

ISBN: 978-93-95847-71-1

**Research and Reviews in
Literature, Social Sciences, Education,
Commerce and Management
Volume IV**



Editors:

Dr. V. Rajeswari

Mr. Soumen Das

Dr. Averineni Ravi Kumar

Dr. Gauri Dixit



Bhumi Publishing, India
First Edition: April 2024

**Research and Reviews in Literature, Social Sciences, Education,
Commerce and Management Volume IV**
(ISBN: 978-93-95847-71-1)

Editors

Dr. V. Rajeswari

Department of EEE,
AMET University,
Chennai, Tamil Nadu

Mr. Soumen Das

School of Media Science,
Institute of Management Study,
Kolkata, West Bengal

Dr. Averineni Ravi Kumar

Department of Pharmacognosy,
Nimra College of Pharmacy,
Vijayawada, Andhra Pradesh

Dr. Gauri Dixit

Department of Sanskrit,
Kamla PG College,
Dholpur, Rajasthan



April, 2024

Copyright © Editors

Title: Research and Reviews in Literature, Social Sciences,
Education, Commerce and Management Volume IV

Editors: Dr. V. Rajeswari, Mr. Soumen Das, Dr. Averineni Ravi Kumar, Dr. Gauri Dixit

First Edition: April, 2024

ISBN: 978-93-95847-71-1



All rights reserved. No part of this publication may be reproduced or transmitted, in any form or by any means, without permission. Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

Published by:



BHUMI PUBLISHING

Nigave Khalasa, Tal – Karveer, Dist – Kolhapur, Maharashtra, INDIA 416 207

E-mail: bhumipublishing@gmail.com

Disclaimer: The views expressed in the book are of the authors and not necessarily of the publisher and editors. Authors themselves are responsible for any kind of plagiarism found in their chapters and any related issues found with the book.



PREFACE

In the vast landscape of human knowledge, literature, social sciences, education, commerce, and management stand as pillars that shape our understanding of the world and guide our endeavors. They are the domains where ideas take flight, theories evolve, and practical wisdom finds its roots. It is within this dynamic intersection that "Research and Reviews in Literature, Social Sciences, Education, Commerce, and Management" emerges as a beacon of intellectual exploration and scholarly discourse.

This compendium stands as a testament to the relentless pursuit of knowledge and the unwavering commitment of scholars, researchers, and practitioners in their respective fields. It is a repository of insights, analyses, and reflections that collectively contribute to the ever-expanding tapestry of human understanding.

In the pages that follow, readers will embark on a journey through diverse landscapes of inquiry. From the nuanced realms of literature where narratives intertwine with culture and emotion, to the empirical realms of social sciences where patterns in human behavior are deciphered, each chapter offers a glimpse into the multifaceted dimensions of our existence.

Education, the cornerstone of societal progress, is explored with depth and breadth, illuminating pathways to transformative pedagogies and innovative practices that nurture minds and inspire lifelong learning. Meanwhile, commerce and management, amidst the complexities of global markets and organizational dynamics, unveil strategies and paradigms that drive economic prosperity and organizational excellence.

As we delve into these domains, we recognize that knowledge is not static but rather a river in constant flux, shaped by the currents of inquiry, debate, and discovery. The contributions within this volume stand as tributes to this ceaseless pursuit, offering perspectives that challenge assumptions, provoke thought, and invite dialogue.

At its core, "Research and Reviews in Literature, Social Sciences, Education, Commerce, and Management" embodies the spirit of intellectual curiosity and scholarly rigor. It is a testament to the collective endeavor of individuals who seek to unravel the mysteries of the human experience and contribute meaningfully to the advancement of society.

Editors

TABLE OF CONTENT

Sr. No.	Book Chapter and Author(s)	Page No.
1.	CHALLENGES AND IMMINENT OPPORTUNITIES FOR IMPLEMENTING NEP 2020 GUIDELINES IN TEACHER EDUCATION PROGRAMMES Parmindar and Arpita Pradhan	1 – 14
2.	CHALLENGES AND OPPORTUNITIES OF ARTIFICIAL INTELLIGENCE IN TEACHING- LEARNING Gursimran and Anshu Narad	15 – 21
3.	ATTITUDE OF HIGHER EDUCATION STUDENTS TOWARDS MOOCS: A LITERATURE REVIEW Nilesh Kumar and Anshu Narad	22 – 30
4.	THE ROLE OF SCIENTIFIC TEMPERAMENT IN FOSTERING SOCIAL HARMONY IN DEMOCRATIC SOCIETY Suresh Kumar K. A.	31 – 34
5.	THE USE OF TECHNOLOGY IN CLASSROOM LEARNING Puja Mandal and Vishal Kumar	35 – 45
6.	REVIEWING THE LATEST CHANGE IN CONSTITUTION OF INDIA – (ONE HUNDRED AND FIFTH AMENDMENT) ACT, 2021 Sakshi Sahni, Rawal Singh Aulakh, Ritu Raj Kaur, Gursharan Kaur and Ravi Inder Singh	46 – 49
7.	THE ROLE OF LITERATURE IN SOCIETY P. Prasantham	50 – 63
8.	HARMONY IN ACADEMIA: STRIKING THE PERFECT WORK-LIFE BALANCE FOR EDUCATORS Deepti D. Dhere	64 – 70
9.	A COMPREHENSIVE REVIEW AND ANALYSIS OF EXPLORING THE ROLE OF MEDIA AND INTERNET PLATFORMS IN ADVANCING PHYSICS EDUCATION Aloke Verma and Payal Goswami	71 – 74
10.	EMBRACING A PARADIGM SHIFT: TRANSITIONING FROM TRADITIONAL TEACHING METHODS TO AI-BASED NLP EDUCATION Ritesh Mishra	75 – 79

