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Date: 21 – 22 October, 2023

Conference Special Issue - 45 October - 2023

Jointly Organized by:

Management Institute, The Warsaw University of Life Sciences, Poland
'Research Culture Society'
'International Scientific Research Organization'.
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International Conference on Business, Management, Social and Economical Advancements

(ICBMSEA – 2023)

Date: 21 – 22 October, 2023

Conference Special Issue - 45

The Managing Editor:

Dr. Chirag M. Patel

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(Conference Proceedings – Special Issue)

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Conference, Seminar, Symposium organization in association/collaboration with different Institutions.

Conference, Seminar, Symposium Publication with ISSN Journals and ISBN Books (Print / Online).

About the organizing Institutions:

The Warsaw University of Life Sciences (Management Institute) Poland, is one of the largest and the most prestigious universities in Poland. It educates nearly 18,000 students in 38 study programs (including 8 taught in English) - from veterinary medicine and landscape architecture, through economics and computer science, to tourism and dietetics. It employs 1,200 academic teachers and offers a modern campus and excellent learning conditions. The campus is located in the southernmost district of Warsaw, Ursynów. The campus has a historical part, with an 18th-century palace and a new part where most of the faculty buildings and dormitories are situated. The Management Institute was established in 2019. The research developed in this Institute is related to management, trust, knowledge management and information technology.

'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.

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

Objectives of the International Conference :

Our main objective is to observe the current scenario towards the advancement of common citizen's life by improving the theory and practice of various disciplines of Business, Management and Economy.

The aim of the conference is to provide an interaction stage for researchers, practitioners from academia and industries to deal with state-of-the-art advancement in their respective fields.

MESSAGE

Dear Ladies and Gentlemen,

Thank you for your attendance at International Conference on Business, Management, Social and Economical Advancements.

This year the Conference is organized by the Research Culture Society and the Management Institute from Warsaw University of Life Sciences in 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 progressive economy. The Conference will shed light on the consequences of the Coronavirus 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.

Message

Dear Professional Colleagues.

I am happy that Management Institute, Warsaw University of Life Sciences, Poland in collaboration with 'Research Culture Society' (Government Registered Scientific Research organization, India) are organizing 'International Conference on Business, Management, Social and Economical Advancements' during 21 – 22 October, 2023.

The aim of the conference is to provide an interaction stage for researchers, practitioners from academia and industries to deal with state-of-the-art advancement in their respective fields. The main objective is to observe the current scenario towards the advancement of common citizen's life by improving the theory and practice of various disciplines of Business, Management and Economy.

I believe, this International Conference will help in redefining the strong connect between commerce, management and economics education and the holistic development of students in the academic institutions. An additional goal of this international conference is to combine interests and scientific research related to business-economics 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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A study on the successful production and marketing of cabbage crops in Serchhip District Mizoram and its contribution to the annual income

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Abstract : *A study was conducted to emphasize on the production and marketing of cabbage crop in Serchhip District. Serchhip District in Mizoram is noted for its good quality and successful production of cabbage. The study aim at to show how the production and marketing of Cabbage crop contribute to the economy of Mizoram especially Serchhip District. Primary data is collected by means of giving questionnaire and personal interviews to the farmers, retailers and sellers. Secondary data has been obtained from relevant book publications and from related government departments such as Economics and Statistics Department, Agriculture Department, Horticulture Department, etc. According to the data released by Directorate of Economics and Statistics, Government of Mizoram in 2022, the state production of cabbage has reached 88530 metric tones. Serchhip has famous for its Cabbage production in Mizoram and the successful production and the crop quality encourage the farmer as well as the seller from all other places of Mizoram. The study examines the production and marketing of the present system and the possibility of advancing the system. The study reveals that there is a possibility of producing more cabbage from Serchhip. From studying the production and marketing of cabbage crops in Serchhip District from various angles, it can be concluded that Serchhip District is the story maker in producing Cabbage crops Mizoram State and the family income of the people and the growth of economy in the District depends upon the success stories of Cabbage production.*

Keyword*: Agriculture, cabbage, marketing, Mizoram, Serchhip.*

1. INTRODUCTION:

Cabbage is the principal horticulture crops produce from Serchhip District, Mizoram. Serchhip District is located in the heart of Mizoram and is famous for its fresh vegetable supply in Mizoram. During the outbreak of pandemic Covid 19 in 2000s, while the nation is mourning due to complete lockdown and shortage of supply. The state of Mizoram mostly depends on Serchhip District for getting fresh vegetables. To ensure supple of essential fruit and vegetables to the public during the lockdown due to pandemic Covid-19, the Government of Mizoram introduced the Vegetables and Fruits Supply Chain. This system helps the rural farmers in selling their vegetables and fruits and earning a better income. In this supply chain system, Serchhip District is main supplier of Vegetables and fruits in Mizoram and they sold 12569.72 quintals of Vegetables and Fruits and its total value is Rs 31395480/- which is the highest in Mizoram.

2. LITERATURE REVIEW

The term agricultural marketing is to be understood from the two words, viz., agriculture and marketing. Agriculture in its broadest sense comprises of all the farm activities, which use the natural resources for human welfare. On the other hand marketing comprises of all the economic activities involved in facilitating the flow of goods and services from production centre to consumption centre (Sjo John, 1976). It is marketing which helps making goods useful to the society by getting them where they are wanted, when they are wanted and by transferring them to those people who want them. Marketing in this sense has defined as, "all the activities involved in the creation of place, time and possession utilities" (Sinha, 1976)

About 75% of India's poor population lives in rural areas and 80% of them depend largely on agriculture for their livelihoods (Kohl's and Richard, 1961; Mohammed *et al.* 2007).

In Mizoram, agriculture is the main occupation of the people and more than 80% of the total populations are depending upon agriculture and allied activities. Mizoram has a good climate and soil and this encourage farmers to produce more crops in the field. The farmers does not depend not only on their rice production, they used to grow another winter crops in the field after harvesting of the rice. Many Rabbi Crops like Cabbage, Mustard and Bean etc are the principal secondary crops and among them, Cabbage is the largest production in the District.

The markets are dominated by the production of the local farmers. Among many crop productions, Cabbage crop is considered to be the largest contributor in Serchhip District, Mizoram. On 26th February 1995, some progressive farmers formed an association called, "Serchhip Vegetable Growers Association" and this association has been registered to the Government of Mizoram on 28th March 2012 with the name, 'Serchhip Agriculture and Horticulture Cooperative Society Ltd.', the association has approximately 190 registered members. Initially the members of this association start commercial production of the potential crops (i.e.,cabbage) in their own land. From the study of 25 familes, their average annual production has reached to about 2813quintals and suppose that the Society has member of 190, their annual production comes to 21378.8quintals which is against the total state production of 497200 quintals.

According to the survey data (Directorate of Economics and Statistics, Government of Mizoram), the state production of cabbage in 2017-2018 has reached to 49720 metric tonnes and this leads to a more achievements of 88530 in 2021-2022. Many of the production comes from a particular area called Zawlpui Zau under Serchhip district.

3. RESEARCH OBJECTIVES:

According to the data released by Directorate of Economics and Statistics, Government of Mizoram in 2022, the state production of cabbage has reached 88530 metric tones. Serchhip has famous for its Cabbage production in Mizoram and the successful production and the crop quality encourage the farmer as well as the seller from all other places of Mizoram. The study tries to examine the production and marketing of the present system and the possibility of advancing the system. The study reveals that there is a possibility of producing more cabbage from Serchhip. From studying the production and marketing of cabbage crops in Serchhip District from various angles, it can be concluded that Serchhip District is the story maker in

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producing Cabbage crops Mizoram State and the family income of the people and the growth of economy in the District depends upon the success stories of Cabbage production.

The objectives of this study is analyzing the cabbage marketing and production in Serchhip District and give a positive outcome and make suggestions for improving their system. This paper emphasize the study on how the sucessful production and marketing of Cabbage crops contributed to the economy; whether the marketing system at present satisfy the farmers and makes it encourage to produce more or not and study the problems faced by the farmers and land owners in the marketing of their production within the study area.

4. RESEARCH METHODS:

The area of the study Serchhip District is located in the central part of Mizoram and in this area; agriculture is the main source of their income (Fig. 2). Horticulture crops dominate the total production of this area and many families make their living by the income earned from their sale of horticulture crops like cabbage, bean, mustard, Pea, etc. The climate is pleasant

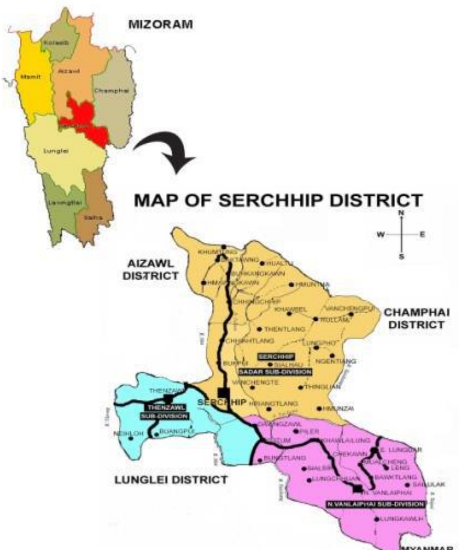

Figure 1: Map of Serchhip Districrt, Mizoram

throughout the year and this makes opportunity farmers to take up both Kharif and Rabi crops. So the farmers can use the land for sowing both Kharif and Rabi crops. During the early season, the farmers shown rice and afther harvesting the rice, Rabbi Crops like Cabbage, Mustard, Peas etc. are shown in the same field.

Cabbage is the major crops cultivated for commercial production and more than hundred tones are produced every year from Serchhip district and it is also the largest producer of Cabbage in Mizoram.

The primary data were collected by means of giving semi-structural questionnaire and personal interviews with 25 nos. of progressive farmers, retailers and sellers within the district. Secondary data were obtained through literature search. The relevant book publications and from related government departments such as Economics and Statistics Department, Agriculture Department, Horticulture Departments, etc were cited after thorough study.

5. DISCUSSION AND ANALYSIS :

The study revealed that those families who depend on commercial production of cabbage are not much. Mixed cropping is the common cropping system adopted by the farmers during kharif and rabi seasons. They mostly grown varieties of cabbage are Indo-America Hybrid, Ryozeki (Japanese variety), Seminish, Bahar, etc. The average area covered by 25 families under cabbage was 40 Hectares. From a case study of the farmers, it is estimated that 68% farmers cultivated in their own land and remaining 32% families cultivated in lease land. 92% farmers used both organic and chemical fertilizers and only 8% families do not used fertilizers. In Serchhip, Cabbage is assembled and sold mostly by the producers themselves. The producers sometimes carry the produce to the nearest market for sale. Most of the farmers usually establish small shops during the season. If large quantities are involved, the farmers directly go to the neighboring areas and in Aizawl city where wholesale buyers purchase directly from the producers in open actions.

Figure 2: Farmers in the field

Table 1: A brief study of 25 no of families

S/no	Particulars	
1	Area under cultivation (in hectares)	40
2	Production (in quintals)	2813
3	Average Wholesale Price (per kg)	6
4	Workers in the field	68
Total income earned		16,87,800

The produce assembled by the cultivators themselves in the market centers for disposal is more than half of the total market arrivals in Serchhip. Besides, the village middlemen and wholesale buyers also play an important place in the process of assembling. Average wholesale price it Rs 6 per kg and the final market price is about Rs 15/- to Rs 20/- during the peak season at Rabi season. In Serchhip, Cabbage is transported to markets by various modes such as head loads and vehicles for transportation which also increase the cost of production. Lack of post-harvest handling and proper management lead to many post-harvest loss which greatly reduce their net income. There are several factors influence post- harvest losses. Some factors which influence post-harvest losses may be physical, physio-biological, mechanical and hygienic (Talukdar and Bhowmick, 1993).

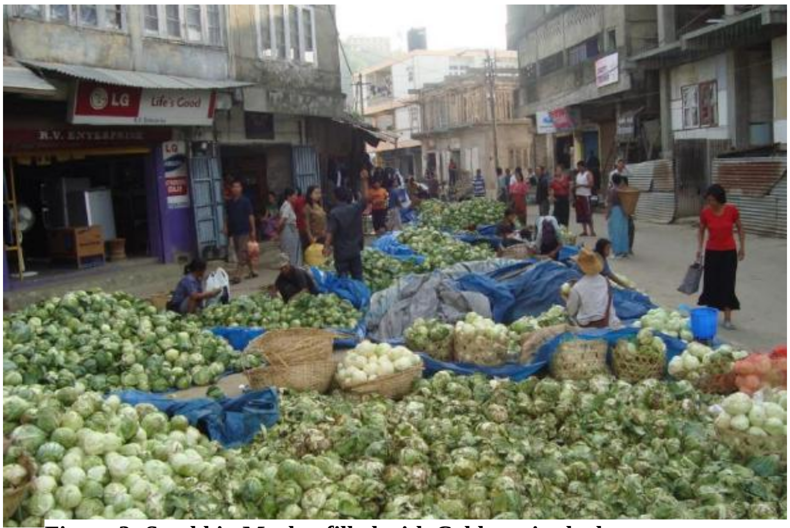

Figure 3: Serchhip Market filled with Cabbage in the harvest season

Grading of Cabbage is done by growers and commission agents. Sometimes the growers did sorting of discolored, damaged and leaf spot at the farm level from the produce at the time of harvesting and during marketing.

Table 2: Year wise area, production and productivity of cabbage in Mizoram

Sl. /no	Year	Area in Ha.	Production in MT	Yield MT/Ha (Productivity)
1	2012 - 2013	3020	40080	13.27
2	2013 - 2014	3230	43280	13.40
3	2014 – 2015	3680	48810	13.27
4	2015 - 2016	3690	48890	13.23
5	2016 - 2017	3690	49630	13.45
6	2017-2018	3710	49720	13.40
7	2018-2019	3822	58241	15.24
8	2019-2020	3870	58290	15.05
9	2020-2021	3872	88530	22.86
10	2021-2022		88530	

Source: Statistical Abstract, Directorate of Economics & Statistics, Govt. of Mizoram. www.ceicdata.com|Department of Agriculture & Farmers Welfare

6. RESULTS/FINDINGS :

The study reveals that Cabbage is the most important crops in Serchhip and many farmers in Serchhip depends on Cabbage cultivation. As it is shown in the data provided by the Departments (Table 2), it is shown that Cabbage production is increasing year by year in Mizoram and the production is also increasing in Serchhip District. According to the Mizoram Statistical Abastract 2021, Serchhip District is the second largest producer of Cabbage in Mizoram which is next to Champhai District and the production of Serchhip District is 13458.7MT.

The study finds that storage facilities plays an important part in the production and marketing of Cabbage. Storage is required at producer level as well as at traders' level. But in Serchhip, storage is a big problem due to lack of good storage facilities in the District. This leads to damaged and heavy loss before arriving at the market place. This condition urged farmers to sell their produce immediately after harvesting with low rate. Diamond black moth, Head borer, Aphids and leaf miner were the major insect reported by the farmers. The major diseases noticed in cabbage are powdery mildew, damping off, mosaic, leaf curl and leaf spot. They may even led to pre-harvest and post-harvest losses although some possible plant protection measure has been taken by them.

Involvement of market intermediaries such as wholesalers and retailers reduce the overall profit of the farmers. The risks associated with crop production, marketing, deficiencies in knowledge and information at all levels, and household-level complexities and intra household conflicts and need to be recognized as determinants of inefficiencies and inequities (Villareal, 1978; Sharma, 1984; FAO, 1989; Braun, Joachim Von. 1994). There are no proper regulations in the marketing system and the price of a commodity has not been fixed by the association as well as the government. Due to this, different price has been changed on the same commodity place to place. The study shows that trading of commodity such as faulty measures, low prices while purchasing and high prices while selling within the same market is a common practice in the region. The study come up with some recommendation such as maintaining of proper grading and provision of cold storage facilities for the perishable products at the producing centers and regulated markets must be set up in the states with strict enforcement of the provisions of market regulation. The regulated markets be managed efficiently to provide all kinds of benefits to the producers, consumers and market intermediaries and same case happen in tomato marketing in Karnataka, India (Mukherjee, 1960; Talukdar and Bhowmick, 1993; Subrahmanyam and Mruthyunjaya, 1979). Though some measures and improvements have been made through various development programmes there is still remain to be done and some defective measures still practice in agricultural marketing system. There are still many gaps in agricultural marketing which need to be bridged (Ahmed, *et al.*,2007)

Figure 4: Cabbage in the field

The Cabbage production in Serchhip District has an immense success in supplying vegetable crops during the Covid 19 Pandemic in the whole Mizoram. During the Covid 19 while the country is in a complete Lockdown, the Government of Mizoram introduce Covid 19 Vegetables supply chain to supply the state owned vegetables products to different places within Mizoram. In this supply chain, Serchhip District is the largest contributor in Vegetable supply.

total lockdown due to Pandemic Covid-19 through Horticulture Department / Task Force and Direct distribution by farmers to the consumers.

(As on 18.05.2020)

Sl. No.	Division/ Sub Division	Vegetable		Fruits		Total	
		Qnty. (Qtl.)	Value (Rs.)	Qnty. (Qtl.)	Value (Rs.)	Qnty. (Qtl.)	Value (Rs.)
1	Tuidam	220.00	9,67,000.00	-	-	220.00	9,67,000.00
2	Siaha	120.00	21,89,000.00	29.00	4,35,000	149.00	26,24,000.00
3	Hnahthial	133.22	3,55,150.00	-	-	133.22	3,55,150.00
4	Kolasib	624.16	47,76,185.00	43.20	2,16,000	667.36	49,92,185.00
5	Aizawl	2121.00	1,63,86,683.00	146.00	3,29,894	2267.00	1,67,16,577.00
6	Lawngtlai	489.00	24,91,000.00	20.70	1,35,000	509.70	26,26,000.00
7	Champhai	L.S	40,00,000.00	L.S	40,000	L.S	40,40,000.00
8	Serchhip	12349.72	3,08,45,480.00	220.00	5,50,000	12569.72	3,13,95,480.00
9	Khawzawl	27.00	1,64,500.00	146.00	1,10,000	173.00	2,74,500.00
10	Lunglei	L.S	24,76,433.00	L.S	86,430	L.S	25,62,863.00
	Total	**16084.10**	**6,46,51,431.00**	**604.90**	**19,02,324.00**	**16689**	**6,65,53,755.00**

Table source: Horticulture Dept, Govt of Mizoram

7. CONCLUSION :

From the study, it is clear known that Serchhip District in Mizoram has a good potential in cultivating Cabbage crops and the market is also improving. Income earn through cabbage cultivation has a great immense in contributing annual income of the District. For the better improvement of the production and marketing of cabbage crops in Serchhip, embracing technology, diversifying market channels, and promoting sustainable practices are imperative steps toward achieving a long-term success.

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Abstract: *The integration of Design Thinking principles into Human Resources (HR) practices has emerged as a transformative force in contemporary business-management. This abstract explores the impact of Design Thinking on HR, illustrating how this innovative approach is revolutionizing the way organizations manage, & grow. Design Thinking, characterized by understanding, observation, empathy, ideation, prototyping, testing, offers a fresh perspective on addressing complex HR challenges. Its application begins with the Understanding of the Organization & the landscape in which it operates, leading to Observation of HR practices, Technology, Human Preferences. In Empathize, HR professionals delve themselves in holistic stakeholders needs & views, employees'-experiences. This sets the stage for a more human-centered approach. Define stage precisely articulates the challenges faced, be it talent acquisition & development, workplace-culture enhancement, four generations working under the same roof, digital-transformation etc. By framing these challenges from multiple viewpoints, HR aligns its strategies more effectively with broader organizational goals. Ideation generates innovative solutions both radical as well as incremental, fostering a culture of collaboration, leading to development of fresh HR initiatives. Prototype & Test involve creation of HR initiatives in a low-risk environment. This approach enables HR teams to iterate with different strategies along with feedback from multiple stakeholders both internal i.e., employees & external. This abstract presents real-world examples of organizations that have applied Design Thinking to HR, demonstrating how Design Thinking can turn HR into a key strategic center in achieving business objectives –employees being star-performers, creating products & services easing the HRMS (Human resource Management System), enhancing efficiency & effectiveness of workforce, developing a comprehensive employee value-proposition, creating more engaging, adaptive & innovative work-culture, reducing job dissatisfaction, attrition, integrating emerging-technologies to HR best practices, globalization, hyper-personalization and many more. The integration of Design Thinking into HR practices represents a paradigm shift in business-management.*

Key Words: *Design Thinking, Human Resource (HR), Holistic, Employee, Emerging Technology, Work Culture.*

1. INTRODUCTION:

The integration of Design Thinking principles into Human Resources (HR) practices has emerged as a transformative force in contemporary business-management. This paper explores the impact of Design Thinking on HR, illustrating how this innovative approach is revolutionizing the way organizations manage, & grow. Design Thinking, characterized by understanding, observation, empathy, ideation, prototyping, testing, offers a fresh perspective on addressing complex HR challenges. This paper presents real-world examples of organizations that have applied Design Thinking to HR.

2. LITERATURE REVIEW:

Definition of HR: The existing definitions of HRD mainly described its practice empirically, lacking conceptualization. They were based on HRD phenomena from the Western world, unable to account for non-western contexts. To address these gaps, a new definition was proposed, emphasizing HRD's core attributes as being dependent on its host system, with shaping and skilling mechanisms as key features [1].

Definition of HRMS: In a recent study, Sanchez et al. (1996) introduced the concept of knowledge as the capacity to effectively utilize resources and skills in a manner that facilitates the fulfillment of a company's objectives. These resources, termed "Knowledge Treasures," necessitate a well-defined knowledge map that outlines the process of locating, identifying, and leveraging valuable insights within the organization. According to Stewart (1997), knowledge, or "intellectual capital," manifests in three distinct forms: human capital, structural capital, and customer capital [2].

Challenges faced by organizations in HR

In the current phase of development, the dynamics of the environment, including globalization, political shifts, social transformations, economic fluctuations, and technological advancements, have significantly impacted the operational landscape of organizations. These environmental changes present a formidable challenge for organizations, constraining their capacity to compete effectively with larger counterparts. According to Snell and Lau (1994), it was identified that the growth of small organizations demands a greater range of management competencies compared to their larger counterparts. Consequently, organizations often struggle to foster skill development, knowledge enhancement, and competencies among their workforce due to financial constraints and inadequate training provisions. Gupta and Cawthon (1996) further emphasized the critical need for comprehensive training, particularly among managers in small organizations. Therefore, training emerges as an indispensable instrument for fostering employee development and promoting organizational growth [3].

A Suggestive List of the challenges faced by HR

Talent Acquisition	Talent Development	Talent Engagement	Talent Retention	Policy	Culture	Organisational Design & Futuristics
• Attracting Talent to the organization • Alignment with the Vision, Mission and values • Availability of Right skill set in the Market • Fresh Talent - Industry ready?	• Mindset of young talent. Need to empathise with their changing values • Training for Knowledge – Now & Future • Training in New Tools and Techniques	• Fostering a culture of continuous Learning • GenX wants fast and frequent Feedback • Want to work in Tech Saavy organization and futuristic Technology • Workforce Engagement • Managing and fostering Innovation • Keeping employees motivated in Crisis • Meeting the ever changing Employee expectations	• Retaining quality talent • Work- life balance perspective of new generation • Employee Wellbeing and mental Health	• 4 different generations working under the same roof? How do we create HR Policies? • Expectations of Rewards & Recognitions • Work force diversity • Gender sensitivity • Competitive Compensation • Compliance of ever changing regulations	• Culture of Excellence • Culture of Transparency, Trust and openness • Embracing Change • Working in Cross functional teams • Mentoring and Coaching • Managing Remote working • Communicatio n in Remote Working • Working in Multi-disciplinary teams	• Organisational Design • Developing Leadership pipeline • Entrepreneurship and Start-up culture • Managing Performance • HR needs to transform as Organisational Design Architect • HR Benchmarking with Global Practices

Figure 5 HR Challenges a suggestive List

Design thinking is a human-centered approach to innovation involving a structured process comprising empathizing with users to understand their needs, defining the core problem, ideating to generate diverse solutions, prototyping to visualize and test ideas, testing to gather feedback, and implementing the final solution. This iterative process emphasizes creativity, collaboration, and a focus on the end-user, allowing for the development of innovative and effective solutions to complex problems [4].

Figure 6 Paradigm Shift [5]

"Design Thinking is a practice that comes to success when the needs of people (desirability) are achievable with technology (feasibility) and what a (viable) business strategy can translate into -> generating customer value and market potential." [6]

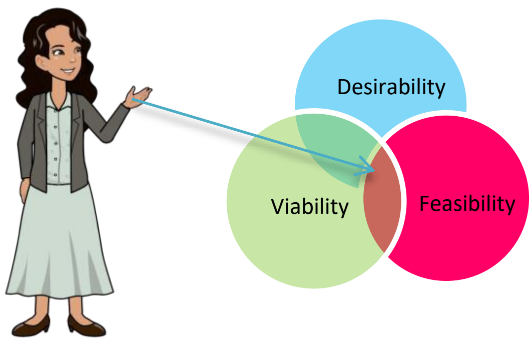

Figure 7 Design Thinking happens at the intersection of the three

2.1 Design Thinking Process

Design thinking is a problem-solving approach that prioritizes empathy for the end-user, encouraging a deep understanding of their needs and experiences. It typically involves a cyclical process of stages, including empathizing with users, defining the core problem, ideating to generate multiple solutions, prototyping to visualize ideas, testing to gather feedback, and implementing the final solution. This iterative and human-centered process fosters creativity, collaboration, and innovation, allowing for the development of effective and user-focused solutions to complex challenges.

