear he can do any dangerous work which one can not imagine.

The political life of Biju Babu started in 1947. He was elected as the Chief Minister of Orissa in 1961, as the junior Chief Minister. He had proved the path for the progress of industry d agriculture. In his Chief Ministership Biju Pattanaik established Paradeep port with the help the then Prime Minister Neheru. At that time the vocational, technical education spread highly. Established Orissa Small Scale Industries Corporations, Panchayat Samiti Industries poration, fertiliser plant at Rourkela steel city, Mig aircraft factory at Sunabeda, thermal power station at Talcher, steel plant at Rourkela, Kalinga Airlipnes etc. For the spread of vocational and technical education, Biju Babu established many vocational and technical education such as the establishment of Rourkela Engineering College, Regional College of Education, Kalinga Vocational and Design Institute, Burla Engineering College, Berhmpur Medical College, Sainik School and Orissa University of Agriculture and Technology etc. Besides these there are many contributions of Biju Babu in Orissa.

He was a great politician in India. Such a political leader having a rare personality is seldom seen now-a-days. He had been elected to the legislative assembly 8 (eight) times, to the Loksabha 4 (four) times and only once to Rajyasabha. He is called a first male runner in Indian politics and it is indeed a record. Biju Babu breathed his last on April 17, 1997 at New Delhi. He was indeed very active in his death-bed and the last rites of Biju Pattanaik were performed at "Swarga dwara", way to the heaven which is considered the most sacred place in earth. During this time 38 VIPs had come to Puri from New Delhi and other countries to lay their last homage to the departed soul. The people of Orissa felt as if it was the day of car festival as so many people from the nooks and corners of India had gathered there and not only the people of Orissa but also the people of different countries shed tears at the death of such a great man.

One of the important aspects of the life of Biju Pattanaik was that there was not any difference between his deeds and declarations. The more industries develop in a country the better economic condition of the people is. So Biju Pattanaik was never encouraging the students to hanker after jobs. So as a leader and visionary he was giving much importance on vocational education. His idea and efficiency were a source of inspiration to going to march ahead towards greater objectives.

Objectives of the Study:

Objectives of the study are as follows

(1) Bhumiputra Biju Pattanaik, the adventurer.
(2) The contribution of Bhumiputra Biju Pattanaik to freedom fight.
(3) To study the contribution of Bhumiputra Biju Pattanaik towards vocational and technical Education for the State of Orissa

Review of Related Literature

Many research studies have been done about the contribution of great men. But so far as the knowledge of the investigator goes, no study has yet been about the contribution of Biju Pattanaik. Some of the studies on great men are stated below: whose are related with the present study such as:

(1) Smt. Aparna Dasgupta made, "an enquiry into the educational contributions of Arya Samaj under the leadership of Swami Dayananda Saraswati". Her dissertation was submitted to Kalyani University in the year of 1989 for her Degree M. A./ M. Sc. In Education. In her thesis Smt. Dasgupta tried to analyse the different philosophical ideas of Dayananda in the light of his thought, action and teachings.

(2) Dr. Chakradhar Biswal made a study on the contribution of Sri Madhusudan Rao, who was a great educationist. The thesis was submitted to Utkal University in the year 1990 for his Ph. D. Degree. In his study Dr. Biswal has critically analysed the contribution of Madhusudan Rao to the field of education in Orissa.

Bhumiputra Biju Pattanaik, the Adventurer:

According to Haldane life without adventure has no charm. The maxim is applicable to the life of Biju Pattanaik. During his life time he had done many adventurous works. His jump into the flooded river for the umbrella of Gopabandhu, his journey from Cuttack to Peshawar by cycle, his competence as a pilot and above all his role in Indonesian freedom movement bear adequate testimony to his adventurous life. During Indo-Pak war he had gone to Indonesia to influence the leaders there not to help Pakistan against India.

In 1950, he had given support to Koirala for his rebellion against monarchy. During Pakistan's occupation of Kashmir Biju Babu was in advance post as a war pilot. He has rendered some personal assistance to Russia during second world war. In 1960 he had dropped food packets from his aircraft when there was a severe flood in Orissa.

Mr. Biju Pattanaik was of the most daring national person. In 1960, he had supplied food to the flood effected people from aeroplane. Being an Indian he ordered to find out Mr. Das, the Registrar of England University, to pierce into the agitated mass and landing from bowing jet while coming from Delhi to Calcutta were the instances of his daringness.

Contribution of Bhumiputra Biju Pattanaik to Freedom Fight:

Biju Babu was a man of adventure and no other Indian is comparable with him in adventurous work. He participated in the freedom movement when he was in service and earned fame as a leading pilot. He was beaten by foreign people during his childhood. The murder of his brother, Debaprasad, the son of his uncle and influenced him very much and at last he left his job and joined the freedom movement on the request of Jayprakash.

In 1943, he was arrested by white detectives. He was put in jail and treated with much humiliation. He was told to drink urine instead of water. He spent his days as a prisoner at Rodfort of Delhi, Firojpur and Cuttack. His role in the freedom movement is really a glorious chapter in the history of India.

Contribution of Bhumiputra Biju Pattanaik towards the Vocational and Technical Education for Orissa:

He was not only a freedom fighter but also a great son of Orissa. His objective was to make Orissa an advanced state and he knew that it would be possible only by the development of industry and agriculture. So after the release from prison in 1945, he had taken steps for the establishment of industry like O. T. M. in Choudwar, Kalinga Tubes, Kalinga Refrigeration, Kalinga Industries. He was also established Paradeep port and express highway from Paradeep to Daitary. His objective was to utilise the iron ores of Orissa in a proper way. So he had planned to establish a steel plant at Daitary.

He knew that vocational and technical education could develop industry. So he had opened many institutions like Orissa Flying Club, Wireless Institution, Rourkela Regional Engineering College, Regional College of Education Agriculture af Vocational Orissa State Defence, Burla Engineering College, Burla and Berhampur Medical College, Klinge Airlines, Sainik School etc. His aim was to make Orissa an advanced State of India . So Mig Factory at Sunabeda, Panchayat Samiti Industry, Talcher Thermal, Rourkela Steel Plant are some of his contributions. Besides it he also opened many small industries.

Till his last, Biju Pattanaik had tried to spread, vocational and technical education for the development of Orissa. The establishment of such above institutions are his real contribution.

Conclusion:

Bhumiputra Biju Pattanaik was indeed a great adventurous and an ace pilot. He was also a daring freedom fighter. He did lot for the development of vocational and technical education in the poor state Orissa. So we conclude that he was an eminent educationist and industrialist of Orissa.

Implication for Further Study:

- A study may be taken on Utkalmani Pandit Gopabandhu Das who sacrificed everything for the State of Orissa. He was a great freedom fighter, social worker and educationist who was also dedicated his life for the suffering millions of Orissa.
- Contribution of Malati Choudhury to the field of freedom fight, social work and education may be studied. She was also one of the eminent woman of Orissa who struggled for the upliftment of woman in Orissa.
- A study may be made on Godabarisha Mishra, who was also a great freedom fighter, social worker, and educationist. He has dedicated his life for development of Orissa.
- Contribution of Aruna Asaf Ali to the field of freedom fight, social work and education may be studied. She was also one of the eminent women of India.
- A study may be taken on Jayaprakash Narayan, who sacrificed everything for our nation. He Was also a great freedom fighter, socialist and educationist.

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Cultural - Social effect on residential area and advantage or disadvantage on educational aspiration among SC & Non-SC Girl Students

(Full Paper)

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Abstract: Present day the social-economic status of single or nuclease family the personality characteristics of parents and family members, the number of family members and the nature of stimulation received by family members due to residential and caste variation of the family and outlook of family members towards current situations of the society, determine to a great extent the nature of human nature, personality, aspirations, attitudes, intelligence, adjustment, locus of control, self-concept and level of aspiration of the current students or children.

The aim of this research investigation is to study the effects of cultural- socio advantage and disadvantage, residential area on educational aspiration, intelligence, self-concept and locus of control of SC and Non-SC girl students of IXth class. For purpose of investigations, one self made questionnaire and four inventories were used. Four hypotheses were formulated and then test was conducted.

The scores on educational aspiration, intelligence, self-concept and locus of control of the two groups namely; scheduled caste and non-scheduled caste were calculated separately. Means and S.Ds. of two main groups were calculated separately. After this't' test was run to test the significance of difference between the mean scores of the two groups.

Cultural- Socio advantage and disadvantage found that the significantly influencing educational aspiration, intelligence, self-concept and locus of control. While cultural-social disadvantage has been found significantly lowering the levels of educational aspiration, intelligence, self-concept and internal locus of control .Scheduled caste group has been found significantly lower than non-scheduled caste group on educational aspiration, self concept, intelligence and internal locus of control.