11.	ROLE OF NGOs IN SCHOOL EDUCATION IN INDIA: A REVIEW Subroto Mandal and Vishal Kumar	80 – 87
12.	A STUDY ON THE ROLE OF RUMINATION AND DEPRESSION ON THE MENTAL HEALTH OF ADOLESCENTS Rehna Chandran K and Parminder	88 – 99
13.	ETHICAL NAVIGATION IN AI-DRIVEN HR: REVOLUTIONIZING PROCESSES WHILE MITIGATING BIAS AND ENSURING ACCOUNTABILITY John Wesley, Laxman Singh, Santosh Yadav, Kalyanrao Kulkarni and Rahul S.	100 – 106
14.	STATUS OF WOMEN EDUCATION IN INDIA AT THE UNIVERSITY LEVEL Sakshi Devi and Vishal Kumar	107 – 116
15.	THE RETURN OF THE SPECTRE OF THE PANOPTICON Suparna Banerjee	117 – 130
16.	A NARRATIVE REVIEW OF THE LITERATURE ON EMOTIONAL INTELLIGENCE CONSTRUCT Randeep Singh and Rajib Chakraborty	131 – 141
17.	A NARRATIVE REVIEW OF THE LITERATURE ON ACADEMIC PROCRASTINATION CONSTRUCT Anurag Jamwal and Rajib Chakraborty	142 – 149
18.	TRANSFORMING DIGITAL MARKETING WITH ARTIFICIAL INTELLIGENCE Prabhat	150 – 156
19.	RESEARCH AND REVIEW IN LITERATURE Rajinder Kaur	157 – 167
20.	THE ROLE OF AI IN DATA ANALYSIS FOR INVESTIGATIVE JOURNALISM: CHALLENGES AND OPPORTUNITIES Soumen Das	168 – 176
21.	AN ANALYSIS OF THE PRE- AND POST-MERGER PROBLEMS CONCERNING DIFFERENT COMPANIES Muktak Vyas	177 – 186
22.	SUCCESS THROUGH PERSISTENCE: CONQUERING SALES OBJECTIONS – A CASE STUDY OF ZERISE DOCUMENTATION S. G. Balaji and S. Vinoth	187 – 190

23.	SHIFTING LANDSCAPES: AADHI'S PROGRESS IN THE TRANSFORMING INDIAN RETAIL INDUSTRY CASE STUDY	191 – 194
	W. Shabeena Shah and Anees Fathima M I	
24.	NAVIGATING COST EFFICIENCY AND CUSTOMER SATISFACTION: A SUPPLY CHAIN CHALLENGE AT PROCESS MANUFACTURER LTD: A CASE STUDY	195 – 198
	M. S. Siranjeevi and K. Sindhura	

CHALLENGES AND IMMINENT OPPORTUNITIES FOR IMPLEMENTING NEP 2020 GUIDELINES IN TEACHER EDUCATION PROGRAMMES

Parmindar and Arpita Pradhan*

School of Education, Lovely Professional University, India

*Corresponding author E-mail: apradhan0884@gmail.com

Abstract:

National Education Policy is an important step recently taken by the Indian Government to transform the educational system in the country in the best way possible. This paper discusses the need and importance of the recently introduced policy of NEP (2020) by the government of India. This paper focuses majorly on the various challenges and imminent opportunities coming in the way of implementing the guidelines of the policy. These challenges and opportunities are highlighted on the basis of Teacher Education Programmes. A questionnaire is prepared and spread to the teacher educators (directly / indirectly associated) of various areas to get their valuable responses. Many teacher educators gave their responses and are supporting NEP (2020) for its various opportunities in the field of teacher education programmes.

Introduction:

Since 1952, education has been recognized as a fundamental human right. India's education system takes a holistic approach, aiming to cultivate well-rounded individuals by nurturing their moral, physical, intellectual, and spiritual development. This emphasis on fostering the "whole person" stands in contrast to education systems that prioritize rote memorization and standardized testing. The system is overseen by the central government, with states managing specific aspects. It encompasses pre-primary, primary, secondary, and higher education, with a focus on primary education (ages 6-14) being free and compulsory. Despite progress, India's literacy rate remains around 74%, and there are disparities in access to quality education, particularly in rural areas and for girls. The government implements various initiatives to improve access and quality, like the Right to Education Act (2009) and programs promoting digital learning. Our Indian Education system has its roots back to ancient times. The ancient education system lays emphasis on the study of Vedas, Bhramanas, Upanishads and Dharmasutras. Both formal and informal types of education were prevalent in ancient times. Temples were considered the main centres of learning (as schools and universities nowadays). The method of teaching was oral and formal. Gradually, the new concept of Gurukul started which is really one of the oldest systems of imparting knowledge on the earth. At Gurukuls, various subjects including Religion, Philosophy, Astronomy, Literature, Mathematics and Astrology had been taught by different methods. There was a restriction for students of classes

other than Brahmin and Kystrias as they were not allowed to enter here and study. In Medieval India, after the rise of some religious philosophies like Buddhism and Jainism, the education system encountered various changes. This period saw the establishment of universities imparting knowledge of different thoughts. Higher education gets started imparting in universities like Nalanda, Takshila, Vikramshila and others. Many foreign travelers not only visit these universities but also study there to acquire knowledge. Even in the medieval period, the Mughals came to India and gave their contribution by introducing the Madrasah system to Indian education, where education was given by Moulvis in the Arabic language. This was an education system with core emphasis on islamic values, islamic religion and Arbraic literacy.

Historical Evolution

Education in India in the modern period refers to the 18th century period. After independence, education became the responsibility of both state and central governments. In this period, Women's education was also introduced and a lot of women got engaged in learning and attaining knowledge.

The history of Indian education saw the introduction of many different types of education policies. Keeping the education system of India in light, the Government of India introduced the Indian Education Commission (1964-66), known as Kothari Commision to deal with all sectors of education and advise the government on the evolution of the education system. After getting recommendations from this commission, National policy on education (1968) was formed. This policy aims at “total reformation” and to extend education to all sections of society in order to achieve harmony and integration. National Policy of Education (1986) aims at providing education to all sections of society, mainly focusing on SCs, STs, OBC and women. Central advisory board of education was set up which requires some modifications in the NPE (1986) document. Under NPE (1986), a two-year course for teacher education was run by the Haryana government which led to the “Diploma in Pre-school education”. Various vocational training was also run to train the teachers in various technical subjects. It could be a diploma, training courses, certificate courses and even courses for specializing in a particular subject. The Indian Education commission (1964) was set up for Teacher’s education under Dr. Daulat Singh Kothari. The Chattopadyay committee (1985) aims at providing the best quality training to the teachers. This report was submitted in 1992 which is known as the National Programme of Action (POA) of 1992. The National policy of Education (1992) works on the greater transformation of the education system along with enhancing the overall quality. Sarva Shiksha Abhiyan (SSA) was also one of the programmes introduced to focus on Universal Elementary.