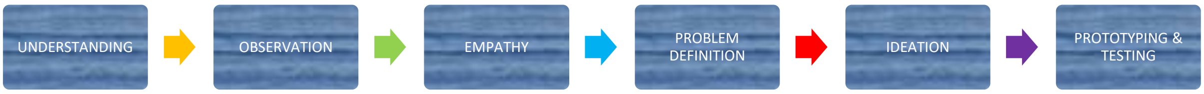

Figure 8 Design Thinking Process [7]

- Understanding: Understanding of HR practices, Technology, Human Preferences, and, trends.
- Observation: 360-degree observation is done i.e., the physical workspace, individuals, and the activities they are engaged in.
- Empathy: Empathizing with stakeholders needs & challenges. This phase cultivates in-depth comprehension of the issues at hand and the stakeholders impacted by them.
- Problem Definition: Process of articulating clear, precise & comprehensive problem/possibility statement from a holistic perspective.
- Ideation: Is a systematic procedure of generating plethora of ideas. A wide spectrum of ideas are contemplated, both radical and incremental, finally selecting the top ideas.
- Prototyping: This is the development of a model/concept of the proposed idea. In order to bring ideas to the real world for the real people. Leading solution and action plans.
- Testing: The iterative process of Design Thinking is consistently applied until solution is accepted by the stakeholders through rapid prototyping and testing the viability of the solution.

3. Research Objectives / Aims:

In the contemporary business landscape, the role of employees as star-performers has become pivotal in driving innovation and ensuring the seamless operation of Human Resource Management Systems (HRMS). This trend is fostering the development of cutting-edge products and services that not only streamline HR processes but also significantly enhance the efficiency and effectiveness of the workforce. Moreover, in response to the evolving demands of the workforce, organizations are increasingly focusing on crafting a comprehensive employee value proposition, aiming to cultivate an engaging, adaptive, and innovative work culture that mitigates job dissatisfaction and reduces attrition rates. This paradigm shift within HR is further amplified by the integration of emerging technologies into best HR practices, thereby enabling businesses to stay ahead in the dynamic landscape of globalization and adapt to the growing demand for hyper-personalization in the workplace.

Following are the Research objectives:

- Employees being star-performers, creating products & services easing the HRMS, enhancing efficiency & effectiveness of workforce

- Developing a comprehensive employee value-proposition, creating more engaging, adaptive & innovative work-culture, reducing job dissatisfaction, attrition
- Integrating emerging-technologies to HR best practices
- Globalization
- Hyper-personalization

3.1 Design Thinking in HR

In the realm of Human Resources (HR), the application of design thinking has emerged as a transformative approach, revolutionizing traditional HR practices. By placing a strong emphasis on understanding and addressing the needs of employees, design thinking in HR has paved the way for the development of innovative solutions, fostering a more engaging and people-centric work environment. This human-centered methodology not only drives organizational success but also nurtures a culture of continuous improvement, ensuring that HR strategies align seamlessly with the evolving demands of the workforce.

- Design Thinking can be applied to any specific domain as it is a process to solve complex problems.
- Design Thinking can bring in among both internal (employes) & external, organization can create more integrated & holistic approach to employee engagement, development, and satisfaction.
- Cultural transformation in HR fosters a mindset of continuous improvement and adaptability that can be brought in, as Design Thinking is Human centric.
- Understanding of the Organization & the landscape in which it operates, HR practices, Technology, Human Preferences.
- In Empathize, HR professionals delve themselves in stakeholders needs & views, employees', customers –experiences developing cross-functional collaboration & openness
- Define stage precisely articulates the challenges faced, be it talent acquisition & development, workplace-culture enhancement, four generations working under the same roof, digital-transformation etc. HR aligns its strategies more effectively with broader organizational goals.
- Ideation generates innovative solutions, leading to development of fresh HR initiatives. Creative ways of thinking, - lateral or divergent, - Incremental or radical
- Prototype & Test involve creation of HR initiatives in a low-risk environment. This approach enables HR teams to iterate with different strategies turning, turning HR into a key strategic center in achieving business objectives

4. Research Method:

Research Design: The research methodology adopted constituted a fusion of qualitative and quantitative research design. A select cohort of students, immersed in the realm of Design Thinking, underwent both collective and individual questioning sessions. Progressing through each phase, the students were interviewed to elucidate their evolving comprehension of the organizational paradigm. During the observational phase, the students were tasked with constructing SPA canvases, extracting insightful observations from their field experiences. In the empathy phase, personas and journey maps were crafted, supplemented by in-depth interviews employing the 5W+1H technique and laddering methodology, uncovering latent perspectives. Articulating problems with precision, the students harnessed various tools to generate viable solutions, culminating in the prototyping stage. Rigorous testing with stakeholders ensued, ultimately yielding a comprehensive solution and a strategic action plan, all within the context of specific HR challenges within the chosen organization.

The teams came up with the following solutions:

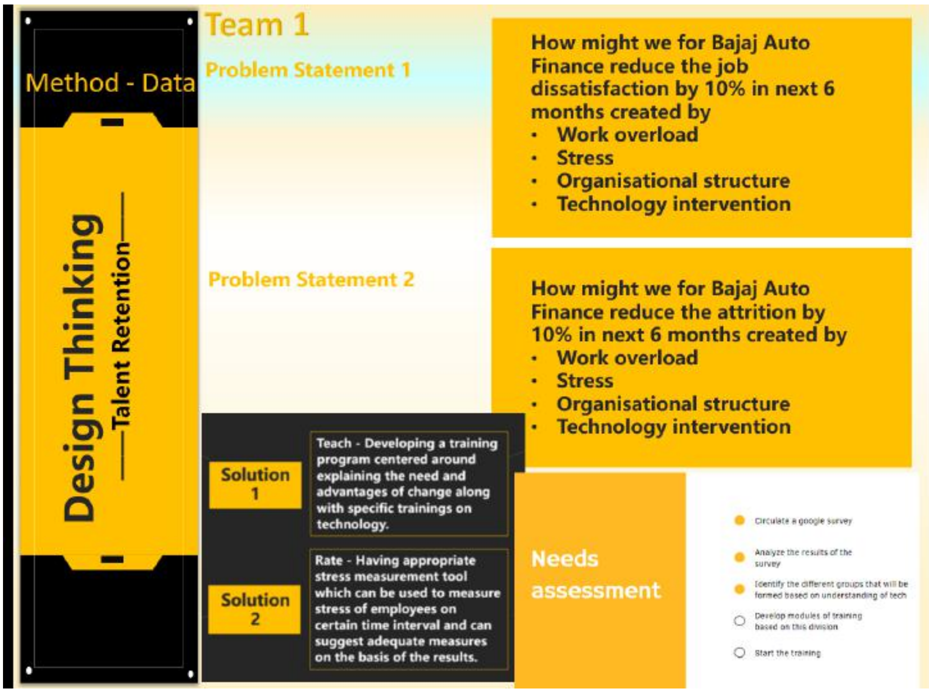

Figure 9 Team one's Problem, Solution representation on the core issue of Talent retention

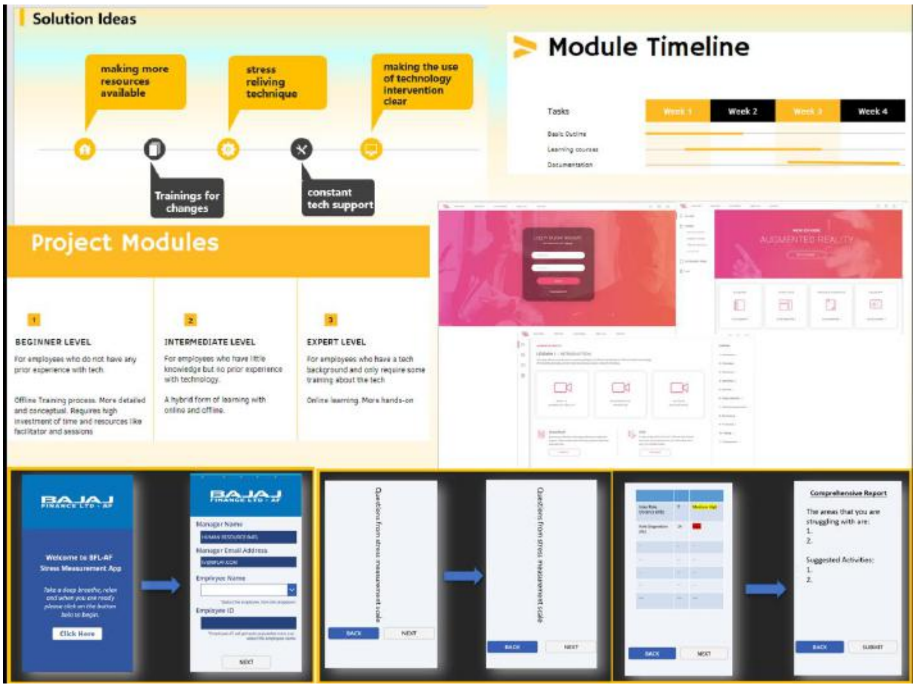

Figure 10 Team one's Prototypes and Solutions to the HR challenge

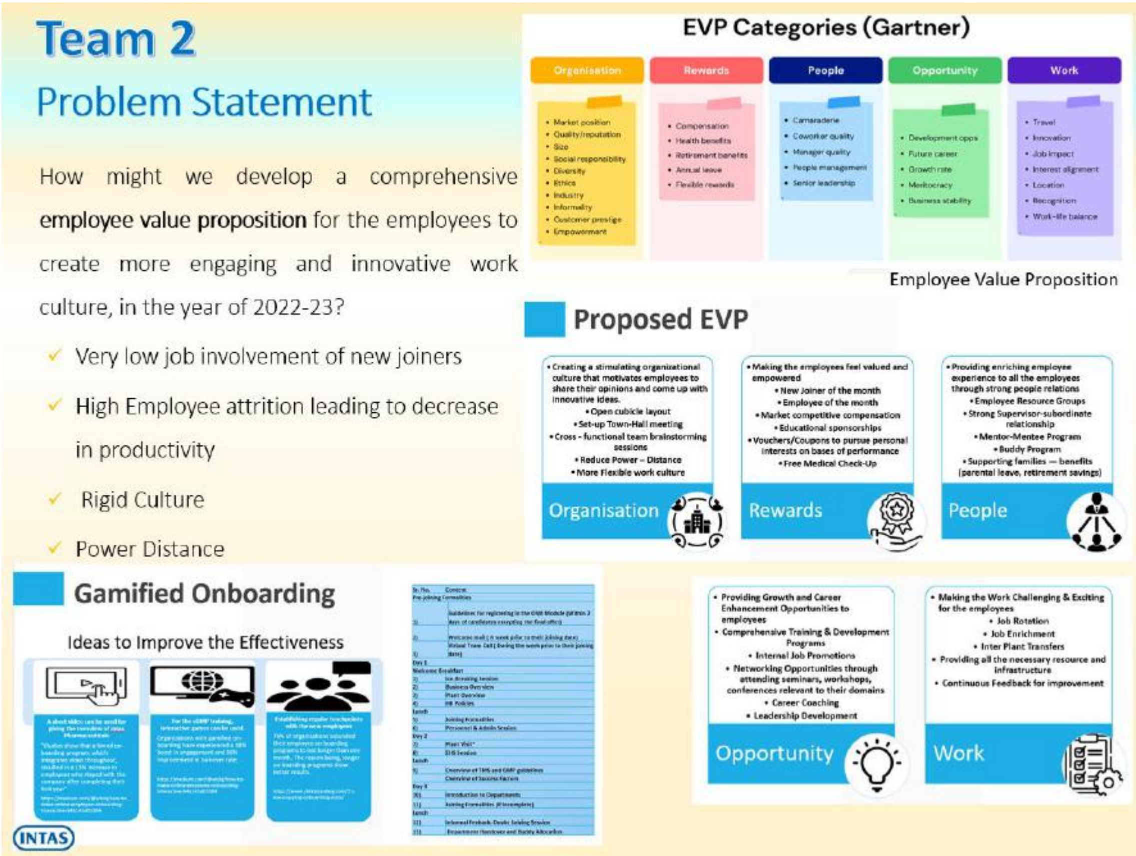

Figure 11 Team two's Problem Statement, and the proposed EVP

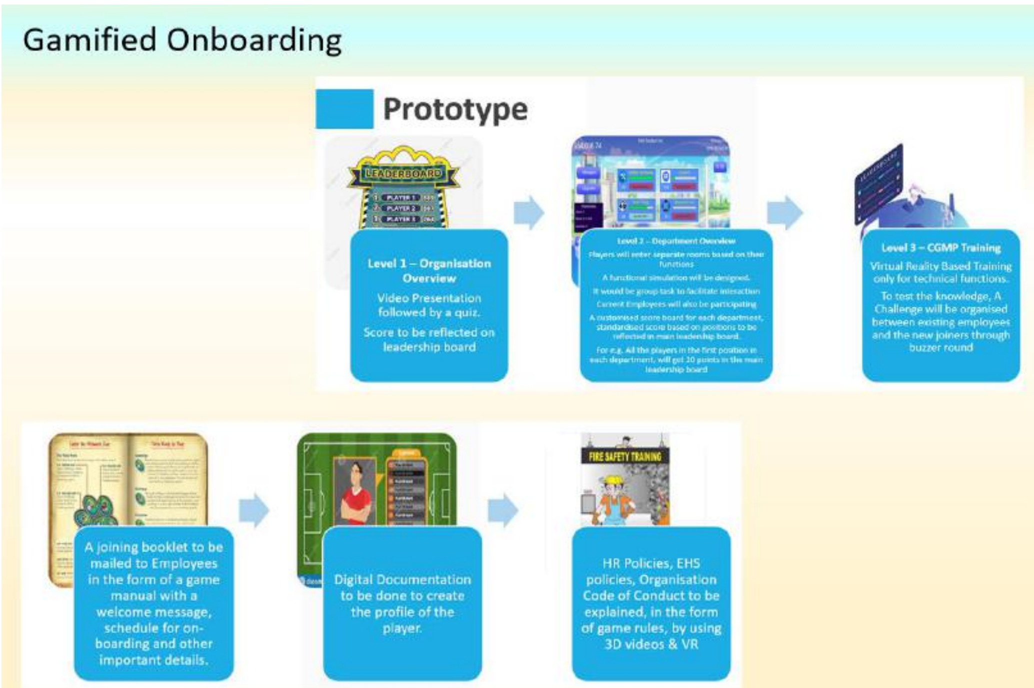

Figure 12 Team Two's prototype as a Gamified Onboarding for HR

Other teams worked on the following:

Performance enhancement of work force (client centric workforce) by 10%

Solution: Collaboration

Where one team talked with the client work team -> and co ordinated with the development team. They brought internal teams together.

Four generations working under the same roof

Where the mental models were studied of various generations related to professional work, environment, team work, suggestions of clarity on expectations, transparency among all generations. E.g., younger generations referred PB work, while other wanted KRA based work

Solution: They brought about transparency and awareness among all

ACTION PLAN

Activities calendar 1. Primary and secondary research on the products' market performance. 2. Competitors' analysis of similar products with better results. 3. Conduct research to find new and active uses of the product 4. Small trials like activities with consumers to introduce the new use. 5. Push the complimentary product along with a popular brand of the company. 6. Promote the use of both products as standalone as well as complimentary products.	**Required Resources** 1. Adequate manpower for extensive research. 2. Professional analysts and forecasters to analyse the right components of the research. 3. Funds to conduct, sort and analyse the primary and secondary research. 4. Emphasis on R&D team to find new and exciting uses for the product. 5. A robust marketing campaign to drive the change.
Cost 1. Funds for conducting primary research. 2. Backup funds to handle the cost of the complementary product. 3. A 10% increase in the marketing budget to achieve results. 4. Hire influencers and actors to promote the brand. 5. Funds for absorbing the losses if the campaign fails.	**Expected results** 1. A rise in the consumer need for the main product. 2. Consumer awareness about unconventional uses of the primary product. 3. Accumulating a consumer base for the complimentary product. 4. A significant increase in the company's revenue steadily over the next few years. 5. Creation of consumer need that can be fulfilled by the company.

Figure 13 Action Plan presented by one of the teams

Sample Size: Comprising five groups, each consisting of 4 to 5 students, the study encompassed a total of 23 Business Management HRM students. The selection process involved choosing students currently enrolled in the Design Thinking course as part of their academic curriculum.

Data Collection: Data acquisition relied on Google Forms questionnaires and in-depth, one-on-one interactions utilizing.

- How design thinking can be applied to Human Resources (HR) to generate employee happiness?
- Who benefits the most from the implementation of design thinking in HR processes, and how does it impact their engagement and satisfaction?
- What specific HR challenges are the internal and external stakeholders face?
- How can promote a culture of innovation and adaptability within the workforce?
- Where within the HR framework can design thinking be integrated, and how does it foster a more collaborative and user-centric approach to problem-solving?
- Why is the incorporation of design thinking crucial for HR in the context of fostering employee development, organizational culture, and strategic alignment with business objectives?
- How can design thinking facilitate the creation of a more personalized and adaptive HR strategy, and what tools and techniques can be employed to enhance employee engagement and retention?
- Who are the key stakeholders involved in the design thinking process within HR, and how can their active participation contribute to the development of more employee-centric initiatives?
- What are the potential challenges that organizations might face when implementing design thinking in HR, and how can these obstacles be effectively addressed to ensure successful integration?
- When assessing the impact of design thinking in HR, what key performance indicators can be used to measure the effectiveness of innovative HR strategies and initiatives?
- Where can HR professionals acquire the necessary skills and training to effectively apply design thinking principles, and how can this knowledge be disseminated across the organization to promote a culture of innovation?
- Why is it essential for HR departments to foster a culture of continuous improvement and experimentation, and how does design thinking support this ethos within the organization?
- How can the principles of design thinking be used to promote diversity, equity, and inclusion within HR practices, and what strategies can be implemented to ensure a more inclusive and equitable work environment?
- What specific strategies can HR departments employ to encourage cross-functional collaboration and interdisciplinary approaches using the principles of design thinking, and how can this enhance overall organizational creativity and problem-solving capabilities?
- How does the integration of design thinking methodologies in HR enable organizations to adapt to the changing needs and expectations of a diverse workforce, and what role does empathy play in fostering a more inclusive and employee-centric workplace culture?

Data Analysis: Validation of student responses was conducted by a panel of HR industry experts and college faculty, who also served as jurors. Further validation was achieved through the alignment of student learnings with program objectives.

Ethical Considerations: Preserving the anonymity of employees and ensuring confidentiality of organization names were paramount ethical considerations. A formal letter from the institution was provided to the organizations, emphasizing the academic nature of the study.

Conclusion and Rationalization: Opting for a qualitative research approach proved advantageous, given the human-centric nature of Design Thinking, necessitating consideration of human preferences, perspectives, emotions, and non-verbal cues, all of which were integral in deriving meaningful conclusions.

5. Discussion and Analysis:

In today's dynamic world, the success of any organization is intricately tied to the innovative contributions and exceptional capabilities of its workforce. It is with this understanding that we embark on a journey to explore the critical intersections between employee performance, HRMS innovation, and the ever-evolving demands of the contemporary workplace. The contemporary business landscape has undergone a transformative shift, wherein the significance of employees as star-performers has become paramount. Their contributions not only drive innovation but also play a fundamental role in the seamless operation of HRMS. As organizations strive for excellence, they are actively leveraging the potential of their workforce to develop cutting-edge products and services that not only streamline HR processes but also significantly enhance the overall efficiency and effectiveness of the workforce. Recognizing the importance of cultivating a thriving work environment, organizations are increasingly focused on crafting a comprehensive employee value proposition. By fostering an engaging, adaptive, and innovative work culture, they aim to mitigate job dissatisfaction and reduce attrition rates. This approach not only fosters a sense of belonging and purpose among employees but also contributes to the overall success and sustainability of the organization. Moreover, the integration of emerging technologies into HR best practices has further catalyzed this paradigm shift within the HR landscape. By embracing digital advancements and leveraging data-driven insights, businesses can proactively stay ahead in the global market and adapt to the growing demand for hyper-personalization in the workplace. This strategic integration enables organizations to optimize their HRMS, enhancing operational efficiency and fostering a more dynamic and responsive work environment.

The findings obtained from the comprehensive interviews with the students and their subsequent group presentations showcase the transformative effects of incorporating design thinking in their project. The identified outcomes not only underscore the multifaceted benefits of design thinking but also highlight its significance in fostering holistic skill development and teamwork. Let's delve into a detailed discussion and analysis of these key findings.

- **Improved Creativity and Innovative Ideation:** The students' enhanced creativity and ability to generate innovative ideas are indicative of the profound impact of design thinking on their cognitive processes. By fostering an environment that encourages unconventional thinking and ideation, design thinking has demonstrated its potential in nurturing a culture of creative exploration and problem-solving among the students.
- **Strengthened Team Dynamics and Collaboration:** The strengthened teamwork skills observed among the students reflect the collaborative nature of the design thinking process. By emphasizing the value of diverse perspectives and effective communication, design thinking has facilitated an environment where each team member's unique strengths are harnessed to achieve common project objectives, thereby maximizing overall team potential.
- **Structured Approach to Project Development:** The implementation of structure and organization in project development signifies the transformative impact of design thinking in instilling a systematic approach to problem-solving. By integrating a structured

framework, the students were able to streamline their processes, ensuring effective project management and efficient utilization of available resources.

- **Human-Centric Problem-Solving and Empathy:** The students' adoption of a human-centric approach underscores the empathetic aspect of design thinking. This approach has enabled them to develop solutions that are not only innovative but also deeply rooted in understanding the needs and experiences of the end-users, reflecting a comprehensive understanding of user requirements and challenges.
- **Cognitive Flexibility and Effective Problem-Solving:** The development of cognitive flexibility, problem identification, and creative problem-solving abilities among the students underscores the cognitive benefits associated with the application of design thinking methodologies. By encouraging adaptive thinking and problem identification, design thinking equips students with the necessary cognitive tools to address complex challenges and develop effective solutions.
- **Cohesive Team Functioning and Effective Communication:** The students' capacity to function cohesively and effectively as a team highlights the collaborative and synergistic nature of the design thinking process. By fostering effective communication and shared responsibility, design thinking has promoted an environment where team members can leverage their collective strengths to achieve successful project outcomes.
- **Importance of Active Listening and Diverse Perspectives:** The recognition of the significance of active listening, observation, and embracing diverse perspectives reflects the pivotal role of empathy and inclusivity in the design thinking process. By encouraging students to actively listen to diverse viewpoints and embrace varied perspectives, design thinking has fostered a more comprehensive understanding of organizational challenges, thus laying the foundation for effective problem-solving and solution development.
- **Encouraging Unconventional Thinking:** The application of unconventional thinking to generate unique and effective solutions highlights the transformative impact of design thinking on the students' cognitive processes. By challenging traditional problem-solving approaches, design thinking has encouraged students to explore unconventional avenues, fostering a culture of innovation and creative risk-taking.

6. Results / Findings:

The following results were derived after a detailed conversation with the students, and after the group presentations they gave to summaries their reflections on the project that used design thinking.

They gained the following

- Improved creativity and the ability to generate innovative ideas.
- Strengthened teamwork skills, facilitating the maximization of each team member's potential.
- Implemented structure and organization in project development and execution.
- Instilled a human-centric approach to problem-solving and project development.
- Enhanced cognitive flexibility, problem identification, and creative problem-solving abilities.
- Developed the capacity to function cohesively and effectively as a team.
- Recognized the significance of active listening, observation, and embracing diverse perspectives for a comprehensive understanding of organizational challenges.
- Applied unconventional thinking to generate unique and effective solutions.

- Acquired skills in effectively presenting project proposals to stakeholders, articulating the core problem and the proposed solution.
- Recognized the broad applicability of design thinking as a problem-solving tool in various aspects of life, including professional settings, academic environments, and everyday situations, emphasizing its promotion of divergent and lateral thinking skills.

7. CONCLUSION:

Design Thinking being a human centered approach works well with HR, it can bring about transformation by addressing complex HR challenges. HR processes can be streamlined, organizations can gain a deeper understanding of their employees' needs and expectations in context of changing times. This can lead to the development of innovative strategies for onboarding that go beyond traditional recruitment methods. It can facilitate the creation of tailored training programs that align with employees' career aspirations and skill development requirements – life long learning. Promote the development of employee-centric policies and initiatives that foster a positive work culture and improve employee satisfaction and engagement. Solutions using emerging tech like gamification, advanced technologies, App based solutions, real-time data analysis and AI-driven algorithms to dynamically adjust content or recommendations, enhances user engagement, satisfaction, & overall experience. Efficient & effective HR management system also enhances overall organizational performance and employee well-being. The solutions generated can be scaled from local to global market & bring in globalization as well as hyper personalization.