Keywords: Cultural – Social, Residential area, Advantage or Disadvantage, Educational aspiration, Self Concept, Intelligence, Locus of control, SC & Non-SC Girl Students.

INTRODUCTION :

Indian society is facing the problems of unemployment, underemployment and unsuitable employment. Educational institutions are charged with the responsibility of developing vocational behaviour which may solve some of these problems. In order that useful behaviour may be developed among the adolescents their initial choices, which lead to their later adjustment to courses and careers, should be traced at their initial choice stages. These initial choices or so-called their academic or educational aspirations stem from their background factors. In high schools, both male and female students appear for their academic pursuits, but they display a wide gap among themselves on their intelligence, locus of control, self-concept and educational aspiration

Cultural – Social :

In all society and family fixes different methods of rearing and teaches different roles to its members according to cultural background. Family influence predominates throughout the life because it plays fundamental role in developing concept of self in childhood which persists relatively unchanged throughout the life span.

Residential areas of SC & Non-SC Girl Students:

The socio-economic status of the family, the personality characteristics of parents and family members, the number of family members and the nature of stimulation received by family members due to residential and caste variation of the family and outlook of family members towards current situations of the society, determine to a great extent the nature of personality, aspirations, attitudes, intelligence, adjustment, locus of control and self-concept of the children.

Advantage or Disadvantage:

Indian culture is based on respect for elders, family unity, honesty, and hard work. Indian values also emphasize education, both formal and informal. India is a land of great opportunity, and its citizens are known for their entrepreneurial spirit.

Educational aspiration of SC & Non-SC Girl Students:

The education system denies the existence of conflict of class interests, class relations with the world and deviates comfortably from the rhythm of reality'. In India the increasing demand of privatization of schools and decline in the public funds on one hand and rapid speed of universalization of education on the other through various programs nowhere reflect the importance of quality education or needful education.(Roy & Kumar, 2018).

Self Concept of SC & Non-SC Girl Students:

Dehal (2015) find in his study and concluded that significant difference was found between SC and non sc students on all dimensions of self-concept and total self-concept. Upper caste student's self-concept is better than SC students. Except emotional tendency, all dimensions of self-concept are positively and significantly correlated with achievement for upper caste, SC students and total sample It is clear from the results of present study that SC students differ significantly from upper caste students on self-concept. So study of self- concept can provide direction to teacher and administration to guide, motivate, shape better academic achievements and modify behaviour of SC students. Hence teachers and administrators working in the field of education suggested that they try best to develop self-concept of SC students. The major implication of the study is that it is helpful to teachers and administrators and others in understanding the problems of adolescents. The training of teachers both at the pre-service and in service levels should include a comprehensive unit on development of self-concept. It is necessary to provide remedial measures to those who should marked deficiencies in school subjects. It is also necessary to educate the parents of SC/ST students to understand their children with respect to their interest, motivation and involvement in the school work. For better performance of SC/ST students Govt. take care and provide proper and appropriate facilities.

Intelligence of SC & Non-SC Girl Students

Scheduled caste girl students live in a different cultural-social and economic environment even in this technologically advancing national scenario. This variation of environment is sufficient to bring variation of self-concept, locus of control and intelligence in scheduled caste girl students in comparison to non-scheduled caste girl students. Due to variation in stimulation, there occurs variation in intellectual level of scheduled caste and non-scheduled caste girl students. Furthermore, self-concept and locus of control of scheduled caste students are also influenced by their disadvantaged environment. The disadvantaged cultural-social environment of scheduled caste girls spreads its effect up to their educational and vocational aspirations which results in their lower academic and vocational achievements. House is a socio-cultural milieu that is strongly connected to its residents' lifestyles; thus, any change in their way of living could be reflected in its layout.

In this context, the study of educational aspiration of girl students – both scheduled caste and non-scheduled caste in relation to their intelligence, locus of control and self-concept becomes a major problem of research work, because a nation cannot witness a balanced development without the educational up gradation of scheduled caste females.

Review Literature :

Abed, A., Obeidat, B. & Gharaibeh, I. (2021) they find in their study that research aimed to highlight the impact of socio-cultural factors on the internal layout of public housing residences, especially with the absence of a clear policy that defines the framework of their flexibility or the scope of transformation. In order to develop a comprehensive understanding of this relation, six variables were addressed: social role, social network, hospitality, gender segregation, safety, and privacy. The researchers adopted a mixed-method approach involving a questionnaire survey of 202 residents and 35 face-to-face interviews along with documentation of transformed layouts. There results showed that gender segregation, privacy, social network, and safety are significant socio-cultural factors affecting internal layout transformations. The findings underline the need for a public housing policy incorporating design guidelines which suit a wide range of residents to enhance the adaptability of future projects and, consequently, promote residents' satisfaction.

Kishore, K., (2017) find in his study that in our Indian Society, the level of Educational Aspiration and Self Concept is significantly influenced by the socio-economic status of the family. Lower level of Self concept reduces the level of aspiration to achieve the goal & mission of life, through education. Low educational aspiration leads to problems of unemployment, underemployment and unsuitable employment faced by students in their life. The obtained scores on educational aspiration & self-concept of the two groups namely; scheduled caste and non-scheduled caste were calculated separately. Means and S.Ds. of two main groups were calculated separately. After this 't' test was run to test the significance of difference between the mean scores of the two groups. Further, subjects were classified into high self-concept, normal self concept and low self-concept sub-groups. Then, educational aspiration scores of these sub-groups were compared. Socio-culturally disadvantaged group i.e. scheduled caste group has been found equipped with lower levels of self-concept which in turn might have lowered the level of educational aspiration of this group in comparison to socio-culturally advantaged group i.e. non-scheduled caste group.

OBJECTIVES:

The aim of the present investigation is to study the effects of some psychological antecedents i.e. cultural-social disadvantage and residential area on educational aspiration, intelligence, self-concept and locus of control of girl students of IXth classes.

In India, particularly in Bihar, scheduled caste females by and large constitute the socially and economically disadvantaged group whereas the non-scheduled caste females are regarded as socially and economically high and privileged group in our society. These differences in social, economic and cultural background are bound to be reflected in educational aspiration, intelligence and personality traits of the two groups.

HYPOTHESIS:-

The following hypotheses are formulated in present study :

- Non-scheduled caste group will be significantly higher than scheduled caste group on educational aspiration.
- Non-scheduled caste group will be significantly higher than scheduled caste group on General Intelligence.
- Non-scheduled caste group will be significantly higher than scheduled caste group on self-concept.
- Non-scheduled caste group will be significantly lower than scheduled caste group on external locus of control.

METHODOLOGY:

A. **INSTRUMENTS USED :-**

❖ Personal Data Sheet.
❖ Educational Aspiration Scale' by Saxena (1984).
❖ Group Test of Intelligence (1/61)' by Tandon (1973).
❖ Self-concept scale' by Rastogi (1979).
❖ Locus of control scale' by Pal (1983).

B. **SAMPLE**:

The study was conducted on a sample comprising of 200 Girl students studying in IXth classes of Government high schools of Ranchi district, Jharkhand. Of these 200 subjects, 100 will be drawn from schedule caste girls and 100 will be non-schedule caste girls. 100 girls students were from rural areas and 100 girl students were from urban areas.

C. **PROCEDURE & DESIGN** :

With the objective of investigating the effects of cultural-social advantage, disadvantage and residential area on educational aspiration, intelligence, self-concept and locus of control ; four inventories and one self-made questionnaire were applied to a sample of 200 subjects of which 100 were scheduled caste and 100 were non-scheduled caste IXth level classes of girl students.

The scores on educational aspiration, intelligence, self-concept and locus of control of the two groups namely; scheduled caste and non-scheduled caste were calculated separately. Means and S.Ds. of two main groups were calculated separately. After this 't' test was run to test the significance of difference between the mean scores of the two groups.