Education (UEE). Education was made a fundamental right for Indian citizens and added in Part3 of the Indian constitution by the 86th Amendment Act (2002). Providing high-quality opportunities for education to the population of young people will maximize the resources for the

betterment of the individual, society, and the country as a whole which is something to look upon. It was a challenge for future educational policies to address this issue. An autonomous statutory body was introduced comprising six members and a chairman known as Yashpal committee (1993). The National Curriculum Framework was also formed in 2005 to look after the role of teachers as a facilitator in the Education System. The National council of teacher education (NCTE) was a statutory body of the Union government formed in 1995, responsible for the planning and coordination in the developmental task in the country. It enlists some norms, rules and standards for teacher education courses, like the minimum qualifications for educators, content, duration along with the minimum qualifications to enter the particular courses under this policy.

National Education Policy

Therefore, to bring a monumental change in India's Human resource, the Union Cabinet of India approved the National Policy of education (NEP) in 2020 which outlines the new education system of India. This policy is basically a commitment to India's education system by the government of India (Joshi & Samani, 2021). This policy aims at transforming India's education by 2040 and focuses on providing multi-sphere education and development, critical and creative thinking with conceptual-based understanding, testing higher order skills rather than rote learning through regular formative assessments in the learning process. There is a “light but tight” kind of framework that regulates to ensure integrity, transparency, and efficiency. The main vision of this policy is to bring out a responsible and truly global citizen, being an expert on all the values.

Being the first education policy of the 21st century, National Educational Policy of 2020, has a challenge to lift the country as a developed country according to the 4th goal of United Nations Sustainable Development Goals (SDGs), which mainly focuses on ensuring the inclusive and equitable quality education along with the lifelong learning opportunities for all (Aithal, P.S., *et al.*, 2020).

Teachers are a very essential component of any society. Teachers help the society to work in a bright and excellent direction and result in the overall development of the society. Teacher education is a continuous, broad and comprehensive task. It is very evolving and dynamic.

Teacher education = Teaching skills + Pedagogical skills + Professional skills.

The guidelines in the document of NEP (2020) have been provided to ensure the quality of teacher education, recruitment, conditions of service, empowering the teachers and motivating the teachers to reach the desired standards. The respect for teachers and the high status of this profession is something which is to be focused upon through this policy. One of the guidelines of NEP (2020) is that it recommends that all teachers should be appointed to the school complex

and that this existing system of transfers and posting of teachers should be discontinued (Ramachandran, 2020).

The NEP (2020) imparts various opportunities for the teachers in the education sectors to grow at a larger scale. This aims at providing the teacher community with all the requirements, benefits and opportunities which they are lacking for and is really deserving. The thing of concern is that NEP (2020) needs to face many challenges in its way to get implemented and yield out the desired outcomes. If the government of India succeeds in implementing these guidelines of NEP (2020), it can prove to be a greater success as a whole. There are various opportunities which need to be taken care while implementing these guidelines. If the great usage of the opportunities are taken, then they would help to beat all the challenges and show the greater results. Under these opportunities, teachers can improve themselves and bring out the best outcomes in their performances in the education sector.

Review of Literature

Richard (2016) focuses on improving the quality of teacher education by focusing on all the related problems and concerns. It reflects the current situation of Indian education along with all the problems like superficial practice teaching, lack of innovation and facilities, lack of culture-specific pedagogy and incompetency of teachers. Various suggestions have also been given regarding teachers' education. It suggests that admission procedures for B.Ed programmes should be in a full systematic manner and all the necessary steps should be taken to assure this. It states that the quality of teacher education should be improved and upgraded. There is a need for seminars, summer institutions and research work for professional growth of teachers along with adequate fund provision by state governments. Teacher education programme requires an overall change and restructuring and needs to be revised.

Sing (2019) presents a qualitative and comparative study regarding the recommendation of teacher education in NEP (1986) and NEP (2019). This aims at comparing and finding out the various similarities and dissimilarities between the recommendations given by both these policies with regard to teacher education. The primary data is being collected from drafts, and secondary data from articles, books and websites. The result shows that both these policies deal with teacher education and there are similarities in development, administrative structure, faculties, four year integrated B.Ed courses, pre-service and in-service teacher education. There are some dissimilarities in elementary level, multidisciplinary level of teacher education, duties of NCTE, and qualifications of the faculties.

Aithal *et al.*, (2020) performed a conceptual discussion and analysis on objectives of NEP (2020). It highlights policies adopted in the past in higher education and comparison is made with the current NEP. Various kinds of innovation, predictions and merits brought out by NEP (2020) have been discussed here. NEP (2020) is considered to bring the quality, affordability and

encouragement of higher education along with strict measures to implement these and expect to fulfill these objectives by 2030. This also gives various suggestions for the better implementation of these policies in the best possible manner in the country's educational system. It is considered that the educational system is now moving from a teacher-centric to a student-centric, marks centric to skills centric, examination centric to experimental centric and learning eccentric to research centric.

Aithal *et al.*, (2020) discusses the various effective strategies for implementing the provisions of the policy of NEP (2020) especially related with Higher education in India and help to move towards achieving its objectives. This paper is considered as a reference to the policy implementation terms of our Indian government. This paper discusses the strengths, weakness of the policy at the higher education and research level, evaluates the implementation strategies and then identifies and analyses the best ones in order to fulfill its objectives. Aithal *et al.*, (2020) worked on implementation strategies such as planning, Setting standards, implementing systems by government, creating infrastructure for academics and research by autonomous institutions, motivation by administrators and promoting the advantages of new policy by parents/citizens. It also covers the proposals related to quality development of colleges and universities, holistic and multidisciplinary education, technology usage, positive learning environment, student support and online education. Then some recommendations like focusing on top-down approach of implementation as well provided to implement NEP (2020).

Kalyani (2020) conducted a survey on NEP (2020) with regard to the future of it and effects on the various stakeholders (Students, Teachers and Parents). The data was collected through a structured questionnaire of 30 questions. This questionnaire contains the proposals and opportunities related to boards examination, graduate degrees with exit options, vocational courses and use of technology. It was found that the teachers, students and parents are in support of NEP (2020) and believe that it will result in improving the teaching process, development of teachers and will enhance the educational access and quality to all the groups of the society.