8. Recommendation

HR will be soon taken over by Data-Driven HR Management, where data will decide how the management needs to be planned and implemented. Remote and Flexible Work Policies will soon come into existence. Focus on Diversity, Equity, and Inclusion (DEI). Technology Integration is now becoming mandatory with the dynamic changing global trends. Agile and Adaptive HR Practices will come into practice. HR as Strategic Business Partner will be a huge scope. These of these challenges will be worth exploring using the design thinking methodology as it deals with technology, innovative solutions, wicked problems, as machines and AI will take over still problem solving, decision making and creative thinking will be using the human mind. Hence author recommends that Design Thinking as a process must be tired and tested with the emerging trends of the changing business management for the organizations to manage and grow.

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Development Schemes of Visionary Sculptor of Modern Tamil Nadu: Dr. Muthuvel Karunanidhi

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Abstract: *The state of Tamil Nadu in India has a rich traditional Dravidian history. With the advent of the Dravida Munnetra Kazhagam (D.M.K) led government under stalwart leadership of former Chief Minister Dr.Muthuvel Karunanidhi (Kalaignar), the state has witnessed significant advancement in realm of education and social empowerment. This research paper delivers the study of various schemes implemented by Dr.Kalaignar for the empowerment of people of all the categories. This paper highlights the Kalaignar's progressive thinking, meticulous policies and visionary schemes which are the backbone of today's empowered Tamil Nadu. Dr.Kalaignar mainly focused on Social Justice, secularism and women empowerment. Some of the noteworthy schemes are mass health insurance for people of Tamil Nadu, free electricity to farmers and Weavers, road and flyover Constructions. Several new schools, Colleges and Universities introduced by Dr.Kalaignar picturizes the importance given by government for literacy enrichment. State Industries Promotion Corporation of Tamil Nadu (SIPCOT), Tamil Nadu Small Industries Development Corporation Limited (SIDCO), Electronics Corporation of Tamil Nadu Limited (ELCOT) and TIDEL IT parks highlights the achievements of Dr.Kalaignar's government for employment enhancement. This article explains the schemes implemented by Dr.Kalaignar for empowering literacy, poverty eradication, infrastructure and industrial development, enhancement of medical facilities, farmer's care, women empowerment, Tamil Literature development, equality in education, eradication of inequalities in society and many more schemes in all the sectors.*

Key Words: *Dr.Muthuvel Karunanidhi, Dravida Munnetra Kazhagam, Dr.kalaignar, social empowerment, employment enhancement, empowering literacy.*

1. INTRODUCTION:

Dr. Kalaignar M.Karunanidhi, as five times Chief Minister of Tamil Nadu for 5 times proved the progressive development of Tamil Nadu. He launched several schemes which focused on building social equality and life style development of citizens. The visionary schemes and careful conversion of vision to action for benefit of the people has set a role model for the government and democracy. Tamil Nadu government under the leadership of Dr. Kalaignar, concentrated on social justice, secularism, women empowerment and poverty eradication. Many innovative schemes and policies were drafted by the visionary sculptor of Tamil Nadu, Dr. M.Karunanidhi for the development of downtrodden people. Tamil Nadu shows a better rank indicator in human development and role of Dr. Kailaignar was substantial for the development and progress.

2. RESEARCH OBJECTIVES

The aim this research paper is to explain the welfare schemes introduced by a legendary leader Dr. M. Karunanidhi, who is called as Dr. kalaignar. This creates an political awareness among the people of various nations about hr high-tech visionary leader ship of Dr. Karunanidhi. The achievements of Dr. Kalaignar are collected from various web sources.

3. INFRASTRUCTURE DEVELOPMENT BY DR. KALAIGNAR

The following schemes are introduced by Dr. kalaignar for the infrastructure development of the State [1]. These schemes developed Tamil Nadu as a State with facilities and high class infrastructure.

Tamil Nadu Slum Replacement Board and Tamil Nadu Drinking Water / Drainage Board formed. Slum Conversion Board was formed and all slums from cities were converted into flats. In 2010, the housing program was created because there should be no slums anywhere in Tamil Nadu. Road facilities were created even for small villages. To make transportation easy, improvements were introduced in the transport sector. Minibuses were introduced. Electricity facility has been created for all the villages of Tamil Nadu. Rs. 14,600/- crores Chennai Metro project was brought about by our visionary leader Dr. Karunanidhi. Power stations have been established at 8 places for uninterrupted power supply during the legend's rule.

Figure 1: Dr. M. Karunanidhi (Dr.Kalaignar)

4. SCHEMES FOR SOCIAL JUSTICE AND EQUALITY

The use of hand rickshaws was abolished and cycle rickshaws were introduced. To establish social justice and equality in the society, Dr. Kalaignar abolished the practice of pulling a man in a rickshaw by another man. 31 per cent reservation for backward classes and 18 per cent reservation for scheduled classes. The reservation aimed to develop the life style of backward people in the society.

Samatthupurams (Colonies) were created all over Tamil Nadu so that all communities could live together without any racial, religious, communal differences Free houses were built for backward Adi Dravidian people. Intermarriage was largely encouraged. The DMK government has honored those who get into mixed marriages by giving incentives. Several other schemes were introduced to establish social justice, equality and improve the life style of financially backward people.

5. INDUSTRY DEVELOPMENT AND EMPLOYMENT ENRICHMENT SCHEMES

State Industries Promotion Corporation of Tamil Nadu (SIPCOT), Tamil Nadu Small Industries Development Corporation Limited (SIDCO), Electronics Corporation of Tamil Nadu Limited (ELCOT) and TIDEL IT parks highlights the achievements of Dr.Kalaignar's government for employment enhancement.

Salem Steel plant was brought to Salem in Tamil Nadu, which introduced various employment opportunities. In 1997 new policies were developed for information technology in Taramani Tidal Park. Dr. Karunanidhi is credited with building a large number of car factories in Chennai and achieving a milestone in the economy of Tamil Nadu. That is why Chennai is known as the Detroit of Asia. Numerous industries were brought to Tamil Nadu, which paved the way for employment of Tamil Nadu people.

6. SCHEMES INTRODUCED BY DR. KARUNANIDHI FOR FARMERS

Agriculture is considered as the backbone of a nation. To improve the yield and increase agriculture practices, several schemes were introduced by legendary leader Dr. Kalaignar. Government derived policies to share the financial burden of farmers. Free electricity for agriculture (only then such scheme was created in India) [1,2].

Farmers markets were set up and products are distributed to the customers without middle men. This scheme was considered as a visionary scheme, as grown agricultural products reaches public without any intermediate people. This approach is considered as profitable for both farmers and buyers.

To save farmer’s life during drought, Dr. Kalaignar announced Rs. 7 thousand crores loan waiver for farmers. Wage fixation was introduced for agricultural labourers. Our own plan for rural development was introduced, so that they can meet their own needs with government subsidy. Anna Revival Schemes were introduced for rural development. Direct paddy procurement centers were set up, to collect paddy from farmers at good price. Government focused on the welfare of farmers to uplift their life style and eradicate poverty.

7. EMPOWERMENT PROGRAMS FOR WOMEN

Marriage assistance scheme for poor women was introduced in memory of senior woman leader of DMK party Muvalur Ramamirtham Ammayar. To encourage the remarriage of widows, the widow Remarriage Fund Scheme. 30% reservation was given for women in government jobs.

Women's Equal Rights in Property Act was passed. Schemes for free degree studies for women were introduced. Local elections were held very successfully with 33% reservation for women.

Financial assistance of one thousand rupees per month was given to pregnant women. Gas stoves with free gas connection provided to poor women. Women's Self Help Groups were formed in 1989 with the idea that women should be independent in the economy without relying on anyone. Through this, more self-employment was created by women in Tamil Nadu.

8. TAMIL LITERATURE ENRICHMENT SCHEMES

To honor the author of Thirukkural , a 133 feet tall statue of Ayyan Thiruvalluvar was built in Kanyakumari in sea area. It was Dr. Karunanidhi who gave classical recognition to the Tamil language which has been spoken for thousands of years. A classical tamil literature conference “Semmozhi Maanadu” was successfully held in Coimbatore with a huge gathering of Tamil scholars. He named the Tamil year sequence Thiruvalluvar year and Manonmaniyam B. Sundaram Pillai's song was declared as Tamil Thai vaazhthu and sung in all kinds of public programs since 1970s. TO encourage learning in mother tongue 20% reservation in government jobs to Tamil educated people.Tamil has been made compulsory till class 10.

9. EDUCATION EMPOWERMENT SCHEMES

Dr. Kalaignar increased the tuition fees scholarships for Backward Classes and Adi Dravidians. More hostels were opened for the poor and backward people. Abolition of existing entrance examination for engineering degree was a remarkable achievement of Dr. Kalaignar. It paved the way for student’s from village and rural area to Engineering education. Students were given free bus passes. During Dr.Kalaignar’s regime in 2006, he issued a special order to give students two free eggs a week in central meals in government schools to improve the health of students. Efforts were made to establish Government Medical Colleges along with Government Hospitals in every district. He increased the number of arts and science colleges in Tamil Nadu. Manonmaniam University was started in Tirunelveli, Periyar University was started in Salem, MGR Medical University was started in Chennai. The Anna Centenary Memorial Library in Chennai is a largest library in Southeast Asia developed by Dr. Kalaignar. Samacheer Kalvi: Equal uniform syllabus for school education was introduced.

10. OTHER SCHEMES OF DR. KALAIGNAR

Land Sale Definitions Act, Abolition of tax on idle land was passed. Okkenakkal joint drinking water scheme for the people of Dharmapuri and Krishnagiri districts was introduced Rehabilitation centers for beggars and lepers were brought under his rule.
Brought up a scheme for the rehabilitation of the disabled people. Rice at ration shops at Rs 2 and later at Rs 1/ kg [3]. Medical insurance schemes was introduced for benefit of poor people. Free eye camps were conducted to people and then free eye glasses were provided.

Figure 2: Dr. Kalaignar introducing sales of rice at ration shops at Rs.1 per kilogram

A separate welfare board was set up for the third sexes known as Aravanis, who were renamed transgender converts. The DMK leadership also set up a welfare committee for folk artists. Announced increased pension for freedom struggle martyrs. Free dhothies and sarees were given to poor people only from his rule. More four-lane roads were developed to provide smooth transport facilities to the people.

Pension schemes were introduced for contract employees and transport department employees. Inter-district river water connectivity was made possible. New announcements were given to get food items from ration shops at affordable prices. Dr. M. Karunanidhi, who is the owner of self-respect, has created a self-respecting state, Tamil Nadu.

11. CONCLUSION:

Dr. Kalaignar is portrayed as a legendary leader due to the healthy rule and welfare schemes. He focused on people in all the levels ranging from poor and backward classes. His visionary policies shaped Tamil Nadu as a grown state in India. He served as Chief Minister of Tamil Nadu for five times and shaped the state in all the sectors. Dr. M. Karunanidhi, who is the owner of self-respect, has created a empowered State, Tamil Nadu. The impacts of all the schemes are reflected in development of the people. The policies of Dr. Kalaignar are now actively followed by present D.M.K government of Tamil Nadu in India under the leader ship of Honorable Chief Minister Mr. Muthuvel Karunanidhi Stalin.

Figure 3: Dr. Kalaignar and Mr. Muthuvel Karunanidhi Stalin

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A Comparative Study on the Significance and Impact of Urban Tourism in India with Foreign Countries

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Abstract : *Urban tourism is not a new phenomenon in the case of foreign nations. The term has attained much significance in the outer world and is flourishing in an unprecedented rate. Even the adoption of the same has uplifted the life of the public at large and indeed had led to the sustainable development of their economy. But the influence of the same is negligible in the context of India. The present study has undergone a critical evaluation on the significance of urban tourism in outside countries in their development and the impact of same arena in India. It is analysed that almost all foreign countries that have adopted urban tourism as their main agenda have developed overall very successfully and urban tourism has become their main part for earning their daily livelihood. But the same hasn't received much significance in the context of India as different categories of tourism in the form of hill, coastal, leisure, festival, adventure etc are prevailing and running in somewhat routine manner and remains idle during off seasons. Thus, the significance of the urban tourism in nurturing the tourist segment in our country is utmost essential for the overall and workable growth of our nation. So, shaping tourism under urban tourist concept from the part of authorities becomes a crucial factor in the sustainable growth of our nation.*

Keywords: *urban tourism, sustainable development, significance, economy, country.*

1. INTRODUCTION :

The impact of urban tourism is gaining momentum day by day in foreign countries. (1) The synergy has brought numerous changes in lifestyle and working environment of the foreign residents. Even majority of the well develop countries has adopted this sigma in order to convert them into a highly sustainable well-polished nation. Even much of the luxurious cities had adopted urban tourism as their main agenda by enlightening the minds of its residents totally, the impact and significance of the same for a much better orderly living. But it is analysed that the term hasn't received much significance in a country like India even though it is highly active in varying kinds of tourism initiatives throughout the country in different styles and norms. (2)

Thus, the present study attempts to make a deep insight into the underlying significance of urban tourism in foreign countries in terms of prestige, wealth creation, popularity, economic development and overall sustainability. The author also attempts to pinpoint the present status of urban tourism if any, in a country like India and tries to convey its necessity in the present scenario.

Tourism in India

India, a land of beauty is indeed a charming destination for the tourists from all over the world. A good quantum of tourist from within and outside the country travels to varying destinations in different time periods. Nearly, 5.8% of the country's GDP is generated out from the tourism industry. (3) According to Forbes magazine, India is ranked as the 7th most beautiful country in "The world rankings of 50 most beautiful countries". (4) Conferring to Statistical calculation of World Travel and Tourism Council Indian tourism has generated an amount worth Rs. ₹13.2 lakh crore , i.e, US $ 170 billion with a wider support of 32.1 million jobs by the year 2021 which indeed is a significant achievement. (5) . The industry is supposed to nurture by 7.8% on an annual rate leading to 33.8 lakh crore i.e., US $ 420 billion by the year 2031. (6) Even the country has established expressively as the 5th largest travel healthcare destination on a global basis. (7) The country has a huge flow of domestic tourist @ 6.19 million when compared with the foreign tourists ranging to 1.52million in the year 2021 after the severe Covid pandemic which indicates that the country is mainly focussing on domestic tourism. (6) These domestic tourist flows to all union territories and states throughout the year. The most popular tourist destinations in India are Delhi, Mumbai, Chennai, Agra, Jaipur and much more. (8) (9)

Urban Tourism

Urban tourism is considered as one of the fastest growing tourism industries all over the world. (10) When compared with other kinds of tourism, urban tourism stands distinctly that projects almost all kinds of tourism under one single roof. Advancement in information technology has indeed helped the travellers to evaluate the benefits and significance of urban tourist spots. Hosting varying kinds of businesses and MICE i.e., Meetings, Incentives, Conferences and Exhibitions plays a vital role in the urban tourism scenario (11). It is indeed a gateway for both domestic and international tourists. It acts as nodal points for air transport, entertainment, shopping, adventure, leisure and indeed a place for multiple tourist destinations. (12) (13). An added advantage of this kind of tourism is that the travellers need not wander here and there for visiting tourist destines as the same would be available to them within the limited boundaries thereby reducing time and money.

2. Statement of the Problem

Tourism has attained an incredible mark in the minds of the public as a whole. (14) At the busy life style, everyone is utmost interested in wandering to destinations that can enlighten their minds that too even for a short span of time. (15) In this context, urban tourism has gained momentum in the tourist mindset as majority of the working population resides in the cities wish to travel with their dear and near ones for a refreshment. Thus, usually they adopt the places that are near to their locations rather than travelling to places that are far beyond to reach. And urban tourism is indeed the most suitable form of tourism for these categories of tourists as the time, cost and distance to be covered are comparatively low in this case. (1) In this framework, the researcher has analysed the significance of urban tourism in foreign countries and a comparison of the same with that of India as the adoption of the same would really enlighten the tourism industry of our country in an unprecedented rate.

3. Scope of the Study

The scope of the study is wider in approach as the significance of urban tourism brings out a sustainable tourist segment in the economy if implemented. The urban tourist activities all over the world have brought out tremendous revolution in their economy with the passage of time. Even the same has played a crucial in the eradication of poverty as such. Thus, the present study would significantly enlighten the minds of many, i.e., researchers, authorities, travelers and even the public at a stretch which would help to brighten the spheres in this segment in a much fruitful manner.

4. Methodology

The data is collected mainly as quantitative data mainly from secondary sources like articles, newspapers and websites. The researcher has undergone a theoretical study in order to analyse the significance of urban tourism that are prevailing in the foreign countries and the necessity of the same that need to be brought into our nation

5. Objectives of the Study

- To analyze the impact of urban tourism in foreign countries
- To evaluate the significance of urban tourism in foreign countries.
- To analyze the impact and implementation of urban tourism in India
- To suggest the need for implementation of urban tourist activities in India.

6. Urbanization in India

Urbanization is performed on a highly rapid pace all over India. Even though the initiative is highly hectic in nature, it is analyzed that the authority has taken a vibrant action for the upliftment of all the cities and towns as part of sustainable development. (16) According to the recent population statistics, it is evaluated as around 305 million Indians would be residing in towns and cities (17) When compared with the population of India growing two and a half times, its urban area has grown nearly 5 times in the present scenario. (17) Its urban population is even greater than all the urban populations of the world when put together, except Russia, United States and China. (17) Thus, urbanization has helped to bring advancement in the country in segments of employment, infrastructure, revenue, business, economic upgradation and the like. (17)

7. Urban tourism in Foreign Countries

Tourism of different forms had spectacularly increased in 1960’s and 1970’s whereas the concept of urban tourism had gained significance from 1980’s when it was analysed that cities could play a vital role in tourism promotion and would enlighten the tourist segment and the economy as a whole. (18) According to the United Nations, in 2015, around 54% of the population around the globe would be residing in urban areas and would further increase by 60% by the year 2030. Urban tourism acts as a key element in urban development policies as it nurtures the economy and social life of the society through higher employment, infrastructural development, eradication of poverty, business opportunities, investments and a good pool of revenue. (1) In majority of the foreign countries, urban tourism has flourished in an unprecedented manner and it indeed has become their major source of income generation leading to overall sustainability. Popular countries like Bangkok, Thailand, France, Indonesia, United Kingdom, UAE, Singapore, America, Turkey, Japan and South Korea have developed highly in the urban tourist segment and is reaping huge profits. This has even helped to increase their economic, social and cultural development. (19) Enhanced initiatives in the form various global submits on Urban tourism is conducted all over the world with participation of more than 80 countries in order to discuss to future aspects, demand and necessity of urban tourism. (20) These submits also discusses the major challenges faced by the countries when implementing urban tourism as their agenda and appropriate solutions in order to tackle the same. (20) And thus, the concept of urban tourism has gained an effective role in the economic development.

8. Impacts and Significance on Implementation of Urban tourism on the country

Urban tourism acts as a driving force in the development of cities and countries. The following are the general impacts of urban tourism when adopted by a country and thus it is highly significant to be adopted in the present era (1) (21) (22).

- brings employment opportunities
- enhances the economy of the region
- generation of revenue to the local government
- fund generation by the use of public services
- increased demand for public transport
- advancement in historical sites and culture of the cities
- advancement of knowledge
- more accessibility to different languages
- helps to understand different civilisation
- huge circulation of money in all segments
- increased standard of living
- much business opportunities

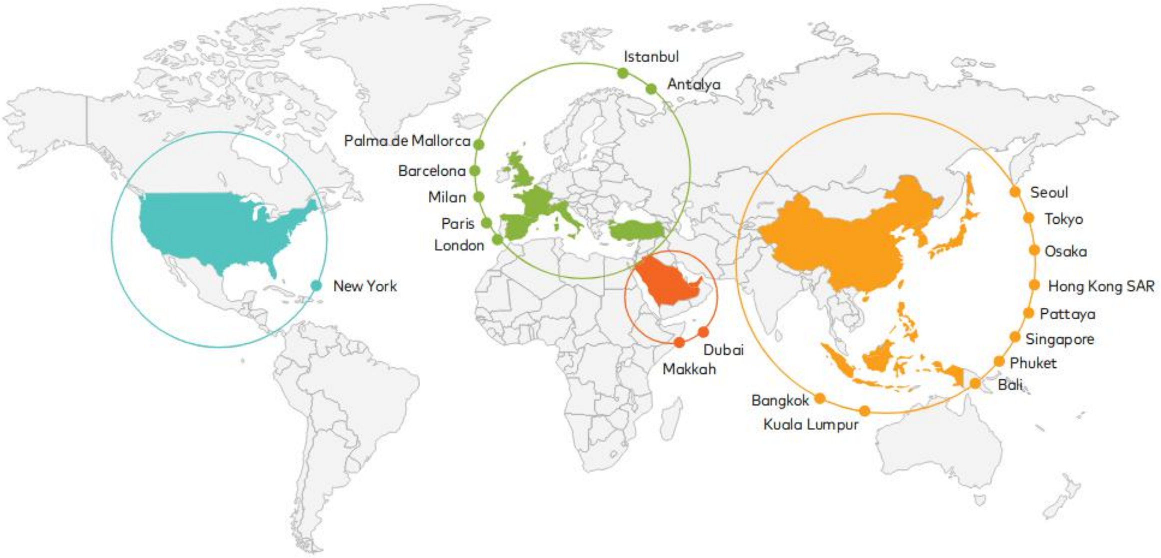
9. Impact and implementation of urban tourism in India

Analysis based on official reports and related accessories, it is examined that urban tourism initiative hasn’t gained any popularity in the context of India as the country mainly focuses on varying other kinds of tourism especially in the form of adventure tourism, eco-tourism, medical tourism , wildlife tourism, cruise tourism, pilgrimage tourism, film tourism, historical tourism, landscape tourism, spiritual tourism, beach tourism, cultural tourism, health tourism, sports tourism, conference or convention tourism, religious tourism and the like. (23) And thus, there is no direct impact of urban tourism in the present context of India. As part of attaining overall development in all segments, the authority is trying its best to regenerate the towns and cities throughout the country with adequate health, hygiene, infrastructure, advanced technology, increased business, private participation, rehabilitation of slums, advancement in education, employment, poverty eradication etc. Thus, development in all segments is performed in a much effective manner, that too even in tourism. But, the term urban tourism hasn’t noted until now.

Even though the concept of urban tourism hasn’t gained significance in country, India’s Urban Policies would really favour and nurture urban tourism when implemented to, as majority of the plans propounded by the government for urban development are directly or indirectly a path way to urban tourism and it is indeed necessary for converting it into a developed nation.

Main Urban tourist Centres in Foreign Countries

Following are the top 20 urban tourist sites in the world (Updated on October 13, 2023)



Mastercard's Global Destinations Cities Index (24)

Rank	The most visited cities in the world	Total International Visitors	Famous attractions
1.	Bangkok (Thailand)	22.78 Million	city comforts of megamalls, golden temples and shrines, countless street markets stuffed with spicy, sour, sweet, and salty flavours, boat riding, vibrant nightlife, travel guides
2.	Paris (France)	19.10 Million	classic buildings, arching bridges and elegant boulevards, cruises, towers, bookstores, vintage shops and flea markets
3.	London (United Kingdom)	19.09 Million	gothic architecture, grand and historical quarters. contemporary art, theatres, green parks urban sprawl, historical journey.
4.	Dubai (United Arab Emirates)	15.93 Million	desert in futuristic glory, housing mega-malls, sleek office blocks, city performance venues, serene places of worship, and fancy rooftop terraces., beaches, aquariums and botanical gardens., desert trip.

5.	Singapore (The Republic of Singapore)	14.67 Million	efficient transportation system, hawker centres to street markets to fine dining, multi-national cuisine, shopping mall, botanic gardens.
6.	Kuala Lumpur (Malaysia)	13.79 Million	mosques and temples, high-fashion shopping malls and vibrant street markets, designer brands, best hawker stalls
7.	New York (United States of America)	13.60 Million	city’s grid-like design, private art galleries, bookstores, brightly lit towns, high-end boutiques and hipster cafés, grand office buildings , huge central park, metropolitan city
8.	Istanbul (Turkey)	13.40 Million	historical trove, old Greeks, Romans, Venetians empire and kingdoms churches and imperial mosques, galleries, museums, tall office towers
9.	Tokyo (Japan)	12.93 Million	Clean streets, chrome skyscrapers, 24/7 moving, neon signboards and flashy urban sprawl, green and spiritual attraction, unique streets, trendy cafés and bold fashions, eateries, languid neighbourhoods, and hidden shrines.
10.	Antalya (Turkey)	12.41 Million	Mediterranean coastline, preserved old quarters, romantic getaway., finely restored houses, Museum
11.	Seoul (South Korea)	11.25 Million	trending holiday destination, youth-driven hub, fashion gurus, cultural activities, idol sightings, and shopping, heritage sites
12.	Osaka (Japan)	10.14 Million	cultural centre, heritage sites, commercial fun, restaurants, kilometres of boutiques, bookstores and sweet shops; shopping malls historical structures
13.	Makkah (Saudi Arabia)	10 Million	pilgrimage destination for all Muslims, Islam’s holiest city, modern buildings, religious hotspot; traditional cozy homes, rocky hills to reflect its traditional nature.
14.	Phuket (Thailand)	9.89 Million	beach, islands, national parks, coral reefs, glittering waters of islands, museums, cooking classes, Chinese shrines, and wildlife sanctuaries
15.	Pattaya (Thailand)	9.44 Million	endless beach fun, party-themed central area, temples and shrines, seaside resorts.
16.	Milan (Italy)	9.10 Million	Creativity, arts, futuristic architecture, fashion, museums and galleries, fashion houses, showrooms, boutiques, Milanese cooking.