Sample Design

Religion	Total	
SC	100	200
Non Sc	100	

RESULT & DISCUSSION :

The results, hypothesis wise are presented below:

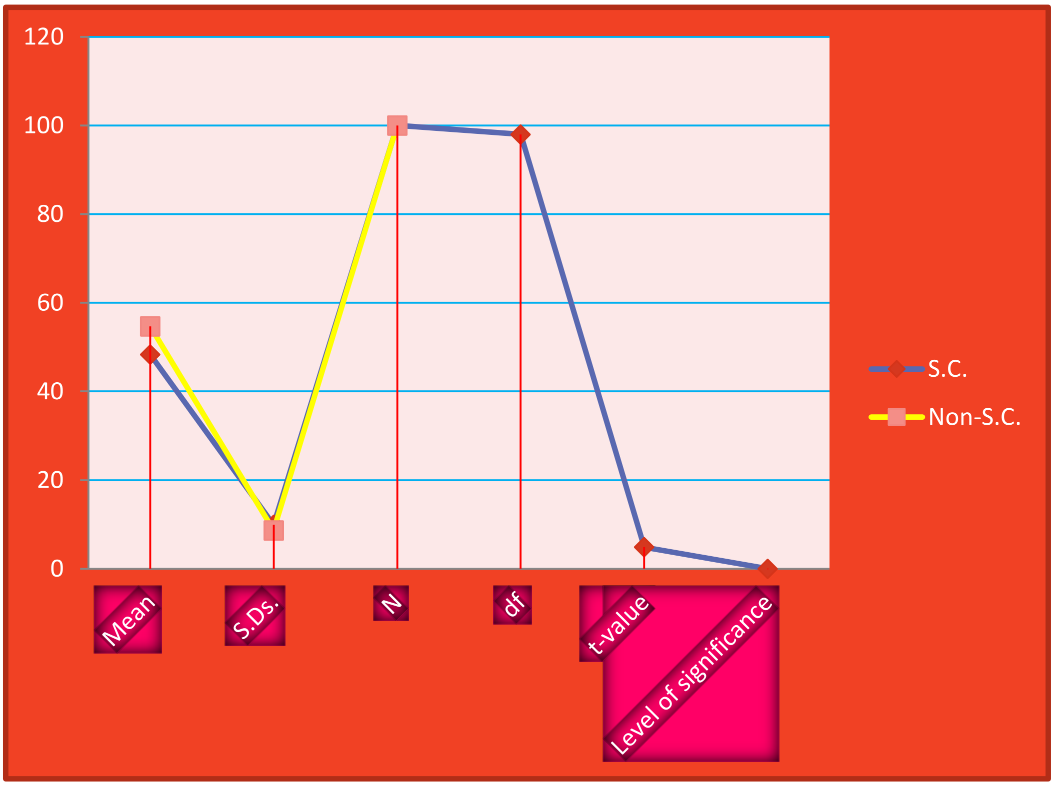
HYPOTHESIS – I

The mean educational aspiration scores of the two groups with S.Ds. and t-ratio are presented in Table-1
Table 1:-

Showing Mean, S.DS. And 't' ratio of EA scores of Scheduled and Non-Scheduled Groups

Groups	Mean	S.Ds.	N	df	t-value	Level of significance
S.C.	48.32	9.92	100	98	4.88	.01
Non-S.C.	54.67	8.68	100			

Figure : 1



HYPOTHESIS – II

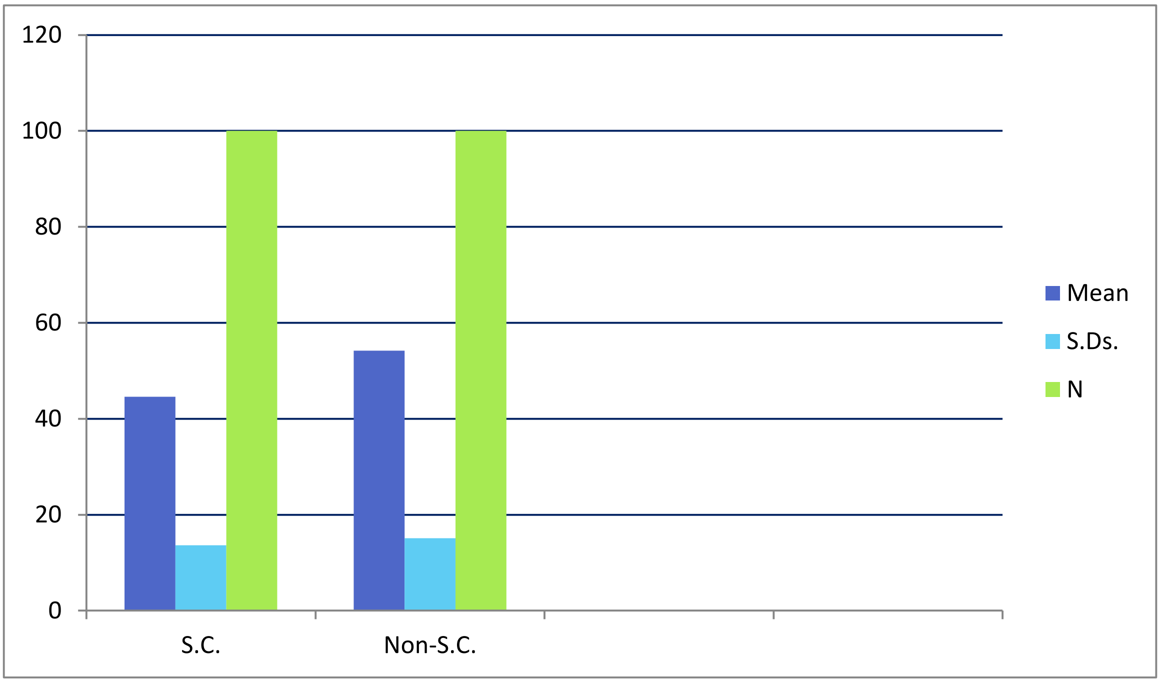
The mean raw General Intelligence Scores of the two groups with S.Ds. and t-ratio are presented in Table- 2

Table – 2 :

Showing Mean, S.DS. and 't' ratio of RGI scores of Scheduled and Non-Scheduled Groups

Groups	Mean	S.Ds.	N	df	t-value	Level of significance
S.C.	44.58	13.61	100	198	4.76	.01
Non-S.C.	54.21	15.10	100			

Figure : 2



HYPOTHESIS – III

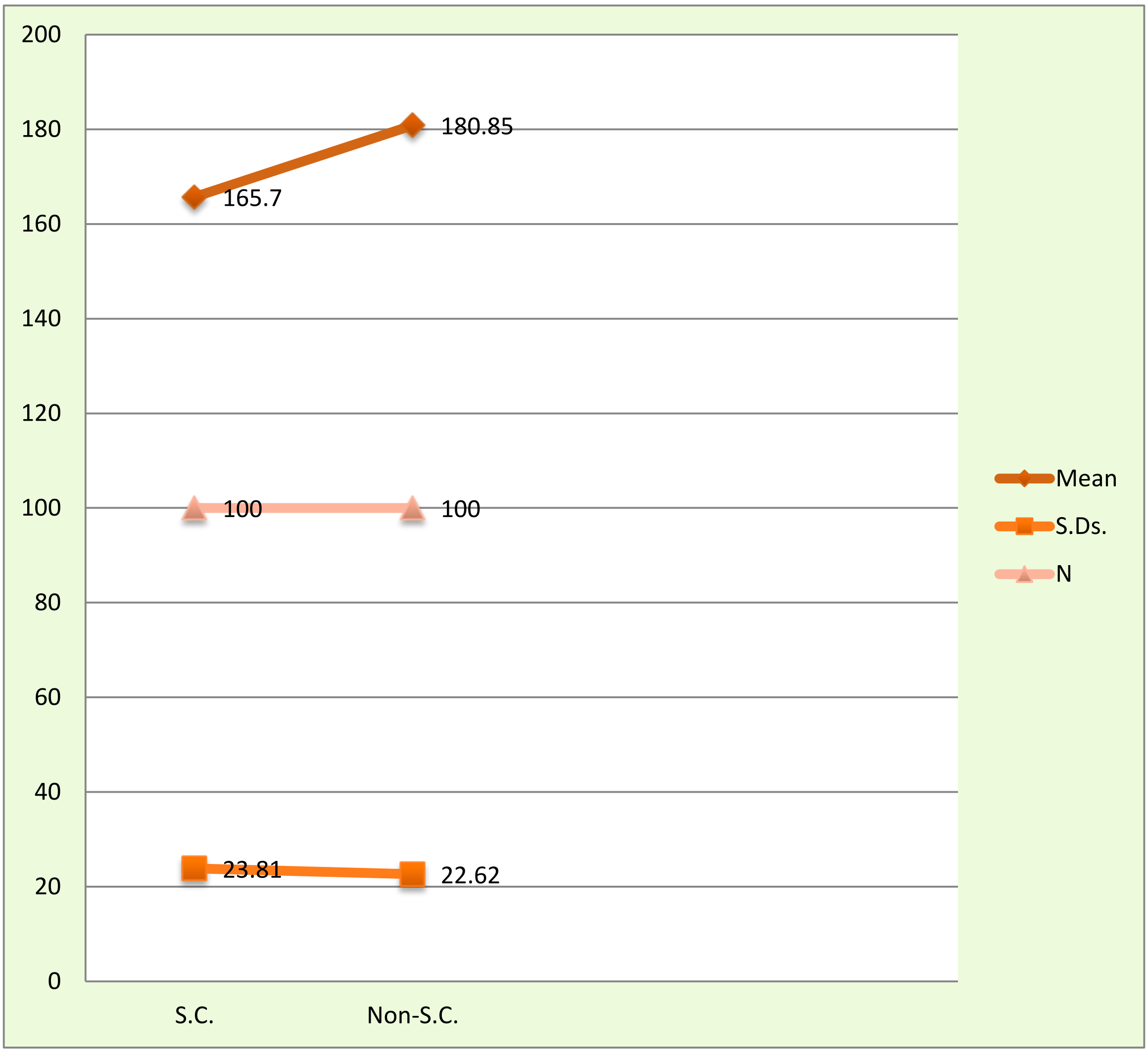
The mean self-concept scores of the two groups with S.Ds. and t-ratio are presented in Table-3.