Kumar (2020) gives a critical analysis of the new national educational policy of NEP (2020). This paper investigates the areas where this policy has come into action. Major reforms are required to be looked upon while implementing this policy. NEP (2020) is concerned towards the credibility of teachers. This paper focuses on the fact that the government does not have a clear picture regarding the teacher education and community. This article states that teachers appointments are on the basis of rules of affiliated boards and universities but these are less concerned about the payment of the teachers.

Kumari (2020) highlights the challenges of NEP (2020) to the teachers' education. She asserts that teachers should require training in high content and pedagogy and teacher education by 2030 by moving towards multidisciplinary and practical learning along with the best

departments offering B.Ed, M.Ed, Ph.D degrees in education. She asserts various challenges like (lack of time for planning, limitations of standardized testing, lack of proper funding, a lot of paperwork and lack of parental support). This article states that the policy ensures that the students are taught by highly qualified, passionate, motivated and well trained and equipped teachers. There are several loopholes in the system like performance pressures from school administration, lack of proper funding, applying a prescribed curriculum to all the students even, therefore this paper focuses on the major problems related to teacher education like faulty curriculum, problem of selection, traditional method of teaching, lack of creativity and much more. Moreover, various suggestions have also been provided to tackle these issues in the best possible manner.

Panditrao & Panditrao (2020) highlights that NEP (2020) is indeed a commendable and a positive step by the government of india. This report clearly focuses on the NEP policy and what it is providing to students, parents, teachers or for higher education institutions and critically focuses on the vision, aims and principles with the main focus on higher education and its implementation as well. The vocational education, online and digital education is also focused. The content from the original document (in part or total) has been used in a liberal way while preparing this article. It is imperative that the strong focus or stress should be put on this online and digital model of study and delivery of the content in this ongoing global pandemic.

Ramachandran (2020) highlights the school teachers in NEP (2020). This article highlights the status of teachers in the education system and society, teacher's capacity, their transfers and autonomy as well. An important positive dimension of NEP (2020) is that it advises that all the teachers should be appointed to the nearby school complex itself and the system of transfers should be stopped now. This article focuses on the shortages of mathematics, science, commerce and english teachers as well. There is an immense need to make a clear road map to transform and operate the ideas mentioned in the document of NEP (2020).

Sakhare (2020) focuses on the conceptual based research and looks towards the features of NEP and the role of teachers with respect to this policy. This paper mainly studies the basic elements, the objective, features, some important observations related to the National education policy 2019. This paper revolves around NEP (2019) and the features, roles for the building of the nation. There is an inter-relation also shown between the policy and teachers and it proves to be best for the teachers because a teacher is one who will make the future of the country.

Vijayalakshmi (2020) focuses on the descriptive research regarding the opinion of teachers on this New Educational Policy of 2020 in India. Total 342 samples collected through online questionnaire with five-point rating scale using purposive stratified sampling technique. Several statistical techniques were calculated with full reliability and validity. The results showed that the agreement level of teachers on features of NEP was high and disagreement was

quite low. The relationship between the agreement and disagreement of teachers are non-significant in the field of Gender and Discipline of teachers and significant in teaching experience of teachers. This study is only limited to collecting the opinions of teachers only. This study gives a major contribution by highlighting valuable suggestions (like explaining the importance of these changes with accurate explanations) and support for recently framed policy. There is a strong disagreement with the abolition of M.Phil. Degree and is advised to give a clear explanation for this change.

Venkataraman (2021) conducted a perception study on NEP (2020) with regard to school reforms and policy impacts. The perception was taken from faculties of higher education, school teachers, researchers and M.Ed students from Salem District. This report found that all the college faculties of teacher education (B.Ed) are in fear of the changes brought out by New education policy and are concerned about their employment. This report gave an opportunity for debate at a scholarly as well as grass root level. It basically revolved round the fear of teachers that it would result in decreasing job prospects for them. Senior teachers stated that the government should think twice before implementing, and should not interfere with the policy changing the framework, especially in the case of B.Ed.

Bhattacharyya (2021) focuses on Teacher Education and its progress after NEP (1986) at a large scale. This article discusses the reforms and its emphasis on the quality of the teacher and teacher education as well. The prevalent institutions can do more in innovations for teachers education through better approach, focusing on pedagogy for improvement in quality aspects. This report does a deep research on NEP (2020), analyses it and gives recommendations (like merit-based scholarships and proper teacher training courses) for its better running in the country. NEP (2020) is considered a light of hope in the field of teacher education and making the teacher community more responsible, careful for their responsibilities and social friendly as well. He recommends changes in TET according to the new school system like hiring and maintaining vacancies digitally, requiring specializations in B.Ed. subjects, offering merit-based scholarship and providing mandatory training courses to the students of teacher education programmes.

Joshi & Somani (2021) lays emphasis on all the aspects of Indian National Policy on Education of 2020. This policy is considered as a commitment to the Indian educational system by our Indian government. The Indian government has taken the most required steps necessary for transforming, building a sustainable, equitable, inclusive learning platform and the formation of true global citizens. All hopes are on NEP (2020) which could lead to a positive and forever change in the country's future.

Kumar (2021) highlights the need and importance of bringing innovation and new practices in teacher education programmes. This paper highlights that the role of teacher is now

changed into a modern one. The role of teacher is not only limited to instructor but has increased much to the role of facilitator and supporter and coping with the new pedagogical and technological advancements in modern education. This paper covers new ideas and innovative practices (like, team teaching, reflective teaching, soft skills, constructivism teaching) which is required to be implemented in teacher education programmes. This paper also mentions the need of teacher education programmes to turn into innovative ones.

Shivarama & Gujral (2022) emphasizes how NEP 2020 necessitates significant improvements in school and public libraries. The NEP 2020 policy envisions a shift towards a more inquiry-based, holistic learning approach. Shivarama & Gujral argue that libraries, equipped with the right resources and staff, are crucial for supporting this learning model. The study highlights the need for libraries to have a diverse collection, including: Traditional books and journals, Digital resources like e-books, e-journals, and online databases, Access to the internet for research and exploration. They believe well-equipped and staffed libraries can significantly contribute to achieving the goals of NEP 2020.

YMER (2022) Focus on Global Competitiveness and Skills The policy aims to bring Indian education in line with global benchmarks to enhance student preparedness for international opportunities. NEP 2020 might encourage fostering intercultural understanding and preparing students to thrive in an interconnected world. It might spark discussions on how effectively NEP equips students with the skills and knowledge to compete and collaborate in an increasingly interconnected world.