17.	Barcelona (Spain)	9.09 Million	fresh sea bounty and world-class architecture. Roman-era Gothic Quarter of the Middle Ages, sandy beaches, rolling hills, majestic and sculpture gardens, endless museums, galleries, taverns and green spaces
18.	Palma de Mallorca (Spain)	8.96 Million	historical chain of empires, city's mixed architecture and historical sites., Gothic Cathedral, medieval streets, public squares, noble townhouses, imposing baroque churches colourful street markets, crystal clear beaches
19.	Bali (Indonesia)	8.26 Million	lush jungles and seaside villas, scenic beauty, temple ceremonies, incredible dance performances, spiritual colourful displays, diving sites, ancient monuments, city comforts, and seaside retreat
20.	Hong Kong SAR (China)	8.23 Million	busy streets, sky-high buildings, unique cultural-scape, international brands and sleek malls temples, water-themed ocean park, spellbinding coastal views

10. Findings and Suggestions

According to the report published by the technical group on population projection, the census of India, it is analysed that 70% of the total population increase would arise from the urban area rather than rural segment (25). A sharp increase from 377 million in the year 2011 to 594 million by the year 2036 is being projected in the future population analysis index, with a superfluous growth of nearly 57% (25). And the present 31% of the population residing in urban areas would hike up 39% by the year 2036. Subsequent decline in the rural population would also be found in the coming years due to this strategic movement (25). The statistical projection indicates a 100% conversion in urbanisation in the state of Delhi, and 50 % in Tamil Nadu, Kerala, Maharashtra, Telangana and Gujarat (25). Even, the highest dramatic population swing to the urban centres from rural areas would be in Kerala @ nearly 92% by the year 2036 (25).

The urban population is projected to increase sharply in the forthcoming decades which in turn would bring more demand in urban segment for all goods and services. In order to meet this cumulative demand, they can use urban tourism as an effective tool to attract both domestic and foreign tourist to the urban tourist destinations, thereby leading to more inflow of money which would in turn help to fulfil the needs of the society and thereby leading to sustainable development.

11. CONCLUSION

A stringent role is played by urban tourism in the development of any economy as it helps to attain overall sustainability in the form of business, employment, infrastructural development, increased standard of living and even in the eradication of poverty. Indian cities are well known to the world in all aspects. But the quantum of foreign tourist flow is comparatively less due to rapidly increasing population with inadequate shelter, industrial pollution, slums, desecrating encroachments on recreation spaces and historical monuments. (26) Thus, appropriate plans for molding and upgrading the tourist destinations in a five-star level as urban tourist spots with all comforts and accessories within the limited space would really enlighten to attain huge inflow of foreign currency into our economy for the overall development. A proper blending between tourism and urban planning would really help to grow this segment in a much dynamic way.

Foreign countries have focussed mainly on urban tourism by enhancing their tourist sites in a much entertaining and fruitful manner which indeed has helped to grab huge quantum of foreign tourists to their respective destinations. Likewise, advancement of urban tourist destinations in a country like India would highly promote to flow huge foreign traffic which is indeed the need of the hour. This would help to restructure the economic structure of our country in a much prolonged and significant way thereby leading to improved standard of living and overall sustainability (25) (26). Thus, upliftment and enhancement from the part of the authorities in collaboration with varying stakeholders is highly necessary for the advance flow of foreign income.

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A study on the causal relationship between Institutional Investors and the Indian Stock Market

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Abstract: *Institutional investors, both domestic and foreign financial institutions, play a vital role in the movements in Indian Stock Market. The present study explores the causal relationship between Foreign Institutional Investors (FIIs), Domestic Institutional investors (DIIs), the Bombay Stock Exchange, and the National Stock Exchange. The BSE SENSEX and NSE NIFTY indexes are used in the study to represent the BSE and NSE, respectively. The author has taken the daily data on gross purchases/sales by FII and DII. In addition, the BSE SENSEX and NSE NIFTY data from the respective stock exchanges. The study period is from 16th April 2007 to 31st March 2023. The variables in the study are Gross Purchases FII (GPFII), Gross Sales FII (GSFII), Gross Purchases DII (GPDII), Gross Sales DII (GSDII), Net Purchase and Sales FII(NPSFII), Net Purchase and Sales DII(NPSDII), S&P BSE SENSEX (SENSEX) and CNX Nifty (NIFTY). The Augmented Dicky Fuller Stationarity Tests are applied to the time series before finding the correlations among various variables and conducting the Granger Causality tests. The ADF tests show that the time series are stationary. The correlations between NPSFII and NPSDII are negative.*

Keywords*: Domestic Institutional Investors, Foreign Institutional Investors, Bombay Stock Exchange, National Stock Exchange, Causality, Stationarity.*

JEL: G12, G23

1. INTRODUCTION

Institutional Investors are non-banking organisations that pool money from their clients for trading in various instruments like securities, real estate and other investment assets. Banks, insurance companies, retirement/ pension funds, mutual funds, etc., are types of institutional investors. The principal objective of the investors is to create portfolios by buying and selling stocks on behalf of their clients. These investors scout for undervalued stocks and invest in them. Institutional investors are of two broad types. They are the foreign and Domestic institutional investors based on the country of origin. Foreign institutional investors (FIIs) invest in assets from a country other than the country of origin. The FIIs have been investing in the Indian Stock market since September 14, 1992 (Rajput, Chopra, & Rajput, 2012). SEBI passed the regulations on the FIIs in 1995. Domestic institutional investors like the FIIs are also a category of investors that contribute to stock market movements. The gross purchases on 31st March 2023 by FII stood at Rupees 11402.22 cr while DII stood at 8212.34 cr. The average FII gross daily purchases stood at 8702.44 cr, while DII stood at 5086.88 cr for the study period. The average FII gross daily sales stood at 8816.56 cr, while DII stood at 4740.95 cr for the study period.

The present study explores the relationship between FIIs and DIIs and with the Bombay Stock Exchange and the National Stock Exchange. The plan of the paper is as follows. Section II deals with the literature review, section III deals with the study's objectives, section IV deals with data and methodology, section V deals with empirical results and findings, and Section VI deals with the conclusion.

2. Literature Review

Kothiwal, Sharma, Sharma, Goel, & Ratnesh (2022) studied the impact of COVID-19 on the changes in the flow of Funds by the DII and FII. They observed an inverse relationship between the FIIs and DIIs, i.e. when there is heavy selling by FIIs and buying by the DIIs.

Khatun (2022) studied the correlation between FII and DII from April 2011 till March 2021. The study takes monthly values. The author observes that the markets saw positive movements even if the economic fundamentals like GDP are low due to FII and DII investing alternatively.

Parab & Reddy (2020) studied the association of FIIs and DIIs with the stock market returns from June 2015 to March 2018. The study has tried to explore the relationship between pre- and post-demonetisation. It is observed that there was a negative relationship between FIIs and DIIs with Nifty 50 returns before demonetisation but was positive post-demonetisation.

Thombare & Chitnis(2020) have carried out a literature review on the various research papers and the trends in FII investment for 2002-2019.

Kashyap, Srivastava, & Sarva (2017) have observed a negative relationship between the FII and DII. Nifty is positively related to FII and negatively correlated to DII. In addition, they observed a cause-and-effect relationship between institutional investors and the stock market.

Ainapure & Iyer (2017) tried to understand the relationship between FII and the Bombay Stock Exchange (BSE) with specific relation to BSE Bankex, BSE Tech, BSE Healthcare, BSE IT, BSE Auto and BSE Oil and Gas, which had attracted the maximum FII. The period of the study is Jan 2006 to 31 December 2015. Johansen's cointegration test revealed that FII and all six indices move together with a positive correlation. However, there is no causal relationship with the healthcare index.

Jalotha (2017) observes that FII investment depends on market conditions and leads to market volatility. As a result, the FII and DII movements are opposite.

Barinov (2017) observes that institutional ownership increases the volatility of stock returns. He follows higher institutional ownership and higher volatility. This volatility is because the institutions are interested in investing in stocks with less firm-specific risk.

In their study, Bamne & Jagtap (2017) analysed FII and DII flow concerning the P/E ratio in Indian Equity markets from April 2007 to October 2017. They find that the FII's purchase is at lower valuations and sold at higher valuations in the Indian equity market.

Jayakumar & Sulthan (2016) examined the dynamic interaction between FII flows and stock market returns from January 2000 to July 2014. GARCH modelling tests the contribution to volatility due to FII investment in various industries listed on the Bombay Stock Exchange.

Nagpal, Chandrika, & Ravindra (2016) have studied the impact of FDI and FII flows on the Indian Stock Market from 2005-06 to 2014-15. The authors have used BSE SENSEX and CNX NIFTY as proxies for the Indian stock market. From the regression analysis, they observed that the flows of FDI and FII significantly impact the stock market movements.

Joo & Mir (2014) have studied the nexus between stock market volatility and FII capital flows. The study uses monthly time series from January 1999 to December 2013. The authors have used the ADF test to check the stationarity of the time series. In addition, GARCH modelling is used to measure standard deviation. They observed a significant impact of volatility on NIFTY and SENSEX due to FII investments.

Banerjee (2013), in his study, explores the impact of FDI and FII on the Indian stock market, i.e. BSE SENSEX and CNX NIFTY. He used correlation and multiple regression analysis to understand the relationship between January 2008 and June 2009. As a result, he observed a positive impact of FDI and a negative impact of FII on the Indian stock market during the recession period.

Zhian, Jinmin, Donghui, & Rui(2013) investigated the impact of foreign institutional ownership on firm-level stock return volatility in China on a sample of 1458 firms between 1998 and 2008. It also showed that the higher the level of ownership, the higher the level of volatility.

Bose (2012) explores the dynamic relationship between investment inflows of mutual funds and FIIs post-sub-prime crisis. They find a negative relationship between the two institutional investor's investments. The Domestic mutual fund's investment flows depend on FII flows, market returns and previous investments. The author also finds a causal relationship between FII investments and Stock market returns.

Rajput, Chopra, & Rajput (2012) examine the information spillover and volatility spillover of the relationship of FIIs in the Indian Stock Market. Cointegration Analysis, VECM, Granger Causality, Etc., were used to study the objectives. As a result, they observed bi-directional volatility spillover.

Karthikeyan & Mohanasundaram (2012) studied the annual data of FII, CNX Nifty and BSE Sensex from 2001 to 2010. They undertook a simple percentage analysis, correlation and regression analysis. As a result, they observed a positive but insignificant relationship between FII and the Indian Stock Market, i.e., S&P CNX Nifty 500 was used as the proxy.

Loomba (2012), in his study, explored the impact of FIIs on the volatility of the Bombay Stock Exchange from 1 January 2001 to 31 January 2011. He observes a positive relationship between FII activity and Sensex movements.

Chittedi (2008) analyses the performance of the Bombay Stock Exchange vs FIIs in the Indian Stock Market. He observes that FII flows highly influence liquidity and volatility in the market.

Rai and Bhanumurthy (2003) studied the bi-directional causality between FII and equity returns from 1994-2002. They observed that the equity returns are driving the FII investment.

Agarwal, (1997). Chakrabarti, 2001; Trivedi and Nair, 2003, have observed a significant positive relationship between FII investments and equity returns.

3. Objectives of the Study

The present study has the following objectives.

- To study the correlation of net investments by FIIs and DIIs for each month for the study period.
- To find the binary causality between the FIIs and Indian Stock Exchanges, i.e. Bombay Stock Exchange and National Stock Exchange.
- To find the binary causality between the DIIs and Indian Stock Exchanges, i.e. Bombay Stock Exchange and National Stock Exchange.

4. Data and Methodology :

The variables in the study are net purchase and sales FII (NPSFII), net purchase and sales DII(NPDFII), gross purchase FII(GPFII), gross sales FII(GSFII), gross purchase DII (GPDII), gross sales DII (GSFII), Change in Sensex (CSensex) (difference between the closing and the opening values), and Change in Nifty (CNifty) (difference between the closing and the opening values). The daily data on gross purchases/sales by FII and DII is from the money-control website. In addition, the BSE SENSEX and NSE NIFTY data from the respective stock exchanges. The study period is from 16th April 2007 to 31st March 2023. The correlation between the daily data for NPSFII and NPSDII is found each month for the study period. The Augmented Dicky Fuller Tests are undertaken in three forms, i.e. level, level and intercept and level, intercept and trend, to test the stationarity of the all-time series. The null hypothesis states that the time series has a unit root, i.e. it is non-stationary. The time series is stationary if the test alternative value is more negative than the critical value and the null hypothesis of a unit root stands rejected (Brooks, 2008). Post-stationarity tests, the Granger causality tests, are undertaken among the variables to test the bilateral causality. The lowest value of the AIC criteria is used to choose the optimal lag.

5. Empirical Results and Findings

Table 1 shows that net FII Buy/ Sell and net Domestic Buy/Sell are negatively correlated. Out of 192 months of observation, only six months show a weak positive correlation. It shows that both investors act in the opposite direction. This represents that the DIIs provide liquidity to the FIIs at the time of their exit.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2023	-0.89	-0.73	-0.20									
2022	-0.66	-0.81	-0.88	-0.68	-0.70	-0.92	-0.72	-0.60	-0.70	-0.79	-0.76	-0.34
2021	-0.86	-0.01	-0.27	-0.67	-0.37	-0.31	-0.54	-0.65	-0.43	-0.72	-0.75	-0.60
2020	-0.85	-0.62	-0.85	-0.40	**0.54**	-0.43	-0.54	-0.16	-0.74	-0.60	-0.71	-0.66
2019	-0.78	-0.44	-0.87	-0.79	-0.80	-0.16	-0.85	-0.43	-0.21	-0.31	-0.67	-0.87
2018	-0.55	-0.77	**0.16**	-0.61	-0.39	-0.55	-0.78	-0.48	-0.56	-0.77	-0.43	-0.76
2017	-0.33	-0.94	-0.36	-0.66	-0.83	-0.44	-0.75	-0.53	-0.82	-0.54	-0.24	-0.61
2016	-0.65	-0.69	-0.69	-0.17	-0.33	-0.54	-0.75	-0.15	**0.11**	-0.72	-0.31	-0.52
2015	-0.92	-0.36	-0.18	**0.04**	-0.94	-0.67	-0.63	-0.97	-0.64	-0.74	-0.61	-0.70
2014	-0.78	-0.80	-0.81	-0.47	-0.39	-0.22	-0.90	-0.75	-0.78	-0.86	-0.41	-0.04
2013	-0.24	-0.75	-0.66	-0.84	-0.68	-0.89	-0.37	-0.63	-0.89	-0.64	-0.44	-0.56
2012	-0.49	-0.20	-0.51	-0.45	-0.56	-0.53	-0.77	**0.28**	-0.79	-0.28	-0.78	-0.71
2011	-0.56	-0.77	-0.80	-0.58	-0.61	-0.90	-0.65	-0.84	-0.81	-0.81	-0.82	-0.74
2010	-0.52	-0.82	-0.40	-0.21	-0.62	-0.53	-0.25	-0.05	-0.70	-0.44	-0.03	-0.84
2009	**0.26**	-0.62	-0.61	**0.03**	-0.60	-0.40	-0.77	-0.34	-0.10	-0.49	-0.56	-0.67
2008	-0.82	-0.28	-0.40	-0.37	-0.54	-0.21	-0.58	-0.61	-0.58	-0.73	-0.18	-0.22
2007				-0.30	-0.18	-0.56	-0.75	-0.83	-0.43	-0.49	-0.47	-0.41

Table 1: Monthly Correlation matrix between Net Foreign Institutional Investors and Net Domestic Institutional Investors (The bold figures show a positive correlation)(Authors Computations)

From Table 2, it is seen that the p-value of all the series is less than 0.05 for constant, constant and linear trends and none, hence stationary.

	Constant		Constant and linear trend		None	
Variables	T-statistic	p Value	T-statistic	p Value	T-statistic	p Value
GPDII	-3.01	0.03	-5.59	0.00	-2.15	0.03
GSFII	-2.56	0.10	-5.35	0.00	-1.84	0.06
GPFII	-6.76	0.00	-11.18	0.00	-2.62	0.01
GSFII	-6.34	0.00	-15.59	0.00	-2.92	0.00
NPSDII	-13.89	0.00	-14.29	0.00	-11.66	0.00
NPSFII	-16.27	0.00	-16.48	0.00	-12.14	0.00
CNIFTY	-6.76	0.00	-11.18	0.00	-2.62	0.01
CSENSEX	-1.76	0.40	-2.13	0.53	-2.60	0.01

Table 2: Results of ADF test (Authors Computations)

From the results of the Granger causality test in table 3, it is evident that the purchase and sales by FIIs (FIIGP, FIIGS) and DIIs (DIIGP, DIIGS)cause movements in the NIFTY as the p-value is less than 0.05. In contrast, the purchase and sales by FIIs (FIIGP, FIIGS) and purchases of DIIs (DIIGP) cause movements in the SENSEX. Similarly, the movements in SENSEX and NIFTY cause fluctuations in Gross Purchases in both FIIs and DIIs and Gross Sales in FIIs.

But gross sales by DIIs have no impact on the movements of the SENSEX. And the movements of the exchanges have no impact on the sales by DIIs.

Null Hypothesis:	F-Statistic	Prob.
FIIGS does not Granger Cause CSENSEX	14.134	0.000
CSENSEX does not Granger Cause FIIGS	2.91252	0.055
FIIGP does not Granger Cause CSENSEX	13.9806	0.000
CSENSEX does not Granger Cause FIIGP	4.28855	0.014
DIIGP does not Granger Cause CSENSEX	14.9778	0.000
CSENSEX does not Granger Cause DIIGP	5.69132	0.003
DIIGS does not Granger Cause CSENSEX	2.54945	0.078
CSENSEX does not Granger Cause DIIGS	2.81601	0.060
FIIGS does not Granger Cause CNIFTY	15.1807	0.000
CNIFTY does not Granger Cause FIIGS	3.58095	0.028
FIIGP does not Granger Cause CNIFTY	14.0476	0.000
CNIFTY does not Granger Cause FIIGP	4.90483	0.008
DIIGP does not Granger Cause CNIFTY	14.7498	0.000
CNIFTY does not Granger Cause DIIGP	7.58841	0.001
DIIGS does not Granger Cause CNIFTY	3.08682	0.046
CNIFTY does not Granger Cause DIIGS	2.49044	0.083

Table 3: Results of Granger Causality test (Authors Computations)

From tables 4 and 5, it is evident that Changes in Sensex and NIFTY are positively related to gross purchases of FIIs and Gross sales of DII and negativelys related to Gross sales of FII and Gross Purchases of DIIs.

Variables	Coeficient	T-Statitics
CSENSEX(-1)	- 0.0905	-5.59851
GPFII(-1)	+0.0394	9.44630
GSFII(-1)	-0.0396	-8.92071
GPDII(-1)	- 0.0277	-4.25570
GSDII(-1)	+ 0.0314	4.47784
Constant	- 32.9754	-4.00513

Table 4: Results of Unrestricted VAR of Changes in SENSEX and Other variables

Variables	Coeficient	T-Statitics
CNIFTY(-1)	- 0.0610	-3.75153
GPFII(-1)	+0.0105	8.34026
GSFII(-1)	-0.0106	-7.91696

GPDII(-1)	- 0.0087	-4.44392
GSDII(-1)	+ 0.0097	4.57604
Constant	- 6.1226	-2.44876

Table 5: Results of Unrestricted VAR of Changes in SENSEX and Other variables

6. CONCLUSION

Institutional investors, both domestic and foreign financial institutions, play a vital role in the movements in Indian Stock Market. The present study on the causal relationship between Foreign Institutional Investors (FIIs), Domestic Institutional Investors (DIIs), the Bombay Stock Exchange, and the National Stock Exchange shows both purchases and Sales of FIIs have positive and negative impacts on the market, respectively. In contrast, the DIIs' impact is opposite to that of the FIIs. The movements on the exchange also impact the decision to buy and sell securities by FIIs and purchases of DIIs. The correlations between NPSFII and NPSDII calculated on daily data are negative in the majority of the months in the period of study, which shows that the domestic institutional investors provide liquidity to the foreign institutional investors.

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A cross-sectional study to assess the Sexual Awareness among adolescent girls in Selected Schools of Hisar District, Haryana.

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Abstract : *Adolescence period begins with normal puberty physiologically, and ceases when an individual identity and behavior of adult life are accepted. This period involves physical, emotional, psychological and sexual developmental changes. Adolescents face numerous issues during this developmental phase. Adolescents especially girls must be provided with sex education to acquire information on the changes in the body, good menstrual hygiene practices, prevention of teenage pregnancies, sexually transmitted diseases, how to say no to unwanted sexual acts and to protect oneself from sexual abuse. A cross-sectional descriptive study was conducted among 100 adolescent girls selected from 2 government senior secondary schools by using lottery method through multistage cluster sampling. The data was collected using self structured Sexual Awareness Questionnaire and the data was analyzed using descriptive and inferential statistics. The results revealed that mostly (35%) girls belonged to 17-18 years of age group and majority (82%) of them attained puberty between 11-13 years. It was also found that 81% adolescent girls had low sexual Awareness, 19% had moderate sexual Awareness and no adolescent girl had high sexual Awareness. There was significant association between level of Sexual Awareness and socio-demographic variables such as occupation of father ($\chi 2 = 15.61$, $p = 0.000$), occupation of mother ($\chi 2 = 8.006$, $p = 0.045$) and family type ($\chi 2 = 6.020$, $p = 0.014$).*

Key Words: *Sexual Awareness, Adolescent girls, selected schools.*

1. INTRODUCTION :

Adolescence period begins with normal puberty physiologically, and ceases when an individual identity and behavior of adult life are accepted. According to World Health Organization's (WHO) definition of adolescence, this period of development is roughly in between the ages of 10 and 19 years[1]. Both boys and girls develop their sexuality during this phase of development[2]. Sexuality develops and changes throughout child's life. It's also about how the adolescent feels about their developing body, about reproductive changes, makes healthy decisions and choices about their own body, understands and expresses feelings of intimacy, attraction and affection for others[3].

Adolescents are vulnerable to many sexuality related issues such as reproductive hygiene, sexually transmitted diseases (STD's), unwanted pregnancies and sexual abuse. Sexual abuse is the prime issue which exposes adolescents especially girls to situations in which they are being used to get sexual gratification from petting, fondling of genitalia, voyeurism, exhibitionism or threatening child to engage in sexual related activities. This abuse leads to severe physical, psychological, and social consequences[4] National Family Health Survey reported that 1.5% of young women in 18-29 years age group have experienced sexual abuse before turning 18 and 1 in 4 Indian girls between 20-24 years get married before the age of 18 which increases the likelihood of related problems[5]. Nearly 15 million adolescent girls worldwide between the age group of 15-19 years have experienced forced sex at some point in their life and data from 30 countries highlights the fact that only 1% seeks professional help and most of the cases go unnoticed. Early exposure to sexual relationship also increases the risk of sexually transmitted diseases and early pregnancies. These all issues can be in one or other way related to the adolescents perception of their sexuality as well as the way they handle any strange situation especially where they feel unsafe and insecure which can lead to sexual abuse[6].

Adolescent girls need to be assertive in a way that if someone known or unknown person trying to harass them, they should take their stand on it and adopt ways to protect themselves from sexual violence. Sexual Awareness starts with gaining the knowledge of what is meant by appropriate and inappropriate sexual related behavior. From a very early age, children were likely to teach "good touch" and "bad touch" to differentiate the handling of sexual from nonsexual parts of the body. Adolescents especially girls must be provided with sex education and sexual Awareness training to acquire information on the changes in the body, good hygiene practices, prevention of teenage pregnancies, sexually transmitted diseases, how to say no to unwanted sexual acts and to protect oneself from sexual abuse.

2. AIM OF STUDY

The aim of the study is to determine the level of Sexual Awareness of adolescent girls.

3. OBJECTIVES OF STUDY

- To assess the level of Sexual Awareness among adolescent girls studying in selected schools.
- To find out the association between selected socio-demographic variables and level of Sexual Awareness among adolescent girls studying in selected schools.

4. OPERATIONAL DEFINITIONS

- **Assess: -** It refers to the assessment and measurement of level of Sexual Awareness among adolescent girls.
- **Sexual awareness: -** It refers to understanding of different aspects of sexuality such as anatomy and physiology of female reproductive system, secondary sexual characteristics, menstrual health, sexually transmitted diseases, sex education which includes good touch and bad touch etc and is determined by the correct response to the structured closed- ended questionnaire regarding sexuality.
- **Adolescent girls: -** They are the girls who are of age group 13-18 years and studying in 8th to 12th standard in different rural state board schools of Hisar district, Haryana.