Table – 3 :

Showing Mean, S.DS. and 't' ratio of Self-concept scores of Scheduled and Non-Scheduled Groups

Groups	Mean	S.Ds.	N	df	t-value	Level of significance
S.C.	165.70	23.81	100	198	4.61	.01
Non-S.C.	180.85	22.62	100			

Figure : 3



HYPOTHESIS – IV

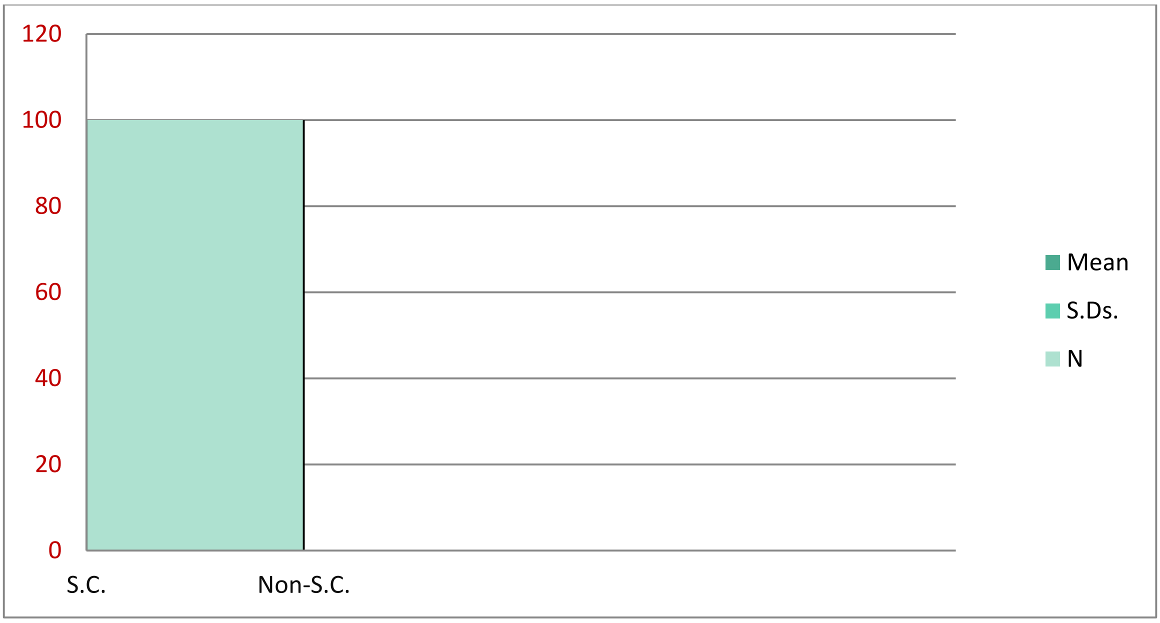
The mean locus of control scores of the two groups with S.Ds. and t-ratio are presented in Table- 4

Table – 4:

Showing Mean, S.DS. and 't' ratio of Locus of Control scores of Scheduled and Non-Scheduled Groups

Groups	**Mean**	**S.Ds.**	**N**	**df**	**t-value**	**Level of significance**
S.C.	61.84	9.18	100	198	1.08	.01
Non-S.C.	55.74	10.28	100			

Figure : 4



CONCLUSION:

Cultural-social advantage and disadvantage has been found significantly influencing educational aspiration, intelligence, self-concept and locus of control. The Cultural-social advantage has been found significantly raising levels of educational aspiration, intelligence, self-concept and internal locus of control.

Scheduled caste group has been found significantly lower than non-scheduled caste group on educational aspiration. The mean educational aspiration score of scheduled caste group is 48.32 while that of non-scheduled caste group is 54.67. The obtained 't' ratio for testing the significance of difference between these two mean scores has been found high significant. Socio-culturally disadvantaged group i.e. scheduled caste group has been found equipped with lower levels of intelligence, self-concept and internal locus of control which in turn might have lowered the level of educational aspiration of this group in comparison to socio-culturally advantaged group i.e. non-scheduled caste group.

The studies of final conclusions are following:

- Educational aspiration, intelligence, self-concept and locus of control of scheduled caste girl students are influenced by their cultural-social environment.
- Scheduled caste girl students are significantly lower on educational aspiration than non-scheduled caste girl students.
- Scheduled caste girl students are significantly lower on intelligence than non-scheduled caste girl students.
- Scheduled caste girl students are significantly lower on self-concept than non-scheduled caste girl students.
- Scheduled caste girl students are significantly lower on orientation towards internal locus of control than non-scheduled caste girl students.

- Scheduled caste girl students are significantly lower on orientation towards internal locus of control than non-scheduled caste girl students.

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Risk perception and Investment Strategy

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Abstract : The interaction between risk perception and investment strategy is a critical factor in shaping decision-making processes within financial markets. This paper delves into the intricate relationship between individuals' cognitive biases, emotional responses, and cultural backgrounds, and how these factors collectively influence the way risks are perceived and subsequently incorporated into investment strategies. By analyzing key theories such as Prospect Theory, Behavioral Portfolio Theory, and the impact of demographic variables, this study aims to uncover the underlying mechanisms that guide investors' risk perceptions and their implications for portfolio construction and asset allocation. The practical significance of aligning investment advice with clients' risk preferences, as well as future directions such as neurofinance and the role of AI in personalized investment strategies, are also explored. Ultimately, understanding the interplay between risk perception and investment strategy is paramount in achieving optimal financial outcomes and fostering informed decision-making in an ever-evolving financial landscape.

Keywords: Risk perception, investment strategy, cognitive biases, emotional responses, Prospect Theory, Behavioral Portfolio Theory, asset allocation, financial decision-making, personalized investment advice, neurofinance, artificial intelligence.

INTRODUCTION :

Risk perception plays a pivotal role in shaping investment strategies, as investors' perceptions of risk directly influence their decision-making processes in financial markets. Understanding how individuals perceive and assess risk is crucial for both investors and financial professionals, as it can greatly impact portfolio construction, asset allocation, and overall investment outcomes. This paper delves into the intricate relationship between risk perception and investment strategy, exploring the psychological and cognitive factors that shape investors' risk perceptions and their subsequent investment choices.

Researchers have long recognized that risk perception is not solely determined by objective measures of risk, such as volatility or historical performance. Instead, it is a complex interplay of psychological, emotional, and cognitive factors that vary from person to person. Studies by Tversky and Kahneman (1979) demonstrated that individuals often exhibit cognitive biases, such as loss aversion and overestimation of rare events, which can distort their perception of risk. These biases lead investors to perceive higher levels of risk than might be objectively present, influencing their asset allocation decisions toward safer investments, even when it might not be optimal from a portfolio diversification standpoint.

Cultural and demographic factors affecting Risk perception

Moreover, cultural and demographic factors also play a role in shaping risk perception. Studies by Weber and Hsee (1998) revealed that cultural backgrounds can significantly impact how individuals perceive and tolerate risk. Similarly, age, income, and educational level have been found to influence risk perception and subsequent investment behavior (Fisher and Statman, 2003). Younger individuals might exhibit a higher risk tolerance, while older investors might become more risk-averse as they approach retirement.

Understanding the dynamics of risk perception can guide the design of effective investment strategies. For instance, financial advisors can tailor their recommendations based on clients' individual risk profiles, taking into account not only their financial goals but also their psychological biases and risk preferences. Behavioral finance research, pioneered by Thaler (1980), has shown that acknowledging and accommodating these biases can lead to more rational investment decisions and improved overall portfolio performance.