Kapoor (2023) This research likely examines the NEP 2020 teacher training programs and how well they prepare teachers to deliver holistic education. Holistic education, as emphasized by NEP 2020, goes beyond rote learning and focuses on a well-rounded development of students' cognitive, social, emotional, and physical abilities. This research can benefit policymakers, teacher educators, and educators themselves by helping to refine and strengthen the NEP's teacher training initiatives, ultimately leading to a more holistic learning experience for students.

Overview of Related Literature

From the review of related literature, it can be concluded that most of the studies favor the NEP 2020 (Kalyani, 2020; Aithal *et al.*, 2020; Panditrao & Panditrao, 2020; Bhattacharyya, 2021; Joshi & Somani, 2021; Ramachandran, 2020; and Vijayalakshmi, 2020). Whereas some researchers consider the implementation of NEP (2020) as a challenge and find various loopholes in it (like performance pressures from school administration, lack of proper funding, applying a prescribed curriculum to all the students) (Kumari, 2020) and are cautious about its implementation as government does not have a clear picture yet of its implementation (Kumar, 2020) and suggested the government to take necessary steps in implementation as it will lead to

loss of jobs in educational prospects (Venkataraman, 2021). There is a strong disagreement for NTA testing for the admissions to B.Ed. so policy makers should give explanations of its importance (Vijayalakshmi, 2020) and review and changes are suggested annually.

Whereas Aithal *et al.*, (2020) worked on implementation strategies such as planning, setting standards, implementing systems by government, creating infrastructure for academics and research by autonomous institutions, motivation by administrators and promoting the advantages of new policy by parents/citizens. Aithal *et al.*, (2020) suggested that institutions providing the teacher's education should convert into a Multidisciplinary HETs by 2030 to offer 4 years integrated B.Ed. Programmes and should consider these degree holders as teachers. Senior faculty should be indulged in providing guidance, mentoring and professional support. To provide with progressive curriculum, research focus, providing monopoly research and contribution with unique and comparative infrastructure are the strategies provided under this paper and recommended working on a top-down approach of implementation of policy. Ramachandran (2020) asserts the importance of a clear roadmap to implement all initiatives of NEP (2020) and advises that the system of transfers and postings of teachers should be stopped. Also, Bhattacharya (2021) recommends changes in TET according to the new school system like hiring and maintaining vacancies digitally, requiring specializations in B.Ed. subjects, offering merit-based scholarship and providing mandatory training courses to the students of teacher education programmes. Richard (2016) suggests that B.Ed. admissions procedures should be fully systematised and free exchange of scholars between different departments are required as well. There is a need for seminars, summer institutions and research work for professional growth of teachers along with adequate fund provision by state governments.

There is a need for some innovations and new practices in teacher education programmes like introducing team teaching, blended learning, constructivism teaching, computer-managed learning, and computer-supported collaborative learning (Kumar, 2021). Usage of new and innovative techniques, training for stress management techniques, and allowing teachers to develop more relief skills within students are suggested to improve teacher education programmes (Kumari, 2020).

Sakhare (2020) focuses on the inter-relation between NEP 2019 and teachers. He said teachers are passionate, motivated towards creating classroom environments, mentoring and facilitating and also focuses on well qualified content, pedagogy and practice. There are various similarities (in development, administrative structure, faculties, four year integrated B.Ed courses, pre-service and in-service teacher education) along with some dissimilarities (in elementary level, multidisciplinary level of teacher education, duties of NCTE, and qualifications of the faculties) between NEP (1986) and NEP (2019) (Sing, 2019).

Many researchers are in favour of NEP (2020). NEP (2020) is considered as a commendable step, a light of hope and a commitment by the Indian government by various scholars. They feel that it will result in development of the teaching community and will make them responsible and effective in their profession. On the other hand, many researchers disavour NEP (2020) and concluded that it will result in the loss of job prospects for teachers. There is an inter -relation between NEP (2020) and teachers. NEP(2020) has come up with various aspects and contributes for the teachers community in various ways. There are various challenges of NEP (2020) to teaching education programmes as told by some scholars. It laid down the requirement of new and innovative practices to bring in these teaching educational programmes which can result in more advancement and prosperity in this field.

Significance of the present study

NEP (2020) is a policy recently introduced by the Indian government and is hoped to bring better outcomes in the field of teacher education and its related programmes. A lot of research has been done on this framed policy but there is still a requirement of much more research to be done in this field. Teachers are one of the groups which are affected by introducing the various reforms through this policy of NEP (2020), therefore it is important as a researcher to look after the challenges and opportunities provided by this recently framed and NEP (2020) majorly on teacher community and teacher education related programmes. It is believed that teachers are provided with various opportunities through this policy but on the same side there are various challenges encountered with this policy that would come in the way of the teaching community and will hinder their functioning in the society. Introducing the policy for the betterment of any section of the society is not enough but the actual implementation of the policy at better terms is quite necessary. There are several noticeable challenges in the implementation of the guidelines laid down in the document of NEP (2020) in the field of teacher education programmes. One of the most important challenges related to this is assuring the implementation of integrated degrees of B.A.-B.Ed and B.Sc-B.Ed in educational framework. There is a major gap between introducing the policies, guidelines and actually implementing these putting in action for the betterment of the educational sector. It is quite necessary to look and evaluate various challenges and opportunities which are arising in order to implement the guidelines introduced by this policy with regard to teacher education programs. The main aim/requirements of this study is to evaluate what the policy of NEP (2020) has for the teaching community, what it brings for the field of teacher education programs and what are the challenges and opportunities that come with implementing these guidelines in the actual framework. The actual implementation of these guidelines can only be seen if the government is working in this sector at the most practical and effective manner and is assuring the implementation of these policies at the best manner possible.