5. ASSUMPTIONS

- The adolescent girls will have low level of sexual awareness.
- There will be a significant association between selected socio-demographic variables and Sexual Awareness among adolescent girls.

6. METHODOLOGY

Research approach: - Quantitative research approach was used b researcher.
Research design: - A cross-sectional descriptive study design was used in the study.
Study setting: - The study was conducted in two Government Senior Secondary Schools of district Hisar, Haryana. The schools were selected randomly by firstly selecting one block from Hisar district, Haryana.

Sample size and sampling technique: - The sample size was 100 adolescent girls and they were chosen by adopting multistage cluster sampling through lottery method from the selected schools.

Content validity and reliability: - The data was collected about socio-demographic variables using self structured Sexual Awareness Questionnaire. The tool was submitted to 12 nursing and medical experts for establishing validity. The reliability of the tool was calculated using Karl Pearson's reliability formula through test-retest method and it was 0.95 which showed that tool is reliable. After that tool was translated into regional language and administered to the adolescent girls for data collection.

Criteria for sample selection

Inclusion criteria: -

1. The adolescent girls who were willing to participate in the study.
2. The adolescent girls of 13-18 years who were studying in selected schools.
3. The adolescent girls who were studying in selected rural state board schools of Hisar district, Haryana.

Exclusion criteria: -

1. The adolescent girls who were not available at the time of data collection.
2. The adolescent girls who were not able to understand Hindi or English language.
3. The adolescent girls who were studying in Private and CBSE board schools.

Data collection procedure

The approval was obtained from Ethical committee of Desh Bhagat University, Mandi Gobindgarh. After that permission from principals of selected schools of district Hisar and then informed consent and assent was obtained from study subjects. This was followed by administering structured Sexual Awareness Questionnaire and collecting the data from the subjects.

7. RESULTS AND ANALYSIS

Analysis is the categorizing, ordering, manipulating, and summarizing the data to obtain answer to research questions. The data was analyzed using descriptive and inferential statistics.

Table 1: Distribution of Demographic variables of adolescent girls

Demographic Variables		Subjects (n=100)	
		f	**%**
Age (in years)	13-14	30	30
	15-16	36	36
	17-18	34	34
Education Pursuing	8th standard	20	20
	9th standard	19	19
	10th standard	23	23
	11th standard	21	21
	12th standard	17	17
Occupation of the father	Government employee	22	22
	Private employee	51	51
	Self employed	28	28
	Unemployed	0	0
Occupation of the mother	Government employee	10	10
	Private employee	27	27
	Self employed	15	15
	Unemployed	48	48
Education of the father	No formal education	0	0
	8th standard	0	0
	10th standard	35	35
	12th standard	34	34
	Diploma holder	18	18
	Graduate	13	13
	Postgraduate	0	0

Education of the mother	No formal education	0	0
	8th standard	0	0
	10th standard	41	41
	12th standard	30	30
	Diploma holder	16	16
	Graduate	13	13
	Postgraduate	0	0
Family Type	Nuclear	12	12
	Joint	88	88
	Extended	0	0
Per capita income (in Rupees)	≤5,000	0	0
	5,001-10,000	53	53
	10,001-20,000	20	20
	>20,000	27	27
Age of Puberty	Not attained	0	0
	Below 10 years	0	0
	11-13 years	78	78
	14 years and above	22	22
Source of information	Parents	40	40
	Siblings	6	6
	Relatives	14	14
	Friends and peer group	9	9
	Teachers	19	19
	Media	12	12
Previous history of sexual abuse	Yes	0	0
	No	100	100

Table 1 depicts that highest percentage of the adolescent girls (36%) belongs to the age group of 15-16 years of age. Highest percentage of adolescent girls (23%) studying 10th standard. Majority of the father's occupation (51%) were doing private job. Highest percentage of the adolescent girls mothers (48%) were homemakers. Highest percentage of the adolescent girls fathers (35%) had studied up to 10th standard. Majority of the adolescent girl's mothers (41%) had up to 10th standard. Majority of the adolescent girls, family type (88%) had joint family. Majority of the adolescent girls, family per capita income (53%) having per capita income of Rs 5,001-10,000. Majority of the girls (78%) had attained puberty at 11-13 years. Highest percentage of the adolescent girls (44%) had source of information from parents. All the adolescent girls (100%) had no previous history of sexual abuse.

Figure 1: Frequency and Percentage Distribution of Sexual Awareness

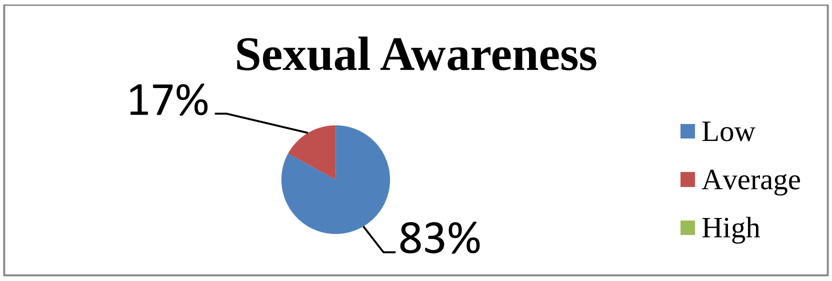

Figure 1 shows that majority of adolescent girls had (83%) low Sexual Awareness, 17% had average Sexual Awareness and no adolescent girl had high Sexual Awareness.

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Table 2: Description of overall Mean, SD and Mean percentage Sexual Awareness Scores of adolescent girls

Sexual Awareness	Mean	SD	Mean %
	8.42	1.43	19.14

Table 2 depicts that mean Sexual Awareness of adolescent girls was 8.42 ±1.43.

Table 3: Association between level of Sexual Awareness and socio-demographic variables among adolescent girls.

n= 100

Demographic Variables		Total	Low Awareness (83)	Average Awareness (17)	Chi-Square Test
Age (in years)	13-14	30	25	5	$\chi2$= 1.358 P=0.506 df= 2
	15-16	34	30	4	
	17-18	36	28	8	
Education Pursuing	8th standard	20	17	3	$\chi2$= 5.541 P=0.236 df= 4
	9th standard	19	15	4	
	10th standard	23	16	7	
	11th standard	17	16	1	
	12th standard	21	19	2	
Occupation of the father	Government employee	22	19	3	$\chi2$= 0.570 P=0.751 df= 2
	Private employee	51	41	10	
	Self employed	28	24	4	
Occupation of the mother	Government employee	10	8	2	$\chi2$= 0.402 P=0.939 df= 3
	Private employee	27	22	5	
	Self employed	15	12	3	
	Unemployed	48	41	7	
Education of the father	10th standard	35	29	6	$\chi2$= 2.409 P=0.491 df= 3
	12th standard	34	30	4	
	Diploma holder	18	15	3	
	Graduate	13	9	4	
Education of the mother	10th standard	41	35	6	$\chi2$= 0.539 P=0.910 df= 3
	12th standard	30	25	5	
	Diploma holder	16	13	3	
	Graduate	13	10	3	
Family Type	Nuclear	12	8	4	**$\chi2$= 12.578 P=0.000*** df= 1**
	Joint	88	75	13	
Per capita in Rupees	5,001-10,000	53	41	12	$\chi2$= 2.553 P=0.278 df= 2
	10,001-20,000	20	18	2	
	>20,000	27	24	3	

Age of Puberty	11-13 years	78	64	14	$\chi2$= 0.226 P=0.634 df= 1
	14 years and above	22	19	3	
Source of information	Parents	40	32	8	$\chi2$= 2.595 P=0.762 df= 5
	Siblings	6	4	2	
	Relatives	14	13	1	
	Friends and peer group	9	8	1	
	Teachers	19	16	3	
	Media	12	10	2	

***** Significant at 0.001 level (P< 0.001)**

The data presented in Table 3 depicts that the association between level of Sexual Awareness among adolescent girls and the socio-demographic variables which was computed using Pearson Chi-square test. There was significant association between level of Sexual Awareness and socio-demographic variables such as family type ($\chi2$ = 12.578, p=0.000).

8. DISCUSSION

The level of Sexual Awareness among majority of adolescent girls (83%) was low. Findings of Biteshori H, Moiranghtem S (2022) are parallel to the present study that most (82.5%) of research subjects had inadequate awareness and only 17.5% had moderate awareness on prevention of sexual abuse[7].

There was significant association between level of Sexual Awareness and socio-demographic variable such as family type ($\chi2$ = 12.578, p=0.000). The findings of Kalkute et. al (2015) on knowledge about sexual health among boys students of junior colleges of an urban area had contradictory results similar to present study in which nuclear families had significant association with knowledge regarding sexual health. It showed that students from nuclear families had good knowledge as compared to students from joint families (p=0.158)[8].

9. LIMITATIONS

1. The researcher faced difficulty in obtaining permission from schools due to sensitivity of topic.
2. Lack of long term follow up.
3. Due to small sample size, generalization was difficult.

10. RECOMMENDATIONS

Based on the study findings, following recommendations are to be considered:

- A longitudinal study can be conducted to assess the long term effect of Sexual Assertiveness Training Program for improving Sexual Awareness.
- The government should recruit more experienced and trained nurses for creating Sexual Awareness among adolescents.
- Mixed method research is recommended for in-depth investigation of the issues of adolescents concerning to sexual matters.

11. CONCLUSION

It is concluded from the study findings that majority of adolescent girls had low level of Sexual Awareness which needs to be improved with the help of educational teachings or Sexual Assertiveness Training Programs to reduce the risk of sexual abuse.

11. FINANCIAL SUPPORT : Nil

12. CONFLICT OF INTEREST

There is no conflict of interest.

ACKNOWLEDGEMENT
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A study to assess knowledge of Breast cancer and practices of Breast Self-Examination among rural women

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Abstract: *Worldwide, breast cancer is the most common and the primary cause of death for women with cancer. Breast cancer is the most serious disease among women because it has a bigger impact on their self-image than any other cancer. The aim of the study is to assess knowledge of Breast Cancer and the practice of Breast Self-Examination and to develop a module of Community Based Education Intervention for early detection and seeking early management among rural women of Breast Cancer. For this study, a descriptive research approach was adopted. A multistage cluster sampling technique through the lottery method was used to enroll the subjects. A structured knowledge questionnaire regarding breast cancer and the checklist for practice of Breast Self Examination was used to collect data from 200 rural women of selected villages of Hoshiarpur, Punjab. Analysis of the data was done by using descriptive and inferential statistics. The study shows that the majority of the level of knowledge among rural women (56%) was associated with very poor knowledge whereas, a majority of low level of poor practice towards Breast Self-Examination was observed (74%). There was a significant association between the level of knowledge and demographic variables such as age, monthly per capita income, source of information ($p<0.05$) and religion, family history of breast cancer ($p<0.001$). Whereas, there was a significant association between the level of practice and demographic variables such as family history of breast cancer ($p<0.001$). The study findings revealed the hat majority of women have low level of knowledge of Breast Cancer the and practice of Breast Self-Examination which needs to be enhanced among women. The study also depicts a positive correlation between knowledge and practice among rural women. It is also inference that the degree to which a person perceives breast cancer as serious and comprehends the disease will determine their ability to conduct BSE, start BSE, and continue practicing BSE for early detection of breast cancer.*

Keywords: *Knowledge, Practice, Women, Breast Cancer, Breast Self-Examination.*

1. INTRODUCTION :

Cancer is one of the most widely discussed and dreaded diseases, and it has evolved significantly in the last two decades. Breast cancer is the most prevalent and leading cause of mortality among cancer patients in women all over the world. Breast cancer is the most serious disease among women because it has a bigger impact on their self-image than any other cancer[1]. The rising number of senior citizens and lifestyle–related risk factors for breast cancer like eating unhealthy foods, obesity, and using harmful substances cause an increased prevalence of breast cancer in developing nations. Moreover, the occurrence is mounting in the unindustrialised nations as a result of the rising lifespan, urbanization, and embracing of Western lifestyles. Despite this, in low and middle-income countries, early detection remains the cornerstone of breast cancer control to improve outcomes and survival to diagnose breast cancer in very late stages[2].

Higher stages of cancer development make survival more challenging, and stage 3 and stage 4 breast cancer affects more than 50% of Indian women. In India, women with breast cancer reported a 60% post-cancer survival rate, compared to 80% in the United States. Women are capable of making their own diagnoses and are aware of any lumps or masses that might be malignant growths. Due to poor rates of early identification and diagnosis, India has a low survival rate for breast cancer in women[3].

It is found that lack of time, lack of self-confidence, inability to perform the technique correctly, fear of possible discovery of a lump, and embarrassment related to breast manipulation was cited as a reason not to practice BSE. In India, while a formal screening program does not exist, it is advisable for adults above the age of 40 years to get themselves tested with a baseline mammogram and then a decision for frequent check-ups done on basis of a doctor[4].

An extensive research review and by professional experience, the investigator found that every year after a practical session, on BSE, among nursing students 1 out of 40 students found unusual and got treatment, which made the researcher interested in exploring more on awareness of Breast Cancer among women. Also, the researcher feels that the ample commitment to public education about breast cancer screening and detection types, including timely diagnosis, would save quite a lot of women's lives**.**

1.1 PURPOSE OF THE STUDY: The aim of the article is to assess knowledge of Breast Cancer and the practice of Breast Self-Examination and to develop a module of Community Based Education Intervention for early detection and early management among rural women of Breast Cancer.

2. OBJECTIVES OF THE STUDY

- To determine the knowledge regarding Breast Cancer among rural women.
- To determine the practice regarding Breast self-examination among rural women.
- To find out the association between demographic variables with knowledge of Breast Cancer and practice regarding Breast self-examination among rural women.
- To find out the relationship between knowledge and practice on Breast self-examination among rural women.

2.1 OPERATIONAL DEFINITIONS

1. Knowledge: In the present study, knowledge is the correct response to the knowledge items in the structured closed-ended questionnaire regarding Breast cancer for rural women.
2.Practice: In this study, practice refers to gain in practice skills of BSE at regular and the same time each month, using a proper technique which is measured by a checklist.
3. Breast Cancer: Breast Cancer is the malignant condition of the breast arising from the epithelial lining of the lobule ducts and the nipple.
4. **Breast Self-Examination:** A Breast self-examination (BSE) is an inspection by a woman of her breasts to detect breast cancer early. In this study BSE refers to gain knowledge regarding Breast self-examination among rural women.

2.2 ASSUMPTIONS

- There will be low level of knowledge on Breast cancer among rural women.
- There will be less practice of Breast Self- Examination among rural women.
- There will be a significant association between level of knowledge among rural women and selected demographic variables.
- There will be a significant association between level of practice among rural women and selected demographic.
- There will be significant relationship between knowledge and practice scores of rural women on Breast cancer and its preventive measure.

3. MATERIALS AND METHODOLOGY

Research Approach : The researcher considered the quantitative research approach.

Research Design : Descriptive non-experimental research design was considered.

Research Settings: The setting of the study was conducted in selected village of district Hoshiarpur, Punjab. The selection of setting was done on based on the nature of the research question and the type of information needed. This study was conducted in randomly selected one block followed by random selected one village viz. Rampur of district Hoshiarpur, Punjab through lottery method.

Variables in the Study: The dependent variable were knowledge and practice of Breast Cancer and Breast Self-Examination among women of rural areas. Whereas, attribute variables of the study were age, type of family, religion, marital status, educational level, occupation, monthly per capita income, family history of breast cancer, and source of information.

Delimitations of Study

1. The study was restricted to a specific region of the district Hoshiarpur..
2. The study was restricted to a particular group of rural women between the ages of 18 and 55.
3. The study was restricted to individuals who volunteered to participate.

Population: In this present study population was rural women between 18 - 55 years of age group who met the inclusive criteria in selected villages of district Hoshiarpur, Punjab.

Sample size: In the present study, the sample consists of 200 women were considered as samples for the study.

Sampling technique: In the present study, the investigator used multistage cluster sampling techniques using lottery method.

Inclusion criteria: Women who are in age group 18 - 55 years, residing in selected villages of district Hoshiarpur, willing to participate in study group and able to read and understand Punjabi language.

Exclusion criteria: Women who are having physical and psychological problems, pregnant during the study period and diagnosed with breast cancer.

Content Validity: The standard instrument was submitted for validation to 12 experts from the field of Medical surgical Nursing, Obstetrical, and Gynaecological Nursing, Community Health Nursing Paediatric Nursing, Oncologist Surgeon and Gynaecologist to establish the validity. Based on the expert opinion some of the questions are modified in the demographic profile and structure questionnaire followed by an arrangement of the options was done in a proper way according to suggestions given by the expert.

Reliability of Tool: The test-retest method was adopted in that is instrument was administered to the samples and was repeated to the same samples, after the gap of one week. Karl Pearson's reliability formula was calculated for the reliability of the tool which was 0.88 and 0.74 for knowledge and practice of breast cancer respectively which shows tool is reliable.

Data Collection: As part of the first author's PhD research work, the study was approved by the ethical committee of Desh Bhagat University. Permission for data collection was taken from permission from Sarpanch of selected villages of district Hoshiarpur. The purpose of the data collection was explained to the women, their consent was taken and a structured questionnaire and checklist were administered.

4. FINDINGS:

Based on the objectives, both descriptive and inferential statistics were used to calculate the findings. The highest percentage (40%) of rural women belonged to 33 to 39 years, (60%) nuclear family. The majority of women (60%) were from the Sikh religion and married (55%) The highest percentage of the rural women (42.5%) had higher secondary education and were homemakers, The large proportion of the rural women (55%) were in the Rs 1000-1999 category of per capita income and more (95%) were not associated with a family history of breast cancer . From 200 women the majority of the rural women (40%) gained knowledge about breast cancer from Health professionals as source information. Out of 200 rural women, the level of knowledge (74%) was associated with very poor knowledge. Besides, a low level of poor practice (56%) was observed. The study shows the relationship between knowledge and practice. The computed findings of Pearson correlation coefficient value show there is positive correlation between knowledge and practice with r value of 0.718 which was significant at the level of p= 0.031. Hence, it was found that if knowledge increases practice also increases in the same direction of knowledge.

Table 1: Distribution of Demographic variables of rural women

N=200

Demographic Variables		**f**	**%**
Age of mother in years	18 -25	30	15.0
	26 -32	40	20.0
	33 – 39	80	40.0
	40 – 46	30	15.0
	47 and above	20	10.0
Type of Family	Nuclear	120	60.0
	Joint	40	20.0
	Extended	40	20.0
Religion	Sikh	120	60.0
	Hindu	50	25.0
	Muslim	10	5.0
	Christian	20	10.0
Marital Status	Unmarried	60	30.0
	Married	110	55.0
	Widow/ Divorce	30	15.0
Educational Status	No formal education	5	2.5
	Elementary Education	15	7.5
	High School Education	30	15.0
	Higher Secondary Education	85	42.5
	Graduate	50	25.0
	Postgraduate	15	7.5

Occupation	Home-maker	100	50.0
	Government employee	30	15.0
	Private employee	30	15.0
	Self – employed	25	12.5
	Student	15	7.5
Monthly income per capita in Rupees as per (Kuppaswamy scale)	≤ 500	10	5.0
	501 – 749	15	7.5
	750 – 999	25	12.5
	1000 – 1999	110	55.0
	≥ 2000	40	20.0
Family history of breast cancer	Yes	10	5.0
	No	190	95.0
Source of information	Friends / Relatives	25	12.5
	Newspaper/ News	15	7.5
	Journal / Magazine	30	15.0
	Social Media – FB / Instagram	50	25.0
	Health professionals	80	40.0

Table 2: Frequency and Percentage Distribution of Level of Knowledge on Breast cancer among rural women.

N = 200

Level of Knowledge	F	%
Very Poor	112	56
Poor	65	32.5
Average	23	11.5
Good	0	0
Excellent	0	0

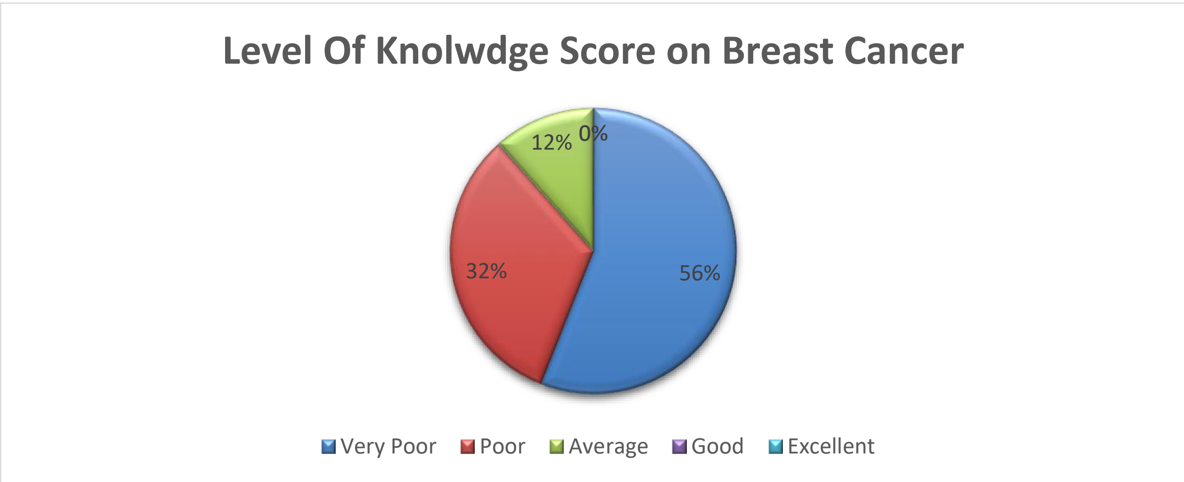

Figure 1 : Pie chart illustrating Frequency and Percentage Distribution of Level of Knowledge on Breast cancer among rural women.