Importance of risk perception in investment decisions:

The importance of risk perception in investment decisions lies in its profound influence on how investors evaluate and manage potential risks and rewards associated with various investment opportunities. This perception shapes investors' behavior, guiding their asset allocation choices, risk tolerance, and overall investment strategies. By understanding the cognitive, emotional, and psychological factors that contribute to risk perception, investors and financial professionals can make more informed decisions that align with their financial goals and risk preferences.

Studies in the field of behavioral finance have emphasized that individuals do not always make rational and objective decisions when it comes to investing. Instead, their decisions are often influenced by biases, heuristics, and emotions. One pivotal work in this area is Daniel Kahneman and Amos Tversky's Prospect Theory, presented in their seminal paper "Prospect Theory: An Analysis of Decision under Risk" (1979). This theory explains how individuals perceive potential gains and losses asymmetrically and how their decision-making is impacted by this perceived risk.

Loss aversion, a central component of Prospect Theory, highlights that people tend to feel the pain of losses more intensely than the pleasure of gains. This phenomenon can lead to risk aversion, where individuals make conservative investment choices to avoid potential losses, even if it means missing out on potential gains. The cognitive bias of loss aversion has direct implications for portfolio construction and asset allocation. Research by Hersh Shefrin and Meir Statman ("Behavioral Portfolio Theory," 2000) further expands on these biases, showing how they affect investment decisions and preferences.

Availability heuristic

Furthermore, the phenomenon of "availability heuristic," as described by Kahneman and Tversky, implies that people often base their judgments on the readily available information or recent events. In the context of investments, this means that individuals might overestimate the likelihood of rare but highly publicized events, leading to an overly cautious approach or avoidance of certain investment opportunities. This bias can impact decisions related to higher-risk investments, such as stocks.

Emotions

Emotions also play a significant role in risk perception. Anxiety, fear, and excitement can cloud judgment and lead to suboptimal investment choices. For instance, during periods of market volatility, investors might react emotionally and hastily sell off investments rather than sticking to a well-thought-out strategy.

Importance of Risk perception

Understanding the importance of risk perception has practical implications for both individual investors and financial professionals. Financial advisors can better serve their clients by acknowledging and addressing their clients' psychological biases and emotions. By providing education and guidance that align with clients' risk perceptions and financial goals, advisors can help clients avoid rash decisions driven by fear or greed.

Theories related to risk perception

- **Prospect Theory:**

Prospect Theory, formulated by Daniel Kahneman and Amos Tversky in their paper "Prospect Theory: An Analysis of Decision under Risk" (1979), explains how people evaluate potential gains and losses relative to a reference point. This theory highlights the asymmetry between gains and losses, suggesting that individuals are more sensitive to losses than to equivalent gains. Prospect Theory introduces concepts such as "loss aversion" and "risk-seeking in losses," which have profound implications for risk perception and decision-making in investments.

- **Portfolio Theory:**

Developed by Hersh Shefrin and Meir Statman, Behavioral Portfolio Theory (BPT) expands on the insights from Prospect Theory to explore how behavioral biases influence portfolio construction and asset allocation. BPT integrates psychological factors, such as loss aversion and mental accounting, into traditional portfolio theory, recognizing that investors' preferences and behaviors deviate from the assumptions of rationality.

- **Regret Theory:**

Regret Theory, proposed by Graham Loomes and Robert Sugden, focuses on the anticipation of regret in decision-making. This theory posits that individuals make choices to minimize potential future regret. Regret aversion can lead to suboptimal decisions, as individuals may avoid actions that could result in perceived regret, even if those actions have higher expected outcomes.

- **Cumulative Prospect Theory:**

An extension of Prospect Theory, Cumulative Prospect Theory incorporates the impact of cumulative outcomes over time. It introduces concepts such as "probability weighting" and "diminishing sensitivity" to describe how individuals adjust their perception of risk and probability when making decisions involving multiple stages or periods.

- **Dual-Process Theory:**

Dual-Process Theory suggests that decision-making involves two cognitive processes: intuitive, automatic, and emotional thinking (System 1), and analytical, deliberate, and logical thinking (System 2). This theory, popularized by Daniel Kahneman in his book "Thinking, Fast and Slow," explains how individuals alternate between these systems to process information and make decisions, including those related to risk perception.

These theories collectively provide insights into how individuals perceive and respond to risk in investment decisions. They acknowledge that people's attitudes toward risk are shaped by cognitive biases, emotional responses, and heuristics, rather than purely rational assessments. By understanding these theories, investors and financial professionals can develop strategies that consider the complexities of human decision-making in uncertain environments.

REVIEW OF LITERATURE

A comprehensive review of the literature on risk perception and investment strategy reveals the intricate relationship between psychological factors, decision-making biases, and investment choices. This synthesis of existing research underscores the significance of understanding how individuals perceive risk and the subsequent impact on formulating effective investment strategies.

Psychological Factors Influencing Risk Perception:

Numerous studies have investigated the role of psychological factors in shaping risk perception. Research by Tversky and Kahneman ("Prospect Theory: An Analysis of Decision under Risk," 1979) demonstrates that cognitive biases like loss aversion and the framing effect greatly influence how individuals assess risks and make decisions. Loss aversion, in particular, leads individuals to perceive losses as more significant than gains, influencing them to adopt risk-averse stances in investment decisions. Similarly, the availability heuristic (Kahneman & Tversky, 1973) prompts individuals to overestimate the likelihood of events based on their recent prominence, impacting their perception of risk.

Cultural and Demographic Variability in Risk Perception:

Studies by Weber and Hsee ("Cross-Cultural Differences in Risk Perception, but Cross-Cultural Similarities in Attitudes Towards Perceived Risk," 1998) highlight that cultural backgrounds play a significant role in shaping risk perception. Individuals from different cultural contexts perceive and tolerate risk differently, impacting their investment strategies. Additionally, demographic factors such as age, income, and education influence risk perception (Fisher & Statman, 2003). Younger individuals might exhibit greater risk tolerance, while older investors might prioritize wealth preservation.

Behavioral Biases and Investment Strategies:

Behavioral biases significantly impact investment strategies. Research by Shefrin and Statman ("Behavioral Portfolio Theory," 2000) extends traditional portfolio theory by incorporating psychological biases into decision-making. The phenomenon of herding behavior (Bikhchandani, Hirshleifer, & Welch, 1992) reveals how investors often follow the crowd rather than independently assessing risks and potential rewards, leading to market inefficiencies.

Risk Perception and Asset Allocation:

Risk perception strongly influences asset allocation decisions. Studies by Statman ("How Much Risk Is Right for You?," 2002) emphasize the importance of aligning investment portfolios with investors' risk tolerance. The disparity between objective risk measures, such as standard deviation, and subjective risk perceptions plays a crucial role in determining asset allocation choices. Investors may favor low-risk assets to align with their perception of safety, even if a more diversified approach would be beneficial.

Behavioral Finance and Practical Implications:

Behavioral finance research, as pioneered by Thaler ("Toward a Positive Theory of Consumer Choice," 1980), provides insights into how acknowledging and accommodating behavioral biases can lead to more rational investment decisions. Financial advisors can leverage these insights by customizing investment strategies to suit clients' risk preferences and by providing education on cognitive biases.

In conclusion, the literature review highlights the multidimensional nature of risk perception and its pivotal role in investment strategy. Psychological biases, cultural influences, demographic factors, and behavioral tendencies all contribute to how individuals perceive and respond to risk. These insights offer a foundation for financial professionals to craft tailored investment strategies that address clients' psychological biases, thereby improving decision-making processes and enhancing overall portfolio performance.

IMPLICATIONS OF THE THEORIES IN CONTEXT TO INVESTMENT STRATERGY:

These theories have profound implications for investment strategy, as they shed light on the cognitive and psychological factors that influence how individuals perceive and respond to risk in investment decisions.

Prospect Theory:

Prospect Theory's insights into loss aversion and risk-seeking in losses have direct relevance to investment strategy. Investors are more sensitive to potential losses than gains, leading them to make cautious decisions to avoid losses. This can result in a preference for safer, lower-risk investments and an aversion to taking on higher-risk assets, even if the potential returns are attractive.

Behavioral Portfolio Theory:

Behavioral Portfolio Theory recognizes that investors' decisions are influenced by cognitive biases, leading them to deviate from the rational assumptions of traditional portfolio theory. This theory underscores the importance of aligning investment strategies with investors' psychological tendencies. Strategies that consider loss aversion, mental accounting, and other behavioral biases can result in more tailored portfolio constructions that better suit investors' preferences.