Various researches have been done by various scholars in the field of NEP (2020) and its effect on teachers and teacher education programs as a whole. But we cannot expect all these papers to cover every element concerned in their research, there are various factors which are never focused on in any of the research papers and various problems which are not answered or remain unresolved in the research papers done till today. There is no clear mention regarding some various important aspects in papers like no solution has been provided for the teachers community who are in fear of losing their educational job prospects. There is a very clear mention about teachers training in pedagogy and content but no such alternatives, initiatives, ideas and solutions have been provided to implement and carry out these training in an actual sense. Only discussing the requirements of teachers' training and what this aspect will bring is not enough until they are implemented in practical terms. There is no clear mention of teachers salary in any of the research papers, which is the most crucial part of the teaching profession. Various new ideas, innovatives and practices are discussed in these papers but no provision for the actual implementation is provided anywhere. How these new practices would be introduced are nowhere clearly mentioned and who would be responsible for their actual implementation and carrying out is nowhere told. Various loopholes and challenges have been mentioned in teacher education programmes but no solution is provided to tackle these.

These very important aspects will be covered in this paper and the ways for an actual implementation would be discussed as well. A survey for knowing the challenges and opportunities provided by this policy and what they are bringing for the teachers community would be evaluated and discussed. The problems and benefits associated with this policy with regard to teachers community and teacher education programmes will also be surveyed by a questionnaire prepared and filled by a sample of Teacher Educators.

Objectives

1. To increase the capacity and quality of teacher training institutions.
2. To develop a more diverse and inclusive pool of teacher candidates.
3. Identify the challenges in the implementation of NEP(2020).

Challenges of NEP

NEP stands for National Education Policy, a major reform introduced in India in 2020. While the policy has many ambitious goals for improving the Indian education system, there are also significant challenges that need to be addressed for successful implementation.

Here are some of the key challenges of NEP:

- **Funding:** One of the biggest hurdles is a lack of funding. The NEP proposes a significant increase in public spending on education, up to 6% of GDP. However, this is a tall order for the government, especially considering the competing demands on the national budget.

- Teacher training and capacity building: The NEP calls for a shift in teaching methods, with a focus on more experiential and interactive learning. However, many teachers are not equipped for this kind of pedagogy. There is a need for large-scale training programs to help teachers develop the necessary skills and knowledge.
- Infrastructure: Many schools and colleges lack the basic infrastructure needed to support the NEP's vision. This includes classrooms, libraries, laboratories, and technology equipment. Upgrading infrastructure will require a significant investment.
- Curriculum development: The NEP outlines a new curriculum framework that is more flexible and holistic. However, developing new curriculum materials and textbooks takes time and resources.
- Standardization and assessment: The NEP proposes a new system for assessing student learning outcomes. However, developing and implementing new assessment methods is a complex task.
- Language policy: The NEP emphasizes the importance of multilingual education. However, there is debate about how best to implement this policy, given the diversity of languages spoken in India.

References:

1. National Education Policy 2020, Ministry of Human Resource Development, Government of India.
https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
2. Venkataraman (2021). Reforms in School Education and its Impacts as mentioned in the New Education Policy-2020. *Sanshodhan Chetana*, 9(1), 2319-5525. Retrived from http://sanshodhanchetana.com/issues/Mar-2021/Reforms_in_School_Education_and_its_Impacts_as_mentioned_in_Education_Policy_2020.pdf
3. Kalyani, P (2020). An Empirical Study on NEP 2020 [National Education Policy] with Special Reference to the Future of Indian Education System and Its Effects on the Stakeholders. *Journal of Management Engineering and Information Technology (JMEIT)*, 7(5), 1-17. DOI: <http://doi.org/10.5281/zenodo.4159546>
4. Aithal, P. S., & Aithal, Shubhrajyotsna (2020). Analysis of the Indian National Education Policy 2020 towards Achieving its Objectives. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(2), 19-41.
<http://doi.org/10.5281/zenodo.3988767>
5. Panditrao MM, Panditrao MM. National Education Policy 2020: What is in it for a student, a parent, a teacher, or us, as a Higher Education Institution/University? *Adesh Univ J Med Sci Res* 2020;2(2):70-9.

6. Bhattacharyya, A (2021). Progress of Teacher Education after NPE, 1986. *International Journal of Research Publication and Reviews*, 2(7), 740-743. Retrieved from <https://www.ijrpr.com/uploads/V2ISSUE7/IJRPR668.pdf>
7. Prof. Dr. Jagdish Joshi & Dr. Parin Somani (2021). Indian National Policy on Education 2020. *Towards Excellence: An Indexed, Refereed & Peer Reviewed Journal of Higher Education*, 13(1), 453-460.
<https://hrdc.gujaratuniversity.ac.in/Uploads/EJournalDetail/30/1045/40.pdf>
8. Sakhare, S.J., (2020). NEP 2019: Features of NEP and Role of Teacher. *Educational Resurgence Journal*, 2(3), 36-42.
<https://coed.dypvp.edu.in/educational-resurgence-journal/documents/jan-2020/Mr-Sachin - J-Sakhare.pdf>
9. Aithal, P. S. & Aithal, Shubhrajyotsna (2020). Implementation Strategies of Higher Education Part of National Education Policy 2020 of India towards Achieving its Objectives. *International Journal of Management, Technology, and Social Sciences(IJMTS)*, 5(2), 283-325. DOI: <http://doi.org/10.5281/zenodo.4301906>
10. Kumari, S (2020). NEP 2020 challenges to teachers education. *International Journal of Applied Research* , 6(10), 420-424. Retrived from <https://www.allresearchjournal.com/archives/2020/vol6issue10/PartG/6-9-95-142.pdf>
11. Kumar, S (2021) NEED OF INNOVATIONS AND NEW PRACTICES IN THE TEACHER EDUCATION PROGRAMMES TO MEET THE GLOBAL CHALLENGES. *Educational Resurgence Journal*, 3(6), 102–109. Retrieved from <https://coed.dypvp.edu.in/educational-resurgence-journal/documents/july-2021/15.pdf>
12. Ramachandran, V (2020). School Teachers in NEP 2020. *The Indian Forum*. Retrieved from <https://www.theindiaforum.in/article/teachers-nep-2020>
13. Creasy, L (2015). Defining Professionalism in Teacher Education Programs. *Journal of Education & Social Policy*, 2(2), 23-25. Retrieved from <https://files.eric.ed.gov/fulltext/ED563997.pdf>
14. Andrysova, P, Chudy, S (2019). Comparative Analysis of Teacher Education Programmes in Selected Countries. *The Turkish Online Journal of Educational Technology*, 18(4), 7-15. Retrieved [fhttps://files.eric.ed.gov/fulltext/EJ1232266.pdf](https://files.eric.ed.gov/fulltext/EJ1232266.pdf)
15. Kumar, D (2020). A Critical Analysis and a Glimpse of New Education Policy -2020. *International Journal of Scientific & Engineering Research*, 11(10), 248-253. Retrieved from <https://www.ijser.net/>
16. Richard , A (2016). Problems of teacher education in India. *International Journal of Multidisciplinary Research and Modern Education*, 2(1), 714720.