Table 3: Frequency and Percentage Distribution of Level of practice score of Breast Self Examination among rural women

Level of practice	f	%
Poor	148	74
Need improvement	40	20
Good	12	6

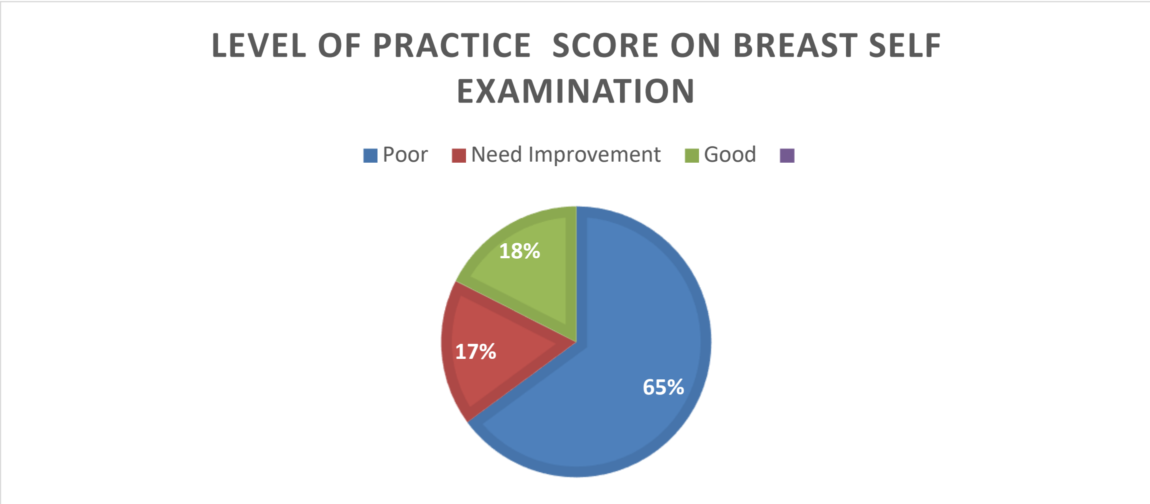

Figure 2 : Pie Chart showing Frequency and Percentage Distribution of Level of practice score of Breast Self Examination among rural women

Table 4: Association between level of knowledge and demographic variables among rural women

N= 200

Demographic Variables		**Total**	**Above Mean (48)**	**Below Mean (152)**	**Chi- Square test**
Age of mother in years	18 -25	30	11	19	**χ2= 11.49 P=0.021* df= 4**
	26 -32	40	14	26	
	33 - 39	80	10	70	
	40 – 46	30	7	23	
	47 and above	20	6	14	
Type of Family	Nuclear	120	31	89	χ2= 0.711 P=0.700 df= 2
	Joint	40	11	29	
	Extended	40	8	32	
Religion	Sikh	120	27	93	**χ2= 20.47 P=0.000*** df= 3**
	Hindu	50	7	43	
	Muslim	10	8	2	
	Christian	20	6	14	
Marital Status	Unmarried	60	18	42	χ2= 1.767 P=0. 0.413 df= 2
	Married	110	23	87	
	Widow/ Divorce	30	7	23	

Educational Status	No formal education	5	2	3	$\chi2$= 2.047 P=0. 0.727 df= 5
	Elementary Education	15	6	9	
	High School Education	30	9	21	
	Higher Secondary Education	85	21	64	
	Graduate	50	13	37	
	Postgraduate	15	3	12	
Occupation	Home-maker	30	7	23	$\chi2$= 1.973 P=0. 0.740 df= 4
	Government employee	30	9	21	
	Private employee	100	21	79	
	Self – employed	25	7	18	
	Student	15	5	10	
Monthly income per capita in Rupees as per (Kuppaswamy scale)	$\leq$ 500	10	3	7	**$\chi2$= 11.66 P=0.019* df= 4**
	501 - 749	15	6	9	
	750 – 999	25	12	13	
	1000 - 1999	110	20	90	
	$\geq$ 2000	40	13	27	
Family history of breast cancer	Yes	10	7	3	**$\chi2$= 12.21 P=0.000*** df= 1**
	No	190	41	149	
Source of information	Friends / Relatives	25	7	18	**$\chi2$= 12.57 P=0.013* df= 4**
	Newspaper/ News	15	9	6	
	Journal / Magazine	30	5	25	
	Social Media – FB / Instagram	50	11	39	
	Health professionals	80	16	64	

***** Significant at 0.001 level (P< 0.001), * Significant at 0.05 level, (P< 0.05)**

Table 5: Association between practice and demographic variables among rural women

N= 200

Demographic Variables		**Total**	**Above Mean (41)**	**Below Mean (159)**	**Chi- Square test**
Age of mother in years	18 -25	30	7	23	$\chi2$= 8.201 P=0.084 df= 4
	26 -32	40	9	31	
	33 - 39	80	10	70	
	40 – 46	30	7	23	
	47 and above	20	8	12	
Type of Family	Nuclear	120	20	100	$\chi2$= 3.395 P=0.183 df= 2
	Joint	40	12	28	
	Extended	40	9	31	
Religion	Sikh	120	21	99	$\chi2$= 3.804 P=0.283 df= 3
	Hindu	50	10	40	
	Muslim	10	3	7	
	Christian	20	7	13	

Marital Status	Unmarried	60	8	52	χ2= 5.156 P=0.075 df= 2
	Married	110	29	81	
	Widow/ Divorce	30	4	26	
Educational Status	No formal education	5	2	3	χ2= 2.835 P=0.725 df= 5
	Elementary Education	15	3	12	
	High School Education	30	4	26	
	Higher Secondary Education	85	19	66	
	Graduate	50	9	41	
	Postgraduate	15	4	11	
Occupation	Home-maker	30	3	27	χ2= 3.221 P=0.521 df= 4
	Government employee	30	5	25	
	Private employee	100	23	77	
	Self – employed	25	6	19	
	Student	15	4	11	
Monthly income per capita in Rupees as per (Kuppaswamy scale)	≤ 500	10	3	7	
	501 - 749	15	5	10	χ2= 4.702 P=0.194 df= 4
	750 – 999	25	8	17	
	1000 – 1999	110	18	92	
	≥ 2000	40	16	24	
Family history of breast cancer	Yes	10	9	1	**χ2= 31.19 P=0.000*** df= 1**
	No	190	32	158	
Source of information	Friends / Relatives	25	3	22	χ2= 4.83 P=0.304 df= 4
	Newspaper/ News	15	4	11	
	Journal / Magazine	30	10	20	
	Social Media – FB / Instagram	50	9	41	
	Health professionals	80	15	65	

***** Significant at 0.001 level (P< 0.001)**

5. DISCUSSION:

The present study revealed that rural women have lack in knowledge related to breast cancer and poor practice of Breast Self Examination. A similar study by S.K., Pradhan A., et al., shows that majority of findings were 30 years above age group (50.9%) and types of family (79.1%) belonging to a nuclear family, whereas, education with the majority belongs to secondary level (44.5%) and occupation about half of them were housewives (46.4%) shown contradictory to the findings of the present study[5]. However another parallel study on the prevalence and risk factors of breast cancer conducted by Madhukumar S., Thambiran U. R. et al. (2017), depicts 58% of respondents were aware of at least one symptom and 59% were aware of at least one risk factor[6]. A similar cross-sectional research design study was conducted by Suleiman AK. (2014) on awareness and attitudes regarding breast cancer and breast self-examination among female. The findings displays that majority 65.1% participants were not aware of BSE, but 11% had performed it[7].Sarker R, Islam MS, et al (2022) conducted a related study on knowledge of breast cancer and breast self-examination practices and its barriers among university female students in Bangladesh. The study exhibit that total knowledge score about breast cancer and practice of breast self- examination were significantly correlated with each other ($r = 0.54$; $p<0.001$)[8].

6. LIMITATION

- The researcher felt it difficult to seek permission from the administration.
- The researcher faced difficulty in convincing the women to participate in research study.
- The researcher found some difficulties raised while collecting data from the rural women.
- This study was focused only on selected villages as per the researcher's convenience. It would be conducted at the state level in order to improve awareness related to breast cancer and its preventive measures.

7. RECOMMENDATION: On the basis of this present study, the following recommendations are to be considered.

- A retrospective study can be carried out to evaluate knowledge and practice related to breast cancer and its preventive measures among women.
- A quasi-experimental study can also be conducted to assess the effectiveness of self structured health education on breast cancer and its preventive measures among community people.
- The study's findings can be generalised to a larger population by replicating it with a different demographic on a large sample.
- It is recommended that educational programmes be implemented to improve students' comprehension in the classroom in order to increase the number of screenings as this information becomes institutionalised. It is also envisaged that information will be transmitted from students to their families, increasing consciousness across society.

8. CONCLUSION: It is concluded from the study findings that the majority of women have low level of knowledge of Breast Cancer and the practice of BSE which needs to be enhanced among women for positive health by means of early detection and early treatment. Moreover, there is a positive correlation between knowledge and practice among rural women was observed. It is also an inference that the degree to which a person perceives breast cancer as serious and understands the disease will determine their ability to conduct BSE, start BSE, and continue practicing BSE for early detection of breast cancer.

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CONFLICTS OF INTEREST : There are no conflicts of interest.

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Enhancing communication skills in the science class room through problem posing, presentation and discussion method among the students.

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1. INTRODUCTION :

Communication is a process where one set out to convey a message to another person through the medium of words, gestures and/or pictures. Effective communication skills are really important for a teacher for transmitting of education, class room management and interaction with students in the class. It also encourages efforts, modifies attitudes and stimulates thinking. Problem posing method in education is the method of teaching that emphasizes critical thinking and help in the generation of new problem in the given situation. Teacher need to pose good question to assess how well the student learned and to trouble shoot specific deficit in knowledge and skill. Presentation method helps the students to learn how to speak in front of a group. Use of presentation aids makes for a much more interesting talk which develop students confidence Discussion method is a variety of forum for open ended, collaborated exchange of ideas among a teacher and students for the purpose of furthering students thinking, learning, problem solving, understanding or literary appreciation. In a discussion, one should aim to interact and respond to what other people are saying.

2. Objectives:

- To study the effect of problem posing method in enhancing communication skills among the students of experimental group and control group.
- To study the effect of presentation method in enhancing communication skills among the students of experimental group and control group.
- To study the effect of discussion method in enhancing communication skills among the students of experimental group and control group.

3. Hypothesis:

- There is no difference seen between students of experimental group and control group on using problem posing method for enhancing communication skills.
- There is no difference seen between students of experimental group and control group on using presentation method for enhancing communication skills.
- There is no difference seen between students of experimental group and control group on using discussion method for enhancing communication skills.

Keywords:

1. Communication skills – These are the abilities used when giving and receiving different kinds of information. It involves listening, speaking, observing and empathising.

2. Problem posing – It is a method of teaching that emphasises critical thinking for the purpose of liberation. . By giving chance to raise hand or to ask a question on any given situation.

3. Presentation method- It is a means of communication that can be adapted to various seeking situations such as talking to a group, addressing a meeting or briefing a team. There are a number of occasions when a student may be asked to speak in public or to a group of people in class or in school.

4. Discussion method – It means exchanging ideas between two or more than people which is generally a face to face interaction to teach a specific decision.

4. Review of related literature :

Nichale A.B. (2018) Shivaji University, investigated a study on enhancing communication skills in English among the students of class-XI . The study revealed that Collaborated Leaning when used in enhancement of communication skills can be found to be very effective as it led to enjoyment , freedom from fear of making mistake , was better than working alone , led to better understanding of task and improvement in communication skills.

N. Shubhathra (Sept 2019) ,Madurai Kamaraj University, investigated on effectiveness of using innovative strategies in developing communication skills among students of arts and science college in Theni district. The finding and objective of this study is to improve the level of communication using modern technology as well as to use innovative method in learning and developing aural, oral, comprehension and composition.

Santosh P. (2019), School of Social Science and Language, VIT University, investigated an experimental study on enhancing oral communication skill of polytechnic students in Vellor district. The study is on three polytechnic colleges of which 360 students belonging to three different colleges that is private, aided and government .Simple randomised sampling method was used. Major finding of study is – teaching through “tasks” is more effective than traditional teaching method.

Meeta Kumawat, Suresh Gyan Vihar university, Mahal, Jagatpura, Jaipur ,Rajasthan (2020) investigated on problems and solutions of communication skills through English in Higher Studies in India. Findings of the study are reasons of problems faced by students in communication in India are – effect of mother tongue, difference in English (UK and US), translation method errors in English, learning method i.e. proper sequence is not followed which is listening, speaking ,reading and writing

Nachal Annamalai, Rajajeya Kumar Manivel and Rajendran Palanisamy (Aug 5, 2015) International Journal of Applied Basic Medical Research investigated on small group discussion – Students’ perspective. Major findings of this study are that group discussion is interactive, friendly and bridged the gap between teacher and students. The students’ communication skills are improved. GD is more effective than traditional teaching method as well it increases their thought process, interactivity and help them in better communication.

Halizah Awang, Zawawi Daud (2015) investigated on improving communication through the learning approach towards the environment of engineering classroom. In this research, field survey using questionnaire was carried. A quasi – experimental pre test –post test was used. The research was done on 60 students of diploma in civil engineering in Malaysiyan polytechnique. The major finding of this research is that students who participate in problem based learning are generally motivated by it and demonstrate good communication skills among themselves.

5. Research Methodology : In the present study experimental method is used.

Variables in research

The variables are majorly categorized as independent and dependent variables. In the present study dependent variable is communication skill and independent variables are problem posing ,presentation and discussion methods.In this study , two groups have been made that is experimental and control having 15 students each .No treatment is given to control group while experimental group is taught by different teaching methods to see the effect of independent variable on dependent variable.

Population: For this research the population is taken from the CBSE board schools of Indore .In the present study ,mainly CBSE middle schools of Scheme number -78 ,Vijay Nagar are selected . The population of middle schools of this area is near about 3000 students.

Sample :In this research the study is on students of middle school of CBSE Board, Vijay Nagar, Indore .In the present study out of 120 students of Daisy Dales CBSE School from middle section 30 students are chosen by stratified random sampling method and then made two groups – experimental and control of 15students each.

Tools : It is a true experimental research where questionnaire is used for data collection which is self made to measure the achievement and success in given particular field by the students. Whatever the students learn by problem posing, presentation and discussion methods to enhance communication skills is assessed by taking tests.

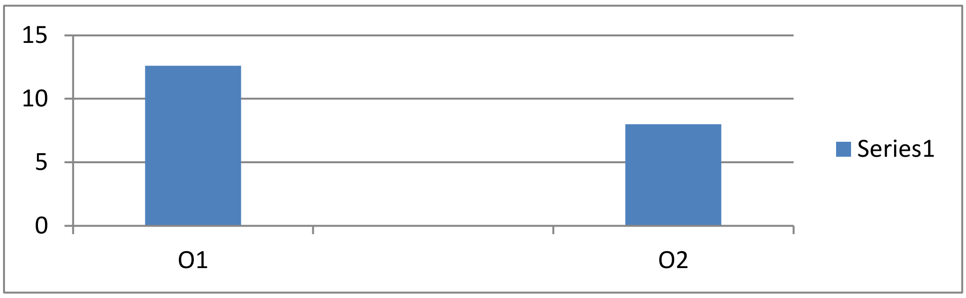
Procedure of data collection

In this research, stratified random sampling method is used. From the students of middle section by stratified random sampling method two groups are made having 15 students each. In the present study homogeneous strata is made on the basis of their age between the age 11-12 , 12 - 13 and 13 - 14 . After dividing the sample in to strata, students are selected randomly from each strata . Here from each strata students are picked up randomly and then two groups are made. In the present study, first is experimental group and the other is control group. To test their average intelligence one pre-test is conducted on the science topic Acid-Base and salt. This test shows that there is not much significance difference in their average intelligence between both experimental and control group. After checking their average intelligence post test is conducted where the experimental group is given treatment and taught by problem posing, presentation and discussion methods in different periods by taking five science topics that is speed, respiration ,motion ,adaptation and breathing. . While the other control group is taught the same topics by simple lecture method without giving any treatment .

Data Analysis

	Experimental Group X		CONTROL GROUP C	
Pretest	O1		O2	
Mean	12.26		8	

Graph



From the above table and chart it is clear that in pre test , mean of experimental group is 12.26 and that of control group is 8 . This shows that there is not much significance difference in the achievement level of both the groups . Hence the group which is made on the basis of random selection that are correct as their means are not significantly different and comparison can be made after taking post test and treatment given to experimental group .

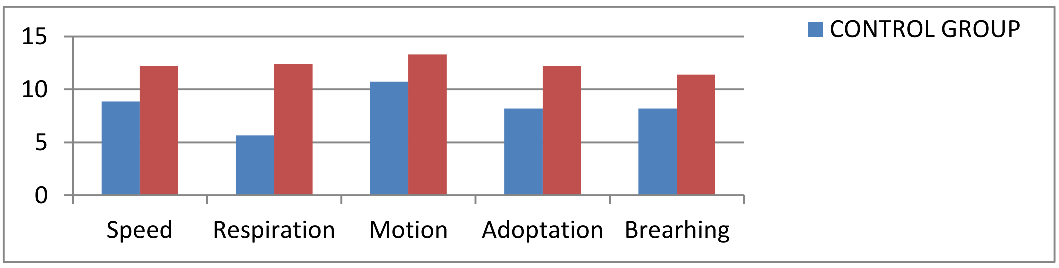
Observation:-

From the above tables it is clear that after conducting pre-test, the academic performance of experimental group is 81.78 % and that of control group is 53.33 which again shows that there is not much difference seen in the performance of both experimental and control groups.And it is further verified that control and experimental groups which are made on the basis of random selection they are correct.

Analysis for Post-test

Post Test : Experimental group :Mean of Post-test control and Experimental group

	MEAN Value Of Post-Test				
Post TEST	Speed	Respiration	Motion	Adoptation	Breathing
Control Group	8.87	5.67	10.73	8.2	8.2
Experimental group	12.2	12.4	13.3	12.2	11.4



Post test Observation- From the above table and chart it is clear that after taking pre test on both the groups ,a post test is conducted . for post test ,5 topics are selected that is speed, respiration, motion ,adaptation and breathing. Experimental group is taught by using problem posing, presentation and discussion method where as control group is taught simply by lecture method. From the above tables it is clear that experimental group 's academic performance is enhanced as well as much better than control group. By comparing mean value of post test of both groups it is clear that the mean value of all five topics of experimental groups is 12.2, 12.4, 13.3 ,12.2, and 11.4 which is greater than mean value of control group . After analysing pre test and post test , three more groups are made further . First group is taught by problem posing method , second group is taught by presentation method and third group is taught by discussion method separately and their marks obtained are given in the following table –

Verification of hypothesis

H_0 (1):-

Group	Variables	Total No. of Students	Means	SD	t-Value	t-Table	Value
		N				0.01	0.05
Experimental Group	PROBLM	10	19.5	2.67	10.8	2.807	2.069
Control Group	Posing	15	8.734	2.05			

0.01t table value is 2.807 and 0.05 t table value is 2.069 and degree of freedom is 23.

From the above table ,it is observed that t value of problem posing method is 10.8 which is greater than t-table value at 0.01 level i.e. 2.807 as well as 0.05 level i.e. 2.069; therefore null hypothesis is **rejected** because problem posing method helped the students to generate a new problem or a question based on given situation , From the above table it is clear that problem posing method when implement to experimental group students have shown improvement in their studies as compared to control group . Hence this teaching method should be adopted by teachers to improve students' academic performance and their confidence level . Only lecture method is not sufficient to make a student active in the classroom. Students often get bored and inactive in a period of forty minutes. So to make them energetic and motivated a teacher should always use a variety of methods .

H_0 (2):-

Group	Variables	Total No. of Students	Means	SD	t-Value	t-Table	Value
		N				0.01	0.05
Experimental Group	Presentation	10	15.3	5.03			
Control Group		15	8.734	2.05	3.9	2.807	2.069

From the above table, it is observed that t- value of presentation method is 3.9 which is greater than t-table value at 0.01 level which is 2.807 as well as 0.05 level i.e. 2.069; therefore null hypothesis is **rejected** because after using presentation method it helped students to enhance their communication skills by learning how to speak in front of class or any group. Use of this method aids for a much more interesting talk which also developed student's confidence. Presentation method helped the students speaking clearly and getting ideas and message across to people well. It also leaded less miscommunication means less stress. From the above table it is evident that presentation method is really a nice method to make students more active and enthusiastic. This method is not only enhanced their communication but also made study interesting. Students have developed self confidence to speak in the group, on the stage, in front of the teachers and elders . They are also motivated to take part in various co curricular activities like debate , anchoring ,speech and essay competitions .

H$_0$ (3):-

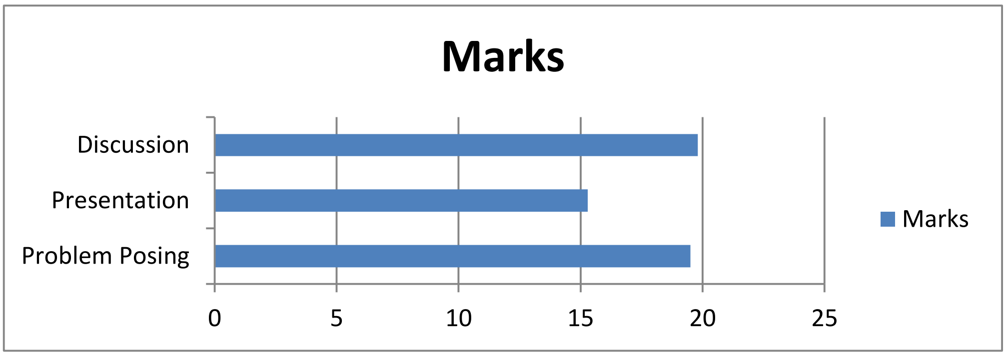
Group	Variables	Total No. of Students	Means	SD	t-Value	t-Table Value	
		N				0.01	0.05
Experimental Group	Discussion	10	19.8	3.26	9.5	2.807	2.069
Control Group		15	8.734	2.05			

From the above table, it is clear that t-value of discussion method is 9.5which is greater than t-table value at 0.01 level that is 2.807 as well as 0.05 level i.e. 2.069. Therefore, null hypothesis is **rejected** because discussion method helped the students to clearly express and exchange their ideas which shows their communication skill is enhanced which is reflected in their academic achievement. Discussion method provides an atmosphere where a student feel at ease, comfortable, cheerful, free and friendly to one another .This method helped students in enhancing thinking ,learning and understanding of literary applications. It is evident that experimental group has shown a great improvement as compared to the control group who were taught by using discussion method No doubt the students have become more free to express their feelings and emotions after using this method . Those who were shy, hesitant and less confident, now they are ready to come forward and share their problems related to academics as well personal. So each and every teacher should take this responsibility to make a student a perfect one . This responsibility can be achieved by seriously taking the efforts to make our students confident, cheerful, happy, proactive ,enthusiastic, well coordinated, highly determined, disciplined and a great leader who can well lead to our nation and this is a noble work .

Comparative study between problem posing, presentation and discussion method in terms of mean

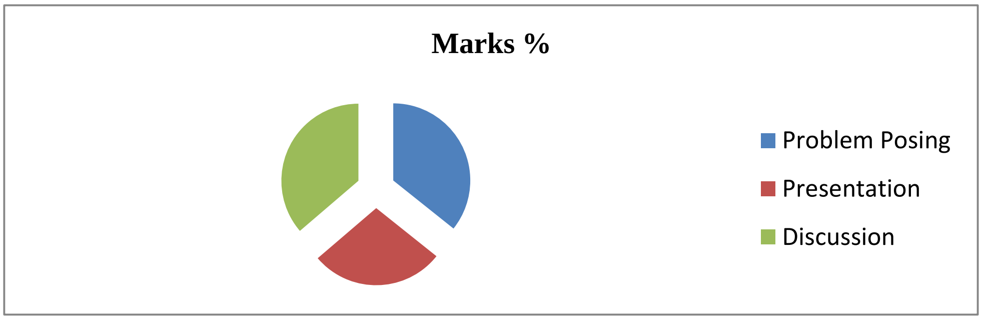
Communication Method	Average Marks
Problem Posing	19.5

Presentation	15.3
Discussion	19.8



Comparative study between problem posing ,presentation and discussion method in terms of percentage

Communication Method	Marks %
Problem Posing	78
Presentation	61.2
Discussion	79.2



From the above tables and charts it is clear that when three groups with different students are made that is group no 1 is taught by problem posing method .Group no 2 is taught by presentation method .Group no 3 is taught by discussion method .The academic achievement of group 3 is higher (Mean-19.8 and Percentage- 79.2) than other two groups. Group no 1 , which is taught by Problem posing method has Mean 19.5 with percentage 78% . group no 2 which is taught by presentation method has a Mean 15.3 with percentage 61.2 . As explained earlier also all the teaching methods problem posing, presentation and discussion are playing very important role in enhancing communication skills . When it is compared it is found that after teaching with discussion method students have shown high academic achievement as compare to other two methods. Moreover the group which is taught by problem posing method is found academically improved and better than the group taught by presentation method . No doubt all the three methods are equally important and found effective in enhancing communication skills. A teacher can adopt any of these method or their combination of them according to the need and situation .

6. Result and Interpretation

Major Findings : During pre test , control group which was taught by lecture method ,their achievement Mean found was 8.The experimental group in pre test got 12.6. After taking their pre test it was clear that there is not much significant difference in their academic levels . In post test , control group has got mean 8.73 .The Experimental group which was taught by different methods ie problem posing , presentation and discussion method shown an improvement and their achievement mean is 12.3 .After taking post test it is observed that the experimental group which is given treatment has shown a great improvement as compare to control group .This completely shows that experimental group has shown a better performance which shows positive impact on their communication skill. It is found that on an average all the sample students exhibited some improvement in their communication skills especially the ones who were taught by problem posing , presentation and discussion method . The academic achievement of group 3 is higher (Mean-19.8 and Percentage- 79.2) than other two groups. Group no 1 ,which is taught by Problem posing method has Mean 19.5 with percentage 78% . group no 2 which is taught by presentation method has a Mean 15.3 with percentage 61.2 .Out of all three methods ,discussion method is better than problem posing and presentation method and problem posing is better than presentation method as students have shown much improved performance in their academics.

7. Educational implications

Problem posing method contributes to the development of problem solving as well as students become more aware of learning .This teaching style emphasizes critical thinking and helps in generating new problem in the given situation . It also improves their monitoring and assessing of learning process which helps to develop meta cognitive awareness. Teacher s by posing good questions can assess how well the students learned .

Presentation method can enhance the intellect of students. It also helps teachers in their teaching method . This skill create innovative ideas when students came up with creative and interesting presentation to illustrate their talk , such kind of activities can help in development of students' confidence. Presentation method help the students to learn how to speak in front of a group with confidence .

Discussion method enhances student's understanding of reading and comprehension . This method also produces student learning outcome including how to mitigate fear of sharing individual opinion by building relationship among classmate. Discussion method style creates a connection between the learners and the curriculum and provides opportunity for open discussion with learners as well as the teachers . It contains exchange of ideas among teachers and students for the purpose of enhancing understanding of literary appreciation .

8. CONCLUSION:

It is a time that every teacher should realize the responsibilities on their shoulders for their students to develop their overall personality by acquiring the language effectively . Communication skills can be enhanced by different methods also which would help the students to learn other subjects also like social studies, mathematics ,science as well. Present study is an exercise to enhance communication skills through problem posing , presentation and discussion methods to enhance students' learning performance and academic achievement.

By doing this study it is very clear that a small step can be taken to bring a change in academic performance of the students which is the purpose of the present study .For the overall development of a student or a person , communication skills play very important role . No doubt by improving so students have also developed confidence , understanding as well as improvement in their academic level. It's a duty and responsibility of every teacher not only language teachers , to develop such skills in students rather than only teaching their own subject .It is also their moral responsibility to boost students confidence ,interest and creativity by introducing certain new innovative teaching methods .It is a noble work .