Regret Theory:

Regret Theory highlights the significance of anticipated regret in investment decisions. Investors might avoid making certain choices to minimize potential future regret, even if those choices offer higher expected returns. This aversion to regret can lead to suboptimal decisions, such as sticking with familiar investments rather than exploring new opportunities.

Cumulative Prospect Theory:

Cumulative Prospect Theory's concepts of probability weighting and diminishing sensitivity influence how investors perceive risk across multiple investment stages. Investors might become more risk-averse when faced with repeated losses or increased uncertainty, leading them to adjust their investment strategies accordingly.

Dual-Process Theory:

Dual-Process Theory suggests that investors alternate between intuitive and analytical thinking when making investment decisions. Recognizing these two modes of thinking can help investors strike a balance between impulsive choices driven by emotions (System 1) and deliberate, rational decisions based on careful analysis (System 2).

Incorporating these theories into investment strategies involves understanding investors' behavioral biases and tailoring approaches to accommodate them. Financial advisors can educate clients about the impact of these biases, helping them make more informed and rational decisions. Portfolio diversification, risk management techniques, and the consideration of individuals' risk preferences are all influenced by these theories, ultimately contributing to more effective investment strategies that align with investors' psychological tendencies.

COMPARISON OF OBJECTIVE MEASURES OF RISK:

Comparing objective measures of risk, such as volatility and standard deviation, with individuals' subjective perceptions of risk reveals the complex interplay between quantitative metrics and psychological factors in the realm of investment decisions.

Objective Measures of Risk:
Objective measures of risk, such as volatility and standard deviation, provide quantifiable metrics to assess the potential variability of investment returns over a specified period. These metrics are rooted in statistical analysis and offer a standardized way to evaluate the historical performance and potential future fluctuations of an investment. For instance, volatility quantifies the dispersion of returns around the mean, providing insights into the potential ups and downs an investment might experience.

Subjective Perceptions of Risk:
On the other hand, individuals' subjective perceptions of risk are influenced by cognitive biases, emotions, and personal experiences. Research by Daniel Kahneman and Amos Tversky ("Prospect Theory: An Analysis of Decision under Risk," 1979) demonstrates that individuals do not perceive risk solely based on statistical probabilities; instead, their risk perceptions are often shaped by the potential gains or losses associated with an investment. This subjective assessment of risk can lead investors to overestimate the likelihood of rare, highly publicized events (availability heuristic) or to feel the impact of losses more acutely than equivalent gains (loss aversion).

Synthesis and Implications:
The disjunction between objective risk measures and subjective risk perceptions can lead to disparities in investment decisions. Investors might shy away from investments with higher objective risk metrics, such as stocks, due to their perception of risk as driven by potential losses. Alternatively, they might be drawn to investments with lower risk metrics, even if those investments offer lower expected returns, because they feel more comfortable and secure with them.

Recognizing and addressing this discrepancy is crucial for financial professionals and advisors. Effective communication about investment risks, aligning investment strategies with clients' risk preferences, and educating investors about the limitations of cognitive biases are vital steps. Acknowledging that individuals' risk perceptions might diverge from objective measures helps advisors tailor investment recommendations that consider both the quantitative aspects of risk and the psychological factors that shape investors' decision-making.

PRACTICAL IMPLICATIONS AND FUTURE DIRECTIONS OF RISK PERCEPTION AND INVESTMENT STRATERGY

The exploration of risk perception and its impact on investment strategy holds valuable practical implications for investors, financial advisors, and researchers. Additionally, identifying potential future directions in this field is essential to further enhance decision-making processes and develop more nuanced investment strategies.

Tailored Investment Advice: Financial advisors can leverage insights from risk perception research to provide personalized investment advice. By understanding clients' cognitive biases and risk preferences, advisors can guide clients toward strategies that align with their individual comfort levels and financial goals.

Behavioral Coaching: Financial professionals can play a crucial role in behavioral coaching. Educating investors about common cognitive biases, such as loss aversion and herding behavior, helps them make more informed and rational decisions. This coaching can prevent impulsive reactions during market volatility.

Communication Strategies: Effective communication is key. Advisors can use language and visual aids that resonate with clients' risk perceptions. Communicating potential outcomes using relatable scenarios can help bridge the gap between objective risk measures and investors' subjective understanding.

Diversification Strategies: Understanding that investors tend to overestimate the likelihood of rare events can inform diversification strategies. Advisors can help clients avoid excessive concentration in a single asset class, thus mitigating the impact of such biases.

Long-Term Focus: Recognizing that risk perceptions may fluctuate due to emotions and market conditions, advisors can emphasize the importance of maintaining a long-term investment perspective. This can help investors weather short-term market fluctuations without making impulsive decisions.

FUTURE DIRECTIONS:

Neurofinance: Investigating the neurological basis of risk perception through neurofinance can provide deeper insights into how the brain processes risk-related information. This field may reveal novel strategies for managing emotional biases and improving investment decisions.

Robo-Advisors and AI: The integration of artificial intelligence and robo-advisors in investment management offers opportunities to tailor strategies based on real-time risk perception data. These technologies can adapt strategies dynamically to align with investors' changing perceptions.

Environmental, Social, and Governance (ESG) Investing: The growing importance of ESG factors in investment decisions introduces a new dimension of risk perception. Future research could delve into how investors' perceptions of environmental and social risks impact their investment choices.

Cross-Cultural Studies: Comparative studies of risk perception across cultures can provide insights into how cultural backgrounds influence risk attitudes and behaviors. This can guide global investment strategies and cross-cultural advisory approaches.

Online Investment Platforms: Analyzing how risk perception is affected by online investment platforms, including social media discussions and digital investment communities, can offer insights into how online interactions shape investor behavior.

CONCLUSION :

In conclusion, the practical implications and future directions of risk perception in investment strategy highlight the importance of acknowledging psychological biases and tailoring strategies accordingly. By leveraging research insights and technological advancements, the field of finance can enhance decision-making processes, empower investors, and contribute to more effective and adaptable investment approaches.

In conclusion, the intricate interplay between risk perception and investment strategy underscores the complexity of decision-making in financial markets. The literature reviewed underscores that risk perception is not solely determined by objective measures of risk, but rather influenced by a multitude of cognitive biases, emotional responses, cultural backgrounds, and individual characteristics. These psychological factors can lead to deviations from rational decision-making, often resulting in suboptimal investment choices.

The importance of recognizing and addressing these biases cannot be overstated. Financial professionals must navigate the delicate balance between quantitative risk assessments and the subjective perceptions that investors hold. Practical implications include tailored investment advice, behavioral coaching, and effective communication strategies. By acknowledging and accommodating these biases, advisors can guide investors towards strategies that align with their risk preferences while promoting long-term financial objectives.

The future directions in this field hold significant promise. The exploration of neurofinance, the integration of AI-driven robo-advisors, and the consideration of ESG factors all promise to refine our understanding of risk perception and enhance the accuracy of investment strategies. Additionally, cross-cultural studies and investigations into the influence of online investment platforms offer insights into the evolving landscape of financial decision-making.

In a world where markets are shaped not only by quantitative indicators but also by human perceptions and behavior, recognizing the intricate dance between risk perception and investment strategy is crucial. By embracing a holistic understanding of how psychology influences investment decisions, financial professionals can navigate market complexities and guide investors toward more informed and rational choices, ultimately leading to more robust and adaptive investment strategies.

As financial markets continue to evolve, the symbiotic relationship between risk perception and investment strategy will remain a dynamic area of study, fueling ongoing research, innovation, and strategies that align with the complexities of human decision-making in the financial realm.

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Moral Value and Causes, Consequences of Migration

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Abstract: The word moral comes from the Latin word 'Mors', which means custom or practice or a way of accomplishing things. Therefore it has come to mean 'belonging to manners and conduct of men' or 'pertaining to right and wrong, good in conduct'. Morality is the conformity to the moral code of social group. It is the internalization of a set of values, virtues, and ideas sanctioned by the society which becomes an integral part of the individual self through the process of development. It is considered a sum total of an individual's way of behaving which is judged in terms of ethical rightness or wrongness. Hence the ability to make moral judgement plays an important facet of the total development of the child. Moral judgement involves the cognitive capacity and insight to see the relationship between the abstract principle and concrete cases and judge the situations as right or wrong, keeping in view the knowledge of moral standards.

Migration is, first and foremost, a normal human activity. Human beings have always moved from 'one country, locality, and place of residence to settle in another'. We tend to migrate from the homes of our families or guardians into our own homes. We migrate between regions, cities and towns. And we also migrate between countries. Migration caused by environmental factors is increasingly involuntary. Environmental factors cause displacement or the forced movement of people by social or environmental factors. Crop failure for example, often results in both food scarcity and a drop in agricultural jobs, prompting people to move to a place with better job opportunities and climate. Pollution of water, air and soil in both urban and rural settings can also create a serious health risk to locals, forcing them to look for a better life for themselves and their children.