17. Vijayalakshmi, M (2020). Opinion of teachers on national education policy 2020 in India. *TNTEU International Journal of Educational Research*, 1(1), 58-69. Retrieved from https://www.researchgate.net/publication/349077236_OPINION_OF_TEACHERS_ON_NATIONAL_EDUCATION_POLICY_2020_IN_INDIA
18. Sing, P (2019). A comparative study on teacher education in “national policy on education”(npe-1986) and “National Education Policy”(NEP-2019). *International Journal of Current Advanced Research*, 8(12), 20757-20759. DOI : <https://dx.doi.org/10.24327/ijcar.2019>
19. Chari, R (2020, August 30). NEP 2020: Empowering the teacher. *The Times of India*. Retrieved from <https://timesofindia.indiatimes.com/blogs/edutrends-india/nep-2020-empowering-the-teacher/>
20. What NEP 2020 has for teachers. (2020, August 2). *The Indian Express*. Retrieved from <https://indianexpress.com/article/education/changes-in-tet-bed-courses-transfer-and-hiring-process-what-nep-2020-has-for-teachers-6530991/>
21. School of Education's Blog (2020). *Teacher Education Under NEP 2020: Prospects and Challenges*. <https://schoolofeducationchristuniversity.wordpress.com/2020/11/06/teacher-education-under-nep-2020-prospects-and-challenges/>

CHALLENGES AND OPPORTUNITIES OF ARTIFICIAL INTELLIGENCE IN TEACHING- LEARNING

Gursimran* and Anshu Narad

School of Education, Lovely Professional University, India

*Corresponding author E-mail: gursimrankhokhar4@gmail.com

Abstract:

The aim of the study was to analyse the challenges and opportunities of artificial intelligence in teaching-learning. The work explained that opportunities included personalised learning experiences, intelligent tutoring systems, and increased accessibility for students with diverse needs. Data-driven insights from AI informed curriculum development and improved student performance. Challenges such as the digital divide and ensuring fair use of intellectual property were identified. Ethical considerations, including data privacy, algorithmic bias, and the role of human interaction in education, were addressed. The paper concluded that AI had the potential to significantly improve education, but careful planning and ethical considerations were necessary for its successful implementation.

Keywords: Artificial Intelligence, Teaching-Learning

What is Artificial Intelligence?

Over several decades, artificial intelligence (AI) has undergone major breakthroughs and paradigm changes. Machine intelligence started in the middle of the 20th century, when innovators like Alan Turing established the theoretical foundation for the field. The field of artificial intelligence (AI) was founded in 1956 at the Dartmouth Conference, where scientists envisioned building machines that could perform activities that required human intelligence. Basic problem-solving skills were displayed by early AI systems as the General Problem Solver and Logic Theorist.

Known as the “AI Winte” years, the 1970s and 1980s saw both optimism and disappointment with artificial intelligence. Though there were disappointments, hope was bolstered by innovations such as expert systems and the development of symbolic AI techniques. A novel strategy motivated by the human brain was presented in the 1980s with the advent of neural networks. But I didn’t see a comeback until the late 1990s and early 2000s, when massive data and computing power became more prevalent. Artificial intelligence (AI) has become widely used as a result of the amazing success that machine learning algorithms-in particular, deep learning-have had in tasks like picture identification and natural language processing. AI is now present in many facets of society, from self-driving cars to virtual assistants, transforming entire businesses and igniting ethical discussions about its potential ramifications.

Recent advances in fields like reinforcement learning, generative models, and transfer learning have fuelled AI's continued rapid progress. These developments have resulted in the creation of AI systems that are able to write books and compose music, create lifelike images and movies, and even master challenging games like Go and poker. Additionally, as AI technologies become more widely used in the healthcare, financial, transportation, and other industries, they present previously unheard-of chances for efficiency and creativity. But as AI becomes more commonplace, worries about bias, privacy, job displacement, and the moral ramifications of AI-powered decision-making have gained prominence. As a result, the history of AI is not just a tale of scientific advancement but also of societal change and moral introspection.

AI in Teaching-Learning

Artificial Intelligence (AI) in teaching and learning is a paradigm shift in the field of education that promises to improve student learning and modernise conventional approaches. AI-powered solutions enable teachers to accommodate a range of learning styles and speeds by providing personalised learning experiences that are catered to each student's needs. AI can evaluate enormous volumes of student data to find trends, preferences, and areas for development through data analytics and machine learning algorithms, allowing teachers to offer focused interventions and support.

The capacity of AI to instantly modify curriculum and instructional techniques is one of the technology's most important educational benefits. Based on student performance, intelligent tutoring systems can dynamically modify the task's degree of difficulty, guaranteeing that every student is suitably challenged and involved. Furthermore, chatbots and virtual assistants driven by AI function as round-the-clock study helpers, responding to questions from students, offering constructive criticism, and promoting group projects. AI frees up crucial time for educators to focus on high-impact activities like mentoring, coaching, and developing critical thinking skills by automating repetitive duties like grading and administrative work.

But there are also socioeconomic and ethical issues with AI's broad use in education. To guarantee that AI technologies help all students equally, concerns including data privacy, algorithmic bias, and digital equity must be carefully considered. Furthermore, although AI can improve instructional strategies, it cannot completely replace human interaction in the classroom. In order to be implemented effectively, AI must be used to maximise productivity while maintaining the vital components of human interaction, empathy, and creativity in the learning process. In summary, artificial intelligence (AI) has the potential to significantly improve education by tailoring lessons, streamlining instructional techniques, and stimulating creativity. However, the integration of AI into education will only be possible with careful thought and ethical planning.

Literature Review

Jafari and Keykha(2023) conducted a qualitative study examining the opportunities and challenges of artificial intelligence in higher education. The researchers discovered that AI created opportunities across eight secondary subthemes, including benefits for faculty members, students, the teaching and learning process, assessment, the development of educational structures, research structures, management structures, and academic culture. Similarly, the authors identified and categorised the challenges posed by AI in higher education.