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The Role of Foreign Direct Investment (FDI) in India: A Comprehensive Research Analysis

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Abstract: *This exploration paper aims to give a detailed analysis of the part of Foreign Direct Investment(FDI) in India's profitable growth and development. FDI plays a pivotal part in the Indian frugality by bringing in capital, technology transfer, employment generation, and fostering invention. The paper encompasses a comprehensive disquisition of the patterns, trends, and impact of FDI on different sectors of the Indian frugality. It also discusses the government programs and nonsupervisory terrain that promote FDI inrushes and the challenges faced in attracting and using FDI investments for sustained profitable progress. Through an in- depth examination of empirical studies, this exploration paper presents a nuanced understanding of the multifaceted influence of FDI in India.*

Keywords: *FDI, Types, Challenges, Opportunities, Initiative.*

1. INTRODUCTION

Foreign Direct Investment(FDI) plays a pivotal part in India's profitable development. FDI refers to investment made by foreign realities, similar as businesses or individualities, in Indian companies or systems. It involves the transfer of capital, technology, and moxie from foreign countries to India. The part of FDI in India can be examined from colorful perspectives

1. **Profitable Growth:** FDI inrushes contribute significantly to India's profitable growth by boosting overall investment. It helps in creating jobs, erecting structure, and expanding diligence. FDI promotes artificial development, increases productivity, and enhances the overall competitiveness of the Indian frugality.
2. **Technology Transfer:** One of the crucial benefits of FDI is the transfer of advanced technology and specialized know- style from foreign companies to Indian enterprises. This helps in upgrading the quality of products and services, perfecting product processes, and enhancing overall effectiveness. The flux of FDI supports the development of indigenous technological capabilities and promotes invention in colorful sectors.
3. **Employment Generation:** FDI plays a pivotal part in generating employment openings in India. When foreign companies invest in Indian enterprises, it leads to the creation of both direct and circular jobs across colorful sectors. This contributes to reducing severance rates and perfecting the standard of living for the population.
4. **Access to Global Markets:** FDI enables Indian companies to expand their reach to transnational requests. By partnering with or attracting investments from foreign enterprises, Indian businesses gain access to their established distribution networks, marketing moxie, and

global client base. This facilitates import- acquainted growth and increases India's competitiveness in the global business.

5. **Structure Development:** FDI contributes to the development of structure, including transport, power, telecommunications, and logistics. It helps bridge the structure gap in India by attracting investments in sectors similar as roadways, anchorages, airfields, railroads, and renewable energy. Advanced structure not only supports profitable growth but also enhances the overall quality of life for the citizens.

6. **Foreign Exchange:** Inrushes FDI brings in foreign currency, leading to increased foreign exchange reserves. This strengthens India's balance of payments position and helps stabilize the frugality. The vacuity of foreign exchange reserves allows for smoother import payments, ensures fiscal stability, and supports profitable growth.

7. **Sectoral Development :**FDI plays a pivotal part in the growth of specific sectors in India. It has been necessary in driving investment and development in sectors similar as information technology, medicinals, motorcars, retail, telecommunications, and manufacturing. Foreign investments in these sectors have helped in job creation, technology upgradation, and overall sectoral growth.

2. Definition and Types of FDI :

FDI, or Foreign Direct Investment, refers to the investment made by a company or an individual from one country into a business or design located in another country. FDI plays a pivotal part in boosting profitable growth, capital conformation, technological transfer, employment generation, and overall development of a country. It has been extensively honored as an important motorist of profitable globalization and is frequently seen as a positive factor for host countries.

FDI can be classified into two main types

1. **Inward FDI :** Inward FDI refers to the investment made by foreign realities into a host country. It occurs when a foreign company establishes its presence in the host country by either setting up a new attachment or acquiring an being company. Inward FDI brings in new capital, technology, and moxie, stimulating profitable growth and creating job openings.

2. **Outside FDI:** Outside FDI refers to the investment made by domestic companies from a host country into foreign countries. This occurs when domestic companies expand their operations abroad by opening accessories or acquiring foreign businesses. outside FDI allows companies to pierce new requests, coffers, and technology, and can enhance their competitiveness encyclopedically. likewise, FDI can also be distributed grounded on the purpose and ideal of the investment

Vertical FDI: Vertical FDI takes place when a company invests in the same assiduity or produces analogous products services in the host country as it does in its home country. The primary purpose of vertical FDI is to tap into new requests and expand the company's reach.

Vertical FDI occurs when a company invests in different stages of the product process within the force chain. It can be either backward(investing in suppliers) or forward(investing in distributors or retailers). Vertical FDI helps companies gain control over their force chain, reduce costs, and ameliorate effectiveness.

Conglomerate FDI: Conglomerate FDI happens when a company invests in a business that's unconnected to its being operations. The end of empire FDI is to diversify the company's portfolio, minimize threat, and explore new request openings.

3. Literal Overview of FDI in India :

Foreign Direct Investment(FDI) has played a significant part in shaping India's profitable growth and development over the times. To understand the part of FDI in India, it's important to have a literal overview.

India began opening its doors to foreign investment in the early 1990s when it espoused a policy of profitable liberalization. Prior to this, India followed a largely regulated and defended frugality with restrictions on foreign capital inrushes. The liberalization measures aimed to attract FDI to boost profitable growth, foster technological advancements, and produce employment openings.

Originally, FDI inrushes were limited, but they gradationally gained instigation as India enforced several policy reforms. The preface of the Industrial Policy of 1991, which concentrated on dismembering artificial licensing and reducing government intervention, paved the way for increased FDI inrushes. also, the establishment of the Foreign Investment Promotion Board(FIPB) simplified the process of carrying blessings for foreign investments.

The early times of FDI inrushes were primarily concentrated in sectors similar as telecommunications, motorcars, and consumer goods. transnational pots honored India's immense request eventuality and sought to establish a presence in the country. This affluence of FDI brought in advanced technologies, directorial moxie, and access to global requests, contributing to the growth of these sectors.

Over time, the Indian government further liberalized the FDI policy, allowing advanced FDI caps, introducing sector-specific reforms, and easing entry and exit morals for foreign investors. These measures aimed to attract investments in critical sectors similar as structure, manufacturing, healthcare, and retail.

FDI has played a pivotal part in driving India's profitable growth. It has contributed to adding the country's gross domestic product(GDP), promoting industrialization, enhancing import capabilities, and generating employment openings. FDI has also backed in perfecting technology transfer and skill development, leading to the overall competitiveness of Indian diligence.

Likewise, FDI has helped to bridge the gap between domestic savings and investment, as well as accelerating the vacuity of capital for structure development. It has eased the upgrade of being structure and the creation of new systems across sectors similar as power, transportation, and telecommunications.

In recent times, India has surfaced as one of the top destinations for FDI, attracting investments from countries around the world. The government's enterprise like " Make in India " and " Digital India " have further bolstered the confidence of foreign investors in the Indian request.

4. Determinants of FDI Inflows :

Foreign Direct Investment(FDI) plays a vital part in the profitable growth and development of India. The preface of FDI in India has brought significant benefits in terms of technology transfer, employment generation, increased product, and overall profitable substance.

FDI refers to the investment made by foreign realities, similar as transnational pots or individualities, in the Indian frugality. These investments can be in the form of setting up new gambles, expanding being businesses, or acquiring controlling stakes in domestic companies.

The part of FDI in India can be bandied in colorful aspects

1. **Profitable Growth:** FDI acts as a catalyst for profitable growth by stimulating domestic investment, enhancing productivity, and contributing to overall profitable development. The flux of foreign capital leads to increased capital conformation, which in turn leads to advanced product, job creation, and income generation.
2. **Technology Transfer and Skill Development:** FDI brings advanced technology, specialized know- style, and directorial moxie to the Indian request. This not only enhances the quality of Indian products and services but also upgrades the chops of domestic workers through knowledge sharing and training programs. It contributes to the development of a professed pool and boosts technological progress in colorful sectors.
3.**Structure Development:** FDI plays a pivotal part in the development of structure in India. Foreign investors frequently invest in sectors like power, telecommunications, transport, and logistics, which bear significant capital and moxie. This leads to the expansion and enhancement of structure installations, eventually serving the frugality as a whole.
4. **Employment Generation:** FDI inrushes contribute to job creation and employment openings in India. Increased investment in colorful sectors results in the expansion of product capacities, leading to the demand for further professed and unskilled labor. This helps in reducing severance and poverty by furnishing income openings to a large number of people.
5. **Export Promotion:** FDI has a positive impact on promoting exports from India. Foreign investors frequently use Indian accessories as a base for their global operations, leading to increased exports of goods and services. This contributes to a favorable balance of trade and enhances India's competitiveness in the global request.
6. **Financial Stability:** FDI plays a pivotal part in maintaining the stability of the Indian frugality. It brings in foreign exchange reserves, improves the balance of payments, and reduces the vulnerability to external shocks. The presence of foreign investors also boosts investor confidence and attracts farther investment, creating a favorable investment climate.

5. Sector- Specific Analysis :

Foreign Direct Investment(FDI) plays a pivotal part in the profitable development of India. FDI is the investment made by foreign companies or individualities in Indian sectors with the end of establishing or expanding their operations. These investments bring in capital, technology, moxie, and request access, which have a significant impact on colorful sectors of the Indian frugality.

1. **Manufacturing Sector:** FDI has been a major catalyst in boosting the manufacturing sector in India. numerous foreign companies have set up manufacturing units in India, attracted by the country's large consumer request, professed labor force, and favorable business terrain. This has redounded in job creation, increased product capacities, and technology transfer, contributing to the overall growth of the sector.
2. **Services Sector:** The services sector, including diligence similar as IT, telecommunications, banking, tourism, and healthcare, has also witnessed significant FDI inrushes. Foreign investments in this sector have helped in the development of ultramodern structure, bettered service quality, and increased employment openings. The IT sector, in particular, has flourished due to FDI, making India a global mecca for software and IT- related services.
3. **Retail Sector:** FDI has been a game- changer for the retail assiduity in India. The entry of foreign retailers has streamlined the force chain, enhanced productivity, and bettered consumer

choices. It has also generated employment openings and eased the growth of organized retail, leading to increased competitiveness and effectiveness.
4. **Structure Development:** FDI has played a vital part in developing India's structure, including sectors like roads, anchorages, airfields, power, and telecommunications. Foreign investments have invested capital, technology, and directorial moxie into these sectors, enabling the expansion and upgradation of critical structure networks across the country. This has not only bettered connectivity but also attracted farther investments in related diligence.
5. **Agriculture and Food Processing:** FDI has started to play a significant part in husbandry and food processing sectors in recent times. Investments by transnational companies have helped in introducing advanced husbandry practices, perfecting crop yields, and enhancing food processing capabilities. This has contributed to the modernization of the agrarian sector, increased income for growers, and reduced post-harvest losses.
6. **Renewable Energy:** FDI has been necessary in boosting the renewable energy sector in India. The government's focus on clean energy and favorable programs have attracted substantial foreign investments in solar, wind, and other renewable energy systems. These investments have accelerated the transition towards sustainable energy sources and reduced reliance on fossil energies.

6. Government programs and Regulatory Environment :

India has been enforcing colorful government programs and creating a favorable nonsupervisory terrain to attract Foreign Direct Investment(FDI) into the country. These programs aim to boost profitable growth, promote job creation, and encourage technology transfer. Then are some crucial aspects of the government programs and nonsupervisory terrain for FDI in India

1. **FDI Caps and Automatic Route:** India allows FDI in utmost sectors through the automatic route, which means foreign investors don't bear previous blessing from the government. still, certain sectors similar as defense, retail, and aeronautics have specific FDI caps and may bear government blessing, subject to certain conditions.
2. **Liberalization of FDI Policy:** The Indian government has precipitously liberalized the FDI policy by easing restrictions and adding sectoral caps in colorful diligence. This has been done to attract advanced investment and enhance competitiveness.
3. **Single Window concurrence:** To simplify the investment process, India has introduced a single window concurrence medium called " Invest India " which provides information, facilitates blessings, and assists investors in setting up their businesses in the country.
4. **Intellectual Property Rights(IPR) Protection:** The Indian government has taken measures to strengthen the protection of intellectual property rights to inseminate confidence among foreign investors. This includes stricter enforcement of brand and patent laws.
5. **Duty impulses:** To promote investment, the government has introduced colorful duty impulses and immunity for foreign investors. These include duty leaves, duty concessions, and immunity on capital earnings in specified sectors or regions.
6. **Structure Development:** The government has initiated several structure development systems similar as devoted freight corridors, smart metropolises, and artificial corridors to enhance the investment climate and grease ease of doing business.
7. **Make in India Initiative:** The Make in India crusade launched by the Indian government aims to promote manufacturing in India by attracting both domestic and foreign investments.

It offers impulses and facilitates a conducive terrain for investors, fastening on sectors like electronics, motorcars, defense manufacturing, and fabrics.
8. **Disagreement Resolution Medium:** The government has established devoted marketable courts and arbitration centers to give a transparent and effective disagreement resolution medium. This helps in mollifying pitfalls and guarding the interests of foreign investors.
9. **Easing of Regulatory Compliances:** The government has accepted reforms to simplify nonsupervisory compliance conditions, reduce regulatory red tape recording, and expedite the blessing process for foreign investors.
10. **Special Economic Zones(SEZs) :**India has established SEZs which offer colorful impulses similar as duty benefits, duty-free significances, and simplified nonsupervisory procedures to promote exports and attract foreign investments.

7. Challenges and Opportunities :

India has made significant sweats to attract foreign direct investment(FDI) through colorful government programs and establishing a favorable nonsupervisory terrain. Let’s first bandy some of the crucial programs and regulations that impact FDI in India.

1. **Foreign Direct Investment Policy India** has enforced a liberalized FDI policy, allowing foreign investors to share in colorful sectors of the frugality. The FDI policy is regularly revised to grease ease of doing business and attract investment in critical sectors similar as manufacturing, structure, insurance, defense, and retail. The policy allows for automatic blessing of FDI in utmost sectors, with limited restrictions in certain strategic areas.
2. **Make in India** Initiative Launched in 2014, the Make in India action aims to encourage global companies to set up manufacturing units in India. The government has relaxed artificial licensing conditions, eased morals for land accession, and simplified the duty structure to promote domestic product and FDI inrushes. This action has opened up vast openings for foreign businesses looking to establish manufacturing installations in India.
3. **Single Window concurrence** India has established a single window concurrence medium to expedite the blessing process for foreign investors. This streamlined system enables investors to gain all necessary permits and licenses through a single point of contact, minimizing regulatory detainments and enhancing the ease of doing business.
4. **Intellectual Property Rights(IPR)** Protection guarding intellectual property is pivotal for attracting FDI in knowledge- ferocious sectors. The Indian government has taken measures to strengthen IPR laws, set up technical IPR courts, and apply stricter regulations. These sweats give investors with confidence in securing their Innovative ideas and technologies.
5. **Structure Development** The Indian government has prioritized structure development, including transportation, logistics, and power sectors, to enhance the investment climate. enterprise like the Bharatmala Project, Sagarmala Project, and Smart metropolises Mission end to produce world- class structure, reducing functional costs and perfecting connectivity across the country.

Now, let’s bandy the challenges and opportunities associated with FDI in India
Challenges
1. **Complex Regulatory Environment** Despite sweats to simplify regulations, India still faces regulatory hurdles and complex compliance procedures. Investors frequently encounter challenges in carrying permits, licenses, and concurrences, performing in detainments and increased sale costs.

2. **Legal System and Contractual Enforcement** The Indian legal system can be time-consuming, and the enforcement of contracts can encounter detainments. These factors may produce misgivings for foreign investors and impact their business operations.

Opportunities
1. **Vast Consumer Market** With a population of over1.3 billion people, India offers a significant consumer request. Foreign companies can tap into the growing middle class and rising disposable income, especially in sectors similar as retail,e-commerce, consumer goods, and services.
2. **Professed pool** India is known for its pool of professed, English- speaking professionals. This provides a competitive advantage for foreign investors looking to establish knowledge-grounded or service- acquainted diligence.
3. **Emerging Technologies** India's focus on digitalization and relinquishment of arising technologies presents openings for FDI in sectors similar as information technology,e-commerce, artificial intelligence, clean energy, and advanced manufacturing.
4. **Government enterprise** The Indian government continues to introduce enterprise to ameliorate the ease of doing business and attract FDI. Reforms similar as Goods and Services Tax(GST), Insolvency and Bankruptcy Code(IBC), and the National structure Pipeline help produce a more investor-friendly terrain.

8. FDI and Economic Growth :
Foreign Direct Investment(FDI) plays a pivotal part in stimulating profitable growth and development in countries, including India. The government programs and nonsupervisory terrain girding FDI in India have experienced significant reforms over the times to attract further foreign investment and promote profitable growth.

The Indian government has enforced several measures to produce a favorable climate for FDI. These programs seek to simplify procedures, liberalize sectors, cover investor rights, and insure a position playing field for both domestic and foreign investors. Some crucial aspects of the government's approach to FDI include

1. **Liberalization of FDI:** India has precipitously liberalized its FDI governance, allowing foreign investors to share in colorful sectors of the frugality. The government has regularly reviewed and revised the FDI policy, raising sectoral caps and introducing automatic routes for investment in specific sectors.
2. **Streamlined Procedures:** The government has simplified the FDI blessing process by establishing a single- window concurrence medium. This allows for faster blessings and reduces regulatory hurdles for foreign investors.
3. **Investor Protection:** India provides robust legal protections and safeguards for foreign investors. The government has legislated laws to insure the protection of intellectual property rights, grease disagreement resolution, and apply contracts. Bilateral investment covenants with several countries also give fresh protection to foreign investors.
4. **Structure Development:** The Indian government recognizes the significance of structure development in attracting FDI. It has taken enterprise to ameliorate transportation networks, power force, and logistics installations across the country to enhance the investment climate.
5. **Competitive duty Regime:** The government has worked towards creating a competitive duty governance that encourages foreign investment. enterprise like the Goods and Services

Tax(GST) and the reduction in the commercial duty rate have been enforced to attract further FDI.

6. **Sector-specific impulses:** To attract investment in specific sectors, the government offers colorful sector-specific impulses similar as duty breaks, subventions, and special profitable zones. These impulses aim to promote investments in areas like manufacturing, renewable energy, and structure development.

7. **Stable Macroeconomic terrain:** India's commitment to maintaining macroeconomic stability through financial discipline, affectation control, and financial policy reforms has further enhanced investor confidence and created a conducive terrain for FDI.

9. CONCLUSION :

In conclusion, the part of FDI in India cannot be undermined. The government's visionary approach in introducing investor-friendly programs, easing nonsupervisory fabrics, and liberalizing foreign investment morals has attracted significant foreign capital, leading to profitable growth, job creation, technology transfer, and overall development. As India continues to make progress in enhancing its business terrain and enforcing structural reforms, it'll probably continue to be an seductive destination for foreign investors in the future.

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Teacher's satisfaction regarding administration of the university

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Abstract: *Teachers are the pillars of the Society who help students to grow to shoulders the responsibility of taking their nation ahead of others. When teacher's needs are not fulfilled they feel dissatisfied with the job. With increase in competition firms have recognized importance of employee's satisfaction and performance and are developing their human resource capital to compete in this global market. Job satisfaction in organizations has been receiving increasing attention because it reduces employee turnover, absenteeism, tardiness, and health setbacks due to stress. An individual who has high level of job satisfaction holds positive attitudes towards the job. An understanding of the job satisfaction of university teachers is important since their dissatisfaction will hinder their performance and ability to deliver quality education to students and this will in turn affect the image of university*

The Present study aim to is to find out factors through which teachers are most satisfied and factors which dissatisfied the teachers.

Keywords: *Teachers, students, satisfaction, university, higher education.*

1. Introduction of the study:

Teachers are the pillars of the Society who help students to grow to shoulders the responsibility of taking their nation ahead of others. Satisfied teachers are very important for the educational institute. Teachers feels satisfied when there is balanced in career development and comfortable work life. When teacher's needs are not fulfilled they feel dissatisfied with the job. With increase in competition firms have recognized importance of employee's satisfaction and performance and are developing their human resource capital to compete in this global market. Job satisfaction in organizations has been receiving increasing attention because it reduces employee turnover, absenteeism, tardiness, and health setbacks due to stress. An individual who has high level of job satisfaction holds positive attitudes towards the job. An understanding of the job satisfaction of university teachers is important since their dissatisfaction will hinder their performance and ability to deliver quality education to students and this will in turn affect the image of university

The Present study aim to is to find out factors through which teachers are most satisfied and factors which dissatisfied the teachers. The result concluded that teachers are highly satisfied with university administration, academic environment for students, infrastructure facilities, and teachers had neutral response for faculty support system, financial administration of students and teachers are less satisfied with placements of students

2. Review of literature:

Shamina (2014) examines the various factors determining the job satisfaction of teacher in higher education and the extent of professional commitment of teacher of higher education. The study showed self-financing colleges experience high level of overall job satisfaction and professional commitment. A Questionnaire of 250 teachers was drafted. Sampling method was used. T-Test was applied to find out difference between job satisfaction and professional commitment. The study revealed that nature of work; salary satisfaction and quality supervision are significant predictor of professional commitment of teacher. It was found that teacher were highly satisfied with their supervisor, co-worker, compensation and opportunities of advancement in their colleges. If teacher are not satisfied this could result in to unfavourable economic and non-economic outcomes. Such as high exit turnovers, reduced teaching effectiveness and intellectual development of the students. So policy makers should take necessary measures for the optimal provision of job rewards to make their work highly satisfied.

Jain (2014) studied teaching effectiveness of teacher and their attitude towards teaching profession. The sample comprised of 75 teachers working in 25 secondary schools in two areas (south and central) of Delhi. The study revealed that teacher effectiveness with respect to sex and teaching experience were found to be significant

Kaur (2017) examined the difference in teacher effectiveness among teacher educators in relation to (a gender (b) location and stream. A study was conducted at 96 private B.Ed. colleges at three state universities of Punjab i.e. Punjab university , Chandigarh and Patiala university , G.N.D.U Amritsar with sample size 511.T-Test and Annova was used to study the difference in effectiveness according to stream. Researcher found that teacher effectiveness was positively but not significantly collected

3. Objectives of the study :

The main objective of the study is find out satisfaction of teachers regarding quality education
The second objective of the study is know which factors effects most on satisfaction of teachers regarding education quality

4. Research methodology:

Primary data has been collected for achieving the objectives of the study. The study has been conducted in Punjabi university Patiala campus. A well-structured self-developed questionnaire has been used. Data has been collected from different department. In order to examine the satisfaction of teachers towards the effectiveness of the university , questionnaire was administered to 350 in campus of Punjabi university Patiala Punjab and out of which 310 questionnaires were found useful.

5. Data Analysis and Interpretation:

In the present chapter, an attempt has been made to examine the satisfaction of teachers towards University effectiveness. The chapter deals with the satisfaction of teachers towards university effectiveness. In order to examine the satisfaction of teachers, a well-structured questionnaire with a list of 82 variables covering 11 dimensions of college effectiveness has been prepared (Table 1.1). Respondents were asked to indicate their level of agreement or disagreement on a five point Likert scale i.e. Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1).

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.865
Bartlett's Test of Sphericity	Approx. Chi-Square	19482.697
	D.F	1953
	Sig.	0.000

After excluding 22 items, factor analysis was return on the remaining items. First of all the data was examined for appropriateness of factor analysis. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was found to be sufficiently high from the recommended limit (KMO=0.865). Bartlett's test of sphericity was also found highly significant ($p<0.01$) indicates that there was sufficient correlation among the variables.

Factor analysis was run using Principal component analysis (PCA) with varimax rotation. Table 7.4 shows that Ten factors extracted which have Eigen value more than 1. These factors explained 77.31 % of total variance. Further mean scores have been calculated to find out the level of agreement or disagreement of the respondents.