Migration changes the resource population ratio. If the people are moving from an over populated area to an area of under population the result is in the balancing of the resource-population ratio. If the migration is from an area of under population to over population or optimal populated, the results are harmful to both the areas. Migration affects the occupational structure of population. The population of receiving areas becomes more productive causing dependency ratio in the source areas. Brain drain is another consequence of migration. Skilled people migrate from poorer countries to developed countries in search of better economic opportunities. People migrating out send remittance to their families at home and add to economic prosperity.

Key Words: Moral, Morality, Value, Migration, population, Environment, rural, urban.

INTRODUCTION:

Migration is a way to move from one place to another in order to live and work. Movement of people from their home to another city, state or country for a job, shelter or some other reasons

is called migration. Migration from rural areas to urban areas has increased in past few years in India.
Migration is, first and foremost, a normal human activity. Human beings have always moved from 'one country, locality, [and] place of residence to settle in another'. We tend to migrate from the homes of our families or guardians into our own homes. We migrate between regions, cities and towns. And we also migrate between countries.

Moral Value:
Moral value are evaluations or opinions formed as to whether some action or inaction, intention, motive, character trait, or a person as a whole is (more or less) good or bad as measured against some standard of Good. The moral value of actions (or inaction) are usually the primary focus of any discussion of Moral developments in particular and Ethical analysis in general. This is because the development of intentions, character traits, and persons are generally based on the judgment of actions that the intention, motive, character trait, or person might potentially do or not do. What distinguishes moral value from non moral development is the context of the statement. Philosophy, and particularly Ethics, differs from the sciences in one very important way. All of the sciences, both 'hard' and "Soft', deal with descriptions of Reality. They purport to describe in varying levels of detail, what **is** about Reality. Ethics, on the other hand, is that branch of Philosophy that describes what one **ought**. All of the various philosophers, in all of their various works on Ethics, are detailing what you "Should" do or how things "Should" be, not what is. In answer to the questions "What should I do?" or "What is the 'right' thing to do?", ethics answers "You should do what you 'ought' to!" So moral judgments are judgments about what one "ought" to do (or not do), or have done (or not done). This paper focuses on Moral value in education system, Rationale of the Study UNESCO report (1972), the International Commission on the Development of Education, need and importance of Moral Value at West Tripura, Tripura in India.

We often hear, "Ekk naari padhegi, saat peedhi taregi".
Education is globally acknowledged as the most powerful means of empowering girls and women and protecting them from the violation of their human rights. Investing in girls' and women's education can transform, and even save, lives—the lives of girls and women, and the lives of their families and communities. It is one of the most effective ways to achieve positive, sustainable change in the world, for everyone. Education sets in motion a virtuous spiral: girls and women gain greater knowledge, skills, self-confidence and capabilities, improving their own life prospects—and, in turn, an educated woman provides better nutrition, health care, and education for her family. Education enables a woman to take greater control of her life and gain inclusion in decision-making processes, which unleashes her potential to contribute socially and economically to her family's and community's wellbeing. Yet, today, millions of girls and women across the world live in debilitating poverty and are denied their right to education and two thirds of the world's illiterate adults are women.

The theory which most directly inspired the research on moral value has been that of Swiss psychologist, Jean Piaget (1928, 1932) who endeavoured to interpret the child's concept of moral rules. He attempted to test children's moral judgement towards intentional and unintentional wrong-doing and described six types of moral thoughts which appeared in children of different age groups. More recently, studies on moral judgement have been conducted by Kohlberg(1968), in which he asked the children to judge the morality of conduct as described in the stories.

Different Educational Commissions and committees in our country have expressed their deep concern over the declining values in human activities and emphasized on providing value oriented education. The National Policy on Education-1986 has categorically stated "The growing concern over erosion of essential values has brought to focus the need for readjustment in the curriculum in order to make education a forceful tool for the cultivation of moral and social values". The Education Commission of 1964-66 has noted, "A serious defect in the school curriculum is the absence of provision for education in social, moral and spiritual values. In the life of the majority of Indians, religion is a great motivating force and is intimately bound up with the formation of character and inculcation of ethical values. A national system of education related to life needs and aspirations of the people cannot afford to ignore this purposeful force". Thus concerns are being expressed to inculcate right moral values in our present generation.

Meaning & Concept of Morality:

The word moral comes from the Latin word 'Mors', which means custom or practice or a way of accomplishing things. Therefore it has come to mean 'belonging to manners and conduct of men' or 'pertaining to right and wrong, good in conduct'. Morality is the conformity to the moral code of social group. It is the internalization of a set of values, virtues, and ideas sanctioned by the society which becomes an integral part of the individual self through the process of development. It is considered a sum total of an individual's way of behaving which is judged in terms of ethical rightness or wrongness.

Meaning of Moral Development: Hemming in his book, "The Development of Children's Moral Values' writes, "Moral development is the process in which the child acquires the values esteemed by his community, acquires a sense of right and wrong in terms of these values, learns to regulate his personal desires and compulsions so that, when a situational conflict arises, he does, what he ought to do rather than what he wants to do. Moral development is the process by which a community seeks to transfer the egocentricity of the baby into the social behaviour of the mature adult."

Moral development includes moral behaviour and moral concepts:

Moral behaviour: Moral behaviour means behaviour in conformity with the moral code of the social group. The term 'Moral' comes from the Latin word 'mores' meaning manners, customs and folkways. Moral behaviour not only conforms to social standards but also it is carried out voluntarily. It is always accompanied by a feeling of responsibility for one's acts. It involves giving primary consideration to tile welfare of l he group and considering personal gain or desires as having secondary importance.

Moral concepts: Moral concepts arc the rules of' behaviour to which the members of a culture become accustomed and which determine the expected behaviour patterns of all group members.

Meaning of Moral Judgment: Moral judgments are evaluations or opinions formed as to whether some action or inaction, intention, motive, character trait, or a person as a whole is (more or less) good or bad as measured against some standard of Good. The moral judgments of actions (or inaction) are usually the primary focus of any discussion of Moral Judgments in particular and Ethical analysis in general. This is because the judgments of intentions, character traits, and persons are generally based on the judgment of actions that the intention, motive, character trait, or person might potentially do or not do.

What distinguishes moral judgments from non moral judgments is the context of the statement. Philosophy, and particularly Ethics, differs from the sciences in one very important way. All of the sciences, both 'hard' and "Soft', deal with descriptions of Reality. They purport to describe in varying levels of detail, what **is** about Reality. Ethics, on the other hand, is that branch of Philosophy that describes what one **ought**. All of the various philosophers, in all of their various works on Ethics, are detailing what you "Should" do or how things "Should" be, not what is. In answer to the questions "What should I do?" or "What is the 'right' thing to do?", ethics answers "You should do what you 'ought' to!" So moral judgments are judgments about what one "ought" to do (or not do), or have done (or not done).

Types of Moral Value:

We can group moral judgments into two broad classes. There are "before-the-fact" moral judgments, and there are "after-the-fact" moral judgments. Before-the-fact judgments are those made before the action (or inaction) takes place. They are made based on the best information available at the time as to what the moral landscape holds and what its future shape will be. These are judgments about what you "ought to do (or not do) and whether what you are planning to do (or not do) is Good or Bad. After-the-fact moral judgments are made after the action (or inaction) has taken place, and are based on 20/20 hindsight view of the actual consequences. These are judgments about what you "ought to have done (or not done)", and whether your actual actions were Good or Bad.

A second major distinction of moral judgments is that they can only be made of an agent with the freedom or will to choose. Moral judgments are judgments of certain choices, or potential choices, where the one who chooses is aware that there is a choice, and has the capability to choose. A person who cannot do other than what was done, is not subject to moral judgment. But if a person has the freedom to choose alternatives, then that person's intentional, or unintentional actions or inaction can be subject to moral judgments. This argument is the ethical basis of the "Insanity" defence. The insanity defence argues that the accused cannot be considered guilty because the accused was unable to make a choice of an alternate behaviour. The behaviour exhibited was "unavoidable". This line of reasoning is never too successful when it is applied to the average human, with an average degree of intelligence. But it is the reason we do not make moral judgments about what a falling tree does on its way down. If the tree happens to kill someone, we don't judge that the tree "ought not to have done that" because the tree had no other alternative.