Item Label	Statement	Factor Loadings	Mean	Std. Deviation
Factor 1	**University administration and Academic environment for students**		**4.01**	**0.79**
ua2	Admin staff is easily available during duty hour	0.853	4.08	0.87
ua1	University administration block quite helpful to the students	0.849	4.14	0.85
ua5	Administration staff behave properly with students	0.846	**4.03**	0.96
ua3	University security and discipline is maintained properly	0.846	3.79	0.92
aes2	Teacher in the university is innovative	0.831	3.96	0.84
ua4	Admin department maintains all record of files and documents of the students	0.828	3.95	0.98
aes1	Teacher in the university has a good academic record	0.819	3.91	0.82
aes3	Teacher in the university give proper attention to students	0.810	4.04	0.89
aes4	Teacher pays sufficient efforts to cover up the syllabus of students	0.797	4.02	0.87
	Eigenvalue = 16.06, variance explained =12.75%, α=0.966			
Factor 2	**Infrastructure activities**		**4.02**	**0.65**
ia1	Well maintained staff rooms, study rooms available in university	0.855	4.06	0.80
ia10	Computer lab with Wi-Fi facilities is available in the university	0.841	4.01	0.84
ia9	Waiting room for the parents are available	0.835	4.07	0.83

ia2	Transport facility is available for various stakeholders	0.828	4.02	0.80
ia6	Crèches are available in the university according to the norms of government	0.827	4.06	0.81
ia4	Hostel facility is provided by the university	0.797	3.91	0.80
ia7	Facilities of fresh drinking water and washrooms are available	0.789	4.00	0.78
ia3	Canteen/mess is available	0.773	3.86	0.72
ia5	There is sufficient space for parking of teacher vehicle	0.752	4.12	0.81
ia8	Play grounds/ Sports activities are available	0.624	4.05	0.81
	Eigenvalue = 7.66, variance explained =11.31, α= 0.944			
Factor 3	**Teaching environment**		**3.26**	**0.83**
te11	Period and no. of break after lecture is sufficient	0.896	3.54	1.13
te5	Teaching aids are available	0.890	3.52	1.14
te7	Teacher is suffering more stress due to assigning of project/ thesis of research scholar	0.872	3.59	1.11
te9	University has proper platform for personality development of teacher.	0.869	3.60	1.11
te6	Administrative department is cooperative towards teaching department	0.864	3.52	1.12
te4	Teacher has sufficient support from head of department and colleague	0.847	3.60	1.12
te3	Faculty has required freedom to select the subject according to their specialization and interest	0.846	3.71	1.06
te2	Work load of teacher is according to UGC rules and regulations	0.802	3.74	0.93
	Eigenvalue =6.05, variance explained =9.59, α= 0.951			
Factor 4	**Research Statement**		**3.77**	**0.81**
rs7	Library has sufficient number of reference books, journals and magazines	0.820	3.87	0.93
rs1	Financial support provided by university for research development is adequate	0.815	3.87	0.92
rs5	Department has sufficient infrastructure for research	0.793	3.74	0.92

rs6	Seminar, conferences, workshops and guest lecture are organized by the university	0.779	3.88	0.89
rs3	Uninterrupted WIFI facility is available in the campus	0.779	3.63	0.90
rs2	Separate rooms are provided to the teacher	0.766	3.67	0.92
	Eigen Value=4.64, variance explained =7.42, α=0.949			
Factor 5	**Faculty support system**		**3.28**	**0.84**
fss9	University has proper channel for handling the grievances of teacher	0.863	3.15	1.04
fss7	Faculty development programme is organized by the university	0.860	3.14	1.06
fss4	Faculty is promoted according to the norms of university	0.834	3.23	1.02
fss3	Teacher participation in department meetings	0.826	3.22	1.01
fss6	Teachers are always encourage to give new ideas and suggestion	0.772	3.24	1.03
fss2	Teacher getting financial and academic support for attending conference, seminars etc.	0.742	3.49	1.06
fss1	Teacher are satisfy with salary and allowance	0.717	3.35	1.07
	Eigen Value=3.62, variance explained =7.34, α=0.908			
Factor 6	**Educational material for students**		**3.43**	**1.09**
ems7	Wi-Fi facility is provided by the university	0.927	3.36	1.14
ems6	Sufficient computers are available in the department	0.922	3.34	1.15
ems2	Library is updated regularly	0.898	3.53	1.16
ems4	Students laboratories have all required material and equipments	0.892	3.49	1.15
ems1	Adequate audio-visual aids are available for teaching	0.886	3.43	1.23
	Eigen Value=2.69, variance explained =7.05, α=0.967			
Factor 7	**Financial administration**		**3.68**	**0.79**
fa7	Grants are utilized for welfare of university	0.866	3.59	0.89
fa3	Amount of budget on infrastructure is satisfactory	0.864	3.59	0.89
fa6	Fee concession is available for deserving and poor students	0.827	3.80	0.85

fa1	University has received sufficient grants from central university	0.822	3.81	0.85
fa2	Scholarship are paid within reasonable time	0.798	3.63	0.87
	Eigen Value=2.43,variance explained =6.86, α=0.950			
Factor 8	**Placement of students**		**3.48**	**0.85**
ps2	University has a high record of placement with good packages	0.867	3.40	0.95
ps3	University student appearing in the competitive exam have a good passing rate	0.833	3.38	0.94
ps1	Student Actively participate in placement services	0.814	3.63	0.99
ps4	University has a carrier counseling cell	0.784	3.53	0.99
ps5	Seminar is organize for carrier counseling of students periodically	0.771	3.49	0.90
	Eigen Value=2.26, variance explained =6.33, α=0.935			
Factor 9	**Extra –curricular activities**		**3.94**	**0.75**
eca2	Students participate in extra-curricular activities	0.844	4.04	0.85
eca4	Students are actively participate in sports activities of university	0.797	3.81	0.82
eca1	Extra –curricular activities is organized by university	0.781	4.06	0.82
eca3	University has NCC/NSS units	0.761	3.86	0.87
	Eigen Value=1.84, variance explained =4.83, α=0.964			
Factor 10	**Students motivation cell**		**3.81**	**0.77**
smc4	IQAC cell work properly	0.709	3.72	1.01
smc3	The college has intellectual quality assurance cell (IQAC)	0.668	3.75	0.88
smc2	Grievances are solved properly	0.664	3.82	0.85
smc1	University has grievance Redressal cell	0.643	3.95	0.91
	Eigen Value=1.41, variance explained =3.87, α=0.866			
	Total Variance Explained	**77.31%**		

Factor I- University administration and Academic environment for students

It is the most important factor as it accounted for 12.75% of the total variance with factor loading ranging from 0.797 to 0.853. The value of Cronbach‟s alpha was accounted for 0.966.

In total, nine statements have been loaded under this factor. The satisfaction of teachers on various aspects of administration and academic environment for students was found to be neutral wherein; University security and discipline is maintained properly (Mean=3.69), Admin department maintains all record (Mean=3.86), Teachers in the university are innovative with mean value of 3.86, Teacher in the university has a good academic record with mean scores 3.81. The teachers were satisfied on few aspects like Administration staff behave properly with students (Mean= 4.03), Teacher in the university give proper attention to students (Mean=4.04), Teacher pays sufficient efforts to cover up the syllabus of students (mean= 4.02); Admin staff is easily available during duty hours (Mean = 4.08) and University administration block quite helpful to the students (Mean =4.14). Overall Teachers show satisfaction towards University administration and Academic environment for students with mean score of 4.01.

Factor 2- Infrastructure activities

The second factor was named as Infrastructure activities and it accounted for 11.31% of total variance with factor loading ranging from 0.855 to 0.624 and Cronbach‟s alpha value 0.944. Teachers were satisfied with the infrastructure facilities being provided. Teachers indicated their level of agreement with Well-maintained staff rooms and study rooms available in university (Mean=4.06), Computer lab with Wi-Fi facilities is available in the university (Mean=4.01), Crèches are available in the university according to the norms of government (Mean=4.06), Waiting room for the parents are available (Mean=4.07), Transport facility is available (Mean=4.02), There is sufficient space for parking of teacher vehicle (Mean=4.12), Facilities of fresh drinking water and washrooms are available (Mean=4.00), Play grounds/ Sports activities are available with mean value 4.05 and Canteen/mess is available with mean value of 3.86. Overall, Teachers are satisfied with the infrastructure facilities provide by the university with mean scores of 4.02.

Factor 3 Teaching environment

The third factor emerged as financial administration and it explained 9.59 % of total variance with 6.05 Eigen value. A total of eight statements loaded under this factor with factor loading ranging from 0.802 to 0.896. These items were Period and no. of break after lecture is sufficient (0.896); Teaching aids are available (0.890); Teacher is suffering more stress due to assigning of project/ thesis of research scholar (0.872); University has proper platform for personality development of teacher (0.869); Administrative department is cooperative towards teaching department (0.864);Teacher has sufficient support from head of department and colleague (0.847) Faculty has required freedom to select the subject according to their specialization and interest (0.846); Work load of teacher is according to UGC rules and regulations (0.802). The Cronbach‟s alpha value was 0.951. Mean score of these statements showed that teachers respond neutral for all these statements.

Factor 4 Research Statement

The fourth factor accounted for 7.43% of variance with 4.64 Eigen value. Factor loading ranged from 0.766 to 0.802. Library has sufficient number of reference books, journals and magazines (0.820) had highest loading followed by Financial support provided by university for research development is adequate (0.815); Department has sufficient infrastructure for research (0.793); Seminar, conferences, workshops and guest lecture are organized by the university (0.779); Uninterrupted WIFI facility is available in the campus (0.779); Separate rooms are provided to the teacher (0.766). The teachers stated neutral with the research environment for students. The value of Cronbach‟s alpha for this factor was 0.949.

Factor 5- Faculty support system

This factor contributed 7.34 % of variance with 3.62 Eigen value and the value of Cronbach‟s alpha was 0.908. The variables in this factor were University has proper channel for handling the grievances of teacher (0.863); Faculty development programme is organized by the university (0.860); Faculty is promoted according to the norms of university (0.834); Teacher participation in department meetings (0.826); Teachers are always encourage to give new ideas and suggestion (0.772); Teacher getting financial and academic support for attending conference, seminars etc (0.742); Teachers are satisfy with salary and allowance (0.717). Mean score of the variables showed that teachers respond neutral to the faculty support system of the colleges.

Factor 6- Educational material for students

This factor explained 7.05% of variance with 2.69 Eigen value. A total of six statements loaded under this factor with factor loading ranging from 0.866 to 0.927. These items were Wi-Fi facility is provided by the university (0.927); Sufficient computers are available in the department (0.922); Library is updated regularly (0.898); Students laboratories have all required material and equipment's (0.892); Adequate audio-visual aids are available for teaching (0.886). The Cronbach's alpha value was 0.967. Mean score of these statements showed that teachers respond neutral for all these statements.

Factor 7- Financial administration

This factor explained 6.86 % of variance with 2.43 Eigen value. Five factors loaded under Financial Administration. Grants are utilized for welfare of university (0.866); Amount of budget on infrastructure is satisfactory (0.864); Fee concession is available for deserving and poor students (0.827); University has received sufficient grants from central university (0.822); Scholarship are paid within reasonable time (0.798). The cronbach alpha value came 0.950. Mean score of the variables indicated neutral response for the financial administration of the university

Factor 8- Placement of students

This factor included five variables which explained 6.33 % of variance with 2.26 Eigen value and 0.935 Cronbach's alpha value. University has a high record of placement with good packages (0.867); University student appearing in the competitive exam have a good passing rate (0.833); Student Actively participate in placement services (0.814); University has a carrier counselling cell (0.784); Seminar is organize for carrier counselling of students periodically (0.771). Mean score of the variables indicated neutral response for the placement of the students

Factor -9 Extra –curricular activities

This factor was labelled as extracurricular activities for students with 0.964 Cronbach's alpha value. Four statements fall under this factor with 4.83% of variance and 1.84 Eigen value. Students participate in extra-curricular activities (0.844); Students are actively participate in sports activities of university (0.797); Extra –curricular activities is organized by university (0.781); University has NCC/NSS units (0.761). Mean score of the variables indicated satisfaction for the extracurricular activities of the students

Factor 10- Students motivation cell

Student's motivation cell explained 3.87 % of total variance with 1.41 Eigen value and 0.866 Cronbach"s alpha value. Factor loading ranged from 0.709 to 0.643. IQAC cell work properly (0.709); the college has intellectual quality assurance cell (IQAC) (0.668); Grievances are solved properly (0.664); University has grievance Redressal cell (0.643). The mean values range between 3.72 to 3.95. Overall, teachers were nearly satisfied with the support services provided to students.

6. Conclusion of the Study:

Teachers satisfaction is most important for higher education institute. Study concluded that teachers are highly satisfied with university administration and academic environment, Infrastructure facilities, teachers has neutral response for faculty support system. Teachers have low response for financial administration and placements of the students . The study had been conducted in Punjab only but in future other area also to be considered for study

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The Study of Rational Analysis as a Method of Evaluating Financial Activities

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Abstract: *In today's financial world, financial performance is important to a variety of stakeholders, including management, lenders, owners, and investors. Measuring financial performance is critical to financial decision making. Therefore, making effective financial decisions is of utmost importance. Annual financial statements provided by accounting systems are considered a key source of information for decision makers, especially investors.*
Therefore, the soundness and correctness of pronouncements depend on proper psychoanalysis of financial statements. Although there are other factors that influence investment decisions such as economic, political and social considerations, the financial analysis component is a key tool for attracting investment. The purpose of this article is to determine the role of ratio analysis indicators in investor decisions.

Keywords: *Business, Decision Making, Financial Reporting, Ratio Analysis, Financial Results.*

1. INTRODUCTION:

Every enterprise has predominant goals: profitability and solvency. Profitability is the ability of a commercial enterprise to make earnings, even as solvency is the capacity of a commercial enterprise to pay debts as they arrive due. To take the right choice on the right time executives ought to know the monetary role of the enterprise, without which it isn't smooth to take any kind of motion for the enlargement and increase of the agency. Via monetary facts a government can take vital choice as and whilst they are required. For reading the economic health and having accurate financial records of a business, ratio analysis is being taken into consideration as the major tool at gift. Selection-making can be defined as "an aware technique of creating selections amongst one or extra options with the indoors of moving closer to a few favored state of affairs." therefore, enterprise decisions are the ones picks exercised by using the executives with the nicely-organized utilization of resources.

Providing the proper financial records at the right time is paramount for any organization to make use of its assets successfully. Ratio analysis is a critical technique of monetary analysis. It represents a courting among two mathematical expressions and a connection between two or extra things. Economic ratios are ratios of selected values in a company's financial statements.

There are a number of fashionable ratios used to evaluate the general monetary health of a business or other organization.

Monetary ratios are used by managers inside an employer, the corporation's modern-day and capacity shareholders, and the company's creditors. Economic analysts use financial ratios to evaluate the strengths and weaknesses of various organizations. Making huge investment selections means making investment significant amounts of key resources: human beings, time, generation, intellectual capital, and money. Selections require that our selections are accurate and the consequences are understandable and nicely-understood. You can make funding choices based on price-gain analysis. Cost-gain evaluation is monetary evaluation tools that may potentially assist traders make decisions.

This allows investors to assess available opportunity options by comparing the advantages and costs of each option. This method is anticipated to allow traders to decide which alternative will provide the greatest net advantage. Furthermore, this will additionally assist acquire financial efficiency by means of improving the allocation of scarce resources (Campbell & Brown, 2005).

Rational analysis: A short evaluation the term "ratio" refers to a numerical or quantitative relationship between variables. in line with Igben (1999:423) "Accounting or economic ratio is a percentage or fraction or percent expressing the relationship between one item in a hard and fast financial statements and another item within the economic statements. Accounting ratios are the maximum effective of all tools used in analyzed and deciphering economic statements". Ratio analysis is a broadly used tool in monetary analysis. Its miles defined because the systematic use of ratios to interpret the economic statements in order that the power and weaknesses of a firm in addition to its ancient performance and modern economic condition can be decided. Consequently, ratio analysis involves taking stats of variety (or gadgets) out of economic statements and forming ratios with them, to enhance informed judgments and choices.

Possibilities may be divided into 4 main classes:

Liquidity ratio Leverage ratio, solvency ratio or capital structure ratio activity or turnover ratio or operating capital ratio profitability ratio

2. LITERATURE REVIEW:

- According to Drake (2010), monetary declaration evaluation is the selection, assessment, and interpretation of monetary information, at the side of other pertinent records, to assist in investment and economic choice-making. Moreover, it is also the process of figuring out the economic strengths and weaknesses of the company via nicely setting up a dating between the objects of the balance sheet and the profit and loss account (accounting for management internet site).

- Analysis of economic statements assists in identifying the main strengths and weaknesses of a commercial enterprise organization. It shows whether or not a firm has enough cash to satisfy duties; an inexpensive bills receivable series duration; an efficient stock control coverage; sufficient plant, property, and system; and an good enough capital shape (Moyer, McGuigan, Kretlow, 2005)

- The financial climate calls for investors to apply monetary evaluation as they examine commercial enterprise performance, weigh potential investments, and assess worldwide competition. Investment is placing money into an asset with the expectancy of capital appreciation, dividends, or interest profits. Infinite smalls, making an investment is the acquisition of property or objects with the desire that they may generate earnings in the future or that they will increase in cost and promote for a higher rate (Wikipedia, 2014).

Ratio evaluation is one of the major gears in financial evaluation. it is an important tool for enterprise planning and decision making as it examines the strengths, weaknesses, possibilities and threats facing a employer. Smart buyers use financial ratios to analyze a employer's financial overall performance earlier than investing.

- Financial ratios display how a corporation is financed, the way it uses its resources, its capacity to repay-debt, and its capacity to generate income. Ratios offer a glimpse of an enterprise's role at a specific time and are maximum beneficial when as compared across periods and whilst comparing companies within the equal enterprise. Ratios on my own do not deliver a complete picture of an employer's funding potential; however they're a smart place to begin the analysis (young, 2014).

- Monetary ratios allow for comparisons and, therefore, are knotted with the method of bench marking, evaluating one's enterprise to that of others or the equal employer at a exclusive point in time. in lots of cases, bench marking entails comparisons of one corporation to the quality organizations in a similar peer group or the common in that peer group or industry. in the process of bench marking, investor identifies the exceptional corporations of their enterprise, or in some other industry where comparable procedures exist, and compares the effects and approaches of these studied to at least one's outcomes and strategies on a selected indicator or collection of indicators (Boundless, 2014).

3. RATIO EXAMINATION AS AN INSTRUMENT FOR CALCULATING MONETARY PRESENTATION :

Assessment of monetary overall performance has a large significance inside the world of financial system and it is what the studies of accounting and administration recognition significantly on. The financial reviews which can be prepared by the enterprise are taken into consideration as an important device to evaluate the financial overall performance studying those reports allows in identifying the company's points of weak spot and power and running on the weak point to discover solutions. The financial ratio is the maximum common technique used to research monetary reviews and has an correct assessment to treat the factors of weak spot, efficaciously and efficaciously. The financial ratios do not add new information but it facilitates give an explanation for the relation between the variables to come up with consequences Ratio evaluation is one of the main monetary signs extracted from monetary statement evaluation this is used to acquire a quick indication of a firm's monetary overall performance in several key areas. Ratio analysis as a tool possesses numerous essential functions.

The records supplied in financial statements are easily reachable. Calculating ratios makes it less difficult to compare organizations of different sizes. Ratios can be used to compare a business enterprise's financial performance to the enterprise common. Ratios also can be used as a shape of fashion analysis to pick out areas wherein performance has progressed or decreased over time.

Analyzing economic ratios can let you know how profitable a business enterprise is, whether it has sufficient coins to pay its money owed, and even whether or not its shareholders could be satisfied.

Financial ratios let you examine:

1. among businesses
2. Inter-industry
3. Between exceptional durations of an agency, and
4. between character agencies and industry averages

Ratio analysis permits you to draw conclusions about numerous aspects of an organization, together with its monetary fitness, profitability, and working efficiency. Ratio evaluation is a fundamental method of reading the health of an employer by examining the relationships between key monetary variables. An enterprise's ratios are generally as compared to the ratios of other groups in the employer's enterprise or tracked within a agency over the years to become aware of tendencies. Ratio analysis is the manner of identifying and offering relationships between gadgets and businesses of items in monetary statements. It’s far a way to evaluate the financial stability and health of a company. Ratio evaluation plays a crucial function within the investment and lending decisions of banks, coverage businesses, and so on. In the economic quarter, it additionally simplifies accounting measurements and emphasizes the interrelationships among numerous commercial enterprise segments. To evaluate an employer's overall performance, current ratios are as compared to past performance.

4. CATEGORIES OF RATIO EVALUATION:

There are loads of financial ratios which are used for ratio analysis, for the scope of class 12 Accountancy college students. The following corporations of ratios are taken into consideration in this text, which can be as follows:

1. Liquidity Ratios: Liquidity ratios are helpful in figuring out the capacity of the organization to meet its debt obligations through the usage of the current assets. At instances of economic crisis, the organization can utilize the property and sell them for acquiring coins, which may be used for paying off the debts.

Some of the maximum generally used liquidity ratios are short ratio, current ratio, coins ratio, and so on. The liquidity ratios are used often by way of creditors, suppliers and any form of economic institutions inclusive of banks, money lending corporations, and many others for determining the capacity of the organization to pay off its responsibilities as and once they grow to be due in the contemporary accounting period.

2. Solvency Ratios: Solvency ratios are used for determining the viability of a employer in the long term or in different phrases, it's far used to decide the long time viability of an enterprise. Solvency ratios calculate the debt ranges of a business enterprise on the subject of its belongings, annual income and equity. Some of the crucial solvency ratios which can be used in accounting are debt ratio, debt to capital ratio, hobby insurance ratio, etc.

Solvency ratios are utilized by authorities’ businesses, institutional investors, banks, and many others to determine the solvency of an agency.

3. Activity Ratio: interest ratios are used to measure the performance of the business sports. It determines how the enterprise is the use of it's to be had assets to generate maximum possible revenue.
These ratios also are referred to as performance ratios. Those ratios preserve special significance for enterprise in a manner that every time there's an development in these ratios, the corporation is able to generate sales and profits a good deal efficaciously.
Some of the examples of hobby or performance ratios are asset turnover ratio, stock turnover ratio, and many others.

4. Profitability ratios: The purpose of profitability ratios is to determine the ability of a agency to earn profits when as compared to their costs. A better profitability ratio proven with the aid of a enterprise as compared to its preceding accounting duration suggests that enterprise is appearing well.
The profitability ratio can also be used to compare the financial overall performance of a comparable firm, i.e it is able to be used for analysing competitor overall performance.
A number of the maximum used profitability ratios are returns on capital hired, gross earnings ratio, net profit ratio, and so forth.

5. USE OF RATIO EVALUATION:
Ratio evaluation is useful inside the following ways:
1. Evaluating economic overall performance: one of the maximum vital things approximately ratio evaluation is that it helps in evaluating the monetary overall performance of corporations.
2. Trend Line: organizations tend to use the hobby ratio to be able to locate any sort of fashion inside the overall performance. Businesses use facts from financial statements that is amassed from monetary statements over many accounting intervals. The fashion that is obtained can be used for predicting the destiny economic overall performance.
3. Operational efficiency: economic ratio evaluation can also be used to decide the performance of handling the asset and liabilities. It helps in know-how and figuring out whether or not the assets of the enterprise is over utilised or under utilised.

Evaluating monetary ratios over a period of time is called time series evaluation or trend evaluation. This shows exchange and reflects whether a corporation's financial performance advanced, worsened, or stayed the identical over the length. It isn't just the exchange that wishes to be recognized, but greater importantly, we want to apprehend that these relationships have modified. That is because those adjustments may additionally occur due to adjustments in accounting guidelines without significant modifications inside the enterprise's overall performance.

Another way is to compare a organization's performance at the same factor in time with other agencies within the identical enterprise. This assessment is referred to as cross-sectional analysis. It may be extra useful to pick a few competitions' engaged in similar sports and examine their overall performance with your agency's overall performance. This assessment suggests the relative economic fitness and performance of the businesses.

Economic statements for comparable corporations may be determined very easily in courses, making this kind of analysis smooth to perform.
To determine the financial condition and overall performance of a firm, its ratios can be compared with the common ratios of the industry to which the firm belongs. This method called

the enterprise analysis facilitates to ascertain the financial standing and capability of the firm within the enterprise to which it belongs. Enterprise ratios are critical standards due to the fact each enterprise has its characteristics, which have an impact on the financial and working relationships.

But, there are positive realistic difficulties for this technique.

• First finding average ratios for the industries is any such headache and hard.

• Second, because an enterprise carries each vulnerable and robust agency, the common additionally includes the ones businesses. Sometimes the unfold may be so extensive that the common is sort of useless.

• Third, if groups inside the same enterprise fluctuate appreciably of their accounting policies and practices, averages may be meaningless and comparisons won't be possible. However, industry ratios might be very beneficial in the event that they will be standardized and exclude extraordinarily strong and extremely weak companies.

Ratio analysis facilitates monetary managers identify issues before they grow to be crises. those problems may be existence-threatening to the company (such as understanding that the business enterprise will not be able to pay its payments in the approaching months) or simple planning problems (inclusive of identifying that company's the gadget is getting older and that finances needs to be set apart to update this gadget inside the following couple of years). overall performance assessment of a agency is commonly related to how properly a company can use its property, shareholder equity and liability, revenue, and fees.

Financial ratio evaluation is one of the pleasant equipment for the performance assessment of any company.

To determine the monetary function of the pharmaceutical enterprise and to make a judgment of the way well the pharmaceutical enterprise is green, its operation and management, and the way well the agency has been in a position to make use of its belongings and earn earnings. For ratios to be beneficial and meaningful, they have to be:

- Its miles calculated using reliable and correct financial information.
- Calculated sequentially via length.
- Used in contrast with inner indicators and desires.
- Used to compare with different agencies inside the industry.
- Taken into consideration both at a particular factor in time and as an indicator of popular developments and troubles.
- Over the years working conditions
- Cautiously interpreted inside the proper context, considering there are numerous other vital eight. Factors and indicators concerned in assessing performance.

6. CONCLUSIONS:

Result

- Using financial signs has a full-size high-quality impact on investments taken via Investors tips.
- Financial signs represented in ratio evaluation play a vital position in a commercial enterprise.
- Making plans technique and figuring out the electricity, weaknesses, and opportunities.

- Business corporation importance to man or woman ratios doesn't continually bring about a terrific decision.
- Occasionally better profitability may be observed through low liquidity.

7. GUIDELINES/ RECOMMENDATION

- Economic signs have to be used wisely after a complete test of the history.
- The corporation, and through auditing test of the financial cycle.
- Other tools than economic indicators have a sizeable effect on choice-making making which
- Ought to be taken into consideration.
- Economic metrics don't let you know why problem so arise what to do.
- Particular situation indicates most effective wherein the problem exists.
- Control's guidelines and moves can carry excessive earnings. Such evaluation eight. An enterprise with some other will be deceptive.

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