The third important distinction is knowledge. In order to be able to make a choice, we have to be aware that there are alternatives. If our knowledge about our current situation is thin, or our knowledge about how reality behaves is thin, then we might come to the conclusion that there are no better alternatives. We might make a choice that we believe is the correct one, but because our knowledge is thin, we overlook a better one. In such a case, we could make an after-the-fact judgment about what we ought to have done, if we had had better information, but any before-the-fact moral judgment we might make about what we did, has to be based on the knowledge available to us at that time.

Theories of Moral Value: Moral development is one of the most significant aspects of the personality development. It is a major task of society and education. Moral development proceeds along with social development. A person whose social development has been disturbed due to some, or the other reason, a person who is socially maladjusted develops immoral behaviour.

Immoral behaviour is that behaviour which fails to conform to social expectations. Such behaviour arises not due to ignorance of social aspect ions, but due to intentional disapproval of social standards or lack of feelings of obligation to conform. Similarly a person who has been deprived of opportunity to learn social standards or lack of feelings of obligation to conform. Similarly a person who has been deprived of the opportunity to learn social behaviour develops unmoral or non-moral behaviour. Unmoral or non moral behaviour arises due to ignorance of what the social group expects rather than intentional violation of the group's standards.

Review of Related Literature:

Tirri (1993) in her investigation on the moral concerns and orientations of 6th grade (N =100) and 9th grade (N =94) Finnish boys and girls students found that boys and girls differ in their main moral orientations in solving moral conflicts. The girls were shown to be more care oriented and emphatic. The girls differed from the boys in their reflection on the meanings of the conflicts in a broader context of life.

Baek (2002) conducted a study to find the moral reasoning of the students as influenced by their age and culture. A total of 128 Korean and British children aged 7-16 years were interviewed individually using Kohlberg's moral dilemmas from Form A. The study concluded with the passing of age, the children were able to take moral decision in a mature manner but for culture, it was concluded that Kohlberg's system could be used to examine British children's general moral stage but was insufficient to understand fully Korean children's moral reasoning.
Edwards (2006) carried out an investigation to ascertain how seven hundred children aged seven to fifteen (half boys and half girls), acquired the ability to define certain moral concepts, how they decided on whether an action was right or wrong, and what influenced the acquisition process. The samples claimed that their regular participation in church with family members had been a major influence in acquiring moral concepts.

Why do people migrate?

People migrate for many different reasons. These reasons can be classified as economic, social, political or environmental:

i. economic migration - moving to find work or follow a particular career path
ii. social migration - moving somewhere for a better quality of life or to be closer to family or friends
iii. political migration - moving to escape political persecution or war
iv. Environmental causes of migration include natural disasters such as flooding.

Some people choose to migrate, eg someone who moves to another country to enhance their career opportunities. Some people are forced to migrate, eg someone who moves due to war or famine. A refugee is someone who has left their home and does not have a new home to go to. Often refugees do not carry many possessions with them and do not have a clear idea of where they may finally settle.

Push and pull factors:

Push factors are the reasons why people leave an area. They include:

- lack of services
- lack of safety
- high crime
- crop failure

- drought
- flooding
- poverty
- war

Pull factors are the reasons why people move to a particular area. They include:

- higher employment
- more wealth
- better services
- good climate
- safer, less crime
- political stability
- more fertile land
- lower risk from natural hazards

Migration usually happens as a result of a combination of these push and pull factors.

Causes of Migration:

Nowadays, many people decide to migrate to have a better life. Employment opportunities are the most common reason due to which people migrate. Except this, lack of opportunities, better education, construction of dams, globalization, natural disaster (flood and drought) and sometimes crop failure forced villagers to migrate to cities.

Positive Impact:

- Unemployment is reduced and people get better job opportunities.
- Migration helps in improving the quality of life of people.
- It helps to improve social life of people as they learn about new culture, customs, and languages which helps to improve brotherhood among people.
- Migration of skilled workers leads to a greater economic growth of the region.
- Children get better opportunities for higher education.
- The population density is reduced and the birth rate decreases.

Negative Impact:

- The loss of a person from rural areas, impact on the level of output and development of rural areas.
- The influx of workers in urban areas increases competition for the job, houses, school facilities etc.
- Having large population puts too much pressure on natural resources, amenities and services.
- It is difficult for a villager to survive in urban areas because in urban areas there is no natural environment and pure air. They have to pay for each and everything.
- Migration changes the population of a place, therefore, the distribution of the population is uneven in India.
- Many migrants are completely illiterate and uneducated, therefore, they are not only unfit for most jobs, but also lack basic knowledge and life skills.
- Poverty makes them unable to live a normal and healthy life.
- Children growing up in poverty have no access to proper nutrition, education or health.
- Migration increased the slum areas in cities which increase many problems such as unhygienic conditions, crime, pollution etc. Sometimes migrants are exploited.

- Migration is one of the main causes of increasing nuclear family where children grow up without a wider family circle.

Root Causes of Migration:

i. Economic Factors

Economic migration, whether permanent or seasonal, is a commonly cited reason for migration. In general, it is believed that in economic migration people move from poorer developing areas into richer areas where wages are higher and more jobs are available[vi]. It is also common for people from rural areas to move to more competitive urban areas in order to find more opportunities.

ii. Environmental Factors

Migration caused by environmental factors is increasingly involuntary. Environmental factors cause displacement, or the forced movement of people by social or environmental factors.[viii] Crop failure for example, often results in both food scarcity and a drop in agricultural jobs, prompting people to move to a place with better job opportunities and climate.[ix] Pollution of water, air and soil in both urban and rural settings can also create a serious health risk to locals, forcing them to look for a better life for themselves and their children.

iii. Social Factors

Social factors motivating migration grow from the human needs and desires to achieve a better quality of life. Migrants often move to ensure better opportunities for themselves or their family, like sending their child to a better, safer school or finding a job that would have not only a sufficient salary, but also important benefits and career growth prospects. In terms of education, the United States graduate programs have been a particularly strong attraction for young, talented individuals around the world.[xiii] Individuals can also migrate in search of services, such as life-saving surgery and medical treatment that are inaccessible in their home area.

Consequences of migration:

Migration affects both the area of origin of migration and the areas of destination of the migrant population. The consequences of migration can be defined as.

i**. Demographic consequences**: Migration changes the characteristics of the population in regions of out migration and regions of in- migration. It changes age and sex composition of population with rate of growth of population. The proportion of old, children and females increases due to out- migration in source region. The high sex ratio is found in the source areas because mostly the youthful male population is involved in migration. Consequently, these areas are depleted of the youth population and results in lowered rates of births and lower population growth rates.

ii**. Social consequences:** Migration results in intermixing of diverse cultures and leads to the evolution of composite culture. It breaks the narrow thoughts and widens the mental horizon of the people. In history, India received migrants from different cultural groups causing different cultures but sometimes migration creates social vacuum and sense of dejection among individuals and people fall in crimes and drug abuse.

iii**. Economic consequences:** Migration changes the resource population ratio. If the people are moving from an over populated area to an area of under population the result is in the balancing of the resource- population ratio. If the migration is from an area of under population to over population or optimal populated, the results are harmful to both the areas. Migration affects the occupational structure of population. The population of receiving areas becomes more productive causing dependency ratio in the source areas. Brain drain is another consequence of migration. Skilled people migrate from poorer countries to developed countries in search of better economic opportunities. People migrating out send remittance to their families at home and add to economic prosperity.

iv. Environmental consequences: Large scale movement of people from rural to urban areas causes overcrowding in cities and puts heavy pressure on resources. It causes haphazard growth of cities and causes slums lacking basic infrastructural facilities such as safe drinking water, electricity, sewage etc. Overcrowding is also responsible for any environmental problems of air, water, land and noise pollution, disposable and management of solid wastes.

v Other consequences: Migration enhances remittances to the source region but causes heavy loss to human resource, in terms of skilled labour. Leg- behind women enjoy empowerment effects with increased interaction in society including their partnership as workers and decision making of households.

Conclusion:

Migration is the movement of people from one place to another. People move in search of employment, better educational and health facilities etc. The male migration constitutes the highest level of migration in India due to employment purpose. The female usually migrates as accompanists of males through several other factors like after marriage or family transfer. More people migrate to urban areas because small land holding, low income, low living standard, less agricultural productivity compels them to migrate in urban areas where diversification of economy and urbanization provides a lot of job opportunities. But overcrowding in cities causes many environmental problems such as land, water, and air pollution, over utilization of resources. So, there is a need to provide employment facilities in rural areas to minimize the rural to urban migration and to prevent to move to cities. A large percentage of the rural population should be able to make decent living through nonagricultural occupations. All basic amenities like roads, electricity, safe drinking water, health facilities (health centers), job opportunities in business and service sectors should be develop by the government in rural areas.

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