Khawrin and Nderego's (2023) research underscores the exciting potential of AI in education while emphasising the importance of preserving creative teaching methodologies. The analysis of 2295 studies highlight the myriad opportunities AI offers for learners and educators alike. Despite acknowledging existing challenges and research gaps, the study advocates for the integration of AI with careful attention to ethical considerations and comprehensive teacher training, ensuring the realisation of AI's benefits in education.

Ruizhe *et al.*, (2023) undertook literature review on challenges of artificial intelligence (AI). The findings highlight both potential benefits and challenges, emphasising the need to consider access and ethical implications. The study used various methods to analyse data and predict future trends in AI use for education.

Villarreal *et al.* (2023) explored the challenges and opportunities of Generative AI for higher education, as explained by ChatGPT. The study identified benefits, limitations, and mitigation strategies, emphasising the need for clear policies. The study highlighted the importance of user experience research and ethnographic approaches to effectively integrate AI in education, paving the way for future research.

Ivanov (2022) studied artificial intelligence in higher education: challenges and opportunities. The paper explored the intricacies involved in incorporating artificial intelligence (AI) into higher education. It addressed the difficulties presented by ethical issues and worries about privacy and equity, as well as the potential advantages of AI in personalising learning experiences and improving student performance.

Celik *et al.*, (2022) conducted a study on promises and challenges of artificial intelligence for teachers. The study revealed a recent surge in research focusing on teachers utilisation of AI in education, suggesting that AI-based instruction was likely to become more common. Evidence supporting this trend was found, as a high proportion of studies on AI and education had been published in recent years. However, the use of AI in education was still less common than in other fields.

Akinwalere & Ventsislav (2022) found that AI in education (AIEd) had the potential to improve teaching and learning in higher education. The study explored the opportunities and challenges of AIEd, including its potential to personalise learning and improve outcomes. The

paper acknowledged potential risks and emphasised the need for discussions on responsible AI use to achieve sustainable educational development.

Kuleto *et al.*, (2021) examined a study on exploring opportunities and challenges of artificial intelligence and machine learning in higher education institutions. The study found that students in Serbia view AI and machine learning as beneficial for universities. Their study suggests AI can improve learning by personalising education, fostering collaboration, and providing easier access to research. This implies AI has the potential to significantly improve higher education.

Zhai *et al.*, (2021) undertook review on Artificial Intelligence (AI) in Education from 2010 to 2020. This study analysed research on applying AI in education from 2010 to 2020. It reviewed 100 papers and categorised AI applications in education by development, application, and integration layers. The study also identified future research trends like deep learning and challenges like teacher roles and social issues. Overall, it offers valuable insights for educators and AI researchers.

Chen *et al.*, (2020) reviewed the impact of artificial intelligence (AI) in education. AI is transforming education by automating tasks, personalising learning, and tailoring curriculum with machine learning. This can improve student engagement, knowledge retention, and overall educational quality.

Tundrea (2020) studied identified five main challenges: perception of equality, data privacy, moral agency, moral deskilling and data bias. Therefore, it is of primary importance to build AI systems with ethics in mind in order that it mitigates legitimate fears and secures new practices that are a blessing for one of the most influential institutions in society: the university.

Challenges of AI in Teaching and Learning

Integrating artificial intelligence (AI) into teaching and learning environments presents both opportunities and challenges. While AI has the potential to transform learning by personalising experiences, enabling self-regulation, and providing insight into student performance, many challenges need to be resolved to realise the full potential of AI.

One of the biggest challenges is the digital divide, where inequality in technology and resources affects the use of skills in education. Students from disadvantaged backgrounds may not have access to the equipment or internet connections necessary to benefit from AI-powered learning tools, leading to inequalities such as current education.

Another challenge is the fair use of intellectual property in education. As AI systems collect and analyse large amounts of student data, concerns arise about data privacy, algorithmic bias, and depersonalization of the learning experience. Transparency, fairness, and accountability in AI-enabled education technology are essential to building trust among students, teachers, and parents.

People are also worried that artificial intelligence will replace human teachers. AI can improve teaching by automating routine tasks, providing personalised feedback, and supporting learning transitions, but it cannot replicate the human connections and understanding necessary for teaching and good teaching. Considering the role of AI as a tool to support teachers rather than replace them requires consideration of practical and ongoing professional development.

Teachers' different digital skills should also be addressed. Many teachers lack the training and expertise needed to effectively integrate AI technology into their teaching. Providing teachers with professional development opportunities and resources to acquire digital knowledge and AI-related skills will be critical to success.

Finally, there are concerns about the long-term social impacts of academic skills, such as unemployment and the destruction of positive thinking. As AI automates tasks and provides instant feedback, students will become dependent on technology and lose their ability to think, solve problems creatively, and engage in useful discussions.

Solving these challenges will require the collaboration of policymakers, educators, technologists, and other stakeholders to clearly ensure that academic skills development is equitable, ethical, and improves learning for all students. By using the power of artificial intelligence as a role, we can create more educational, personalised and effective programs that prepare students for the challenges of the future.

Opportunities of AI in Teaching and Learning

Personalised learning: Artificial intelligence algorithms can analyse students' learning, interests, and performance data to provide personalised learning based on individual needs. This flexible learning approach encourages deeper understanding and engagement by ensuring students receive content and support based on their abilities.

Smart Tutoring System: A smart tutoring system can provide students with quick feedback, guidance and improvement as they study the curriculum. These methods can be adjusted according to the student's progress, identifying areas of difficulty and providing support to reinforce conceptual knowledge.

Augmented content creation: Artificial intelligence technology can create interactive and engaging learning content such as virtual reality experiments, augmented reality experiences and presentations of many things. These informal learning tools can improve comprehension and retention by providing a collaborative, hands-on learning experience.

Automate administrative tasks: Artificial intelligence can streamline administrative tasks such as grading, scheduling, and managing student records, freeing up teachers to focus on teaching and learning. This automation increases efficiency and allows teachers to focus more on students' needs.

Data-driven decision making: Intelligent analytics tools can analyse large amounts of educational data to identify patterns, trends and insights that inform instructional, curriculum development and policy-making strategies. Using data from insights, teachers can make better decisions to improve teaching and learning.

Accessibility and inclusion: AI technology can improve accessibility for students with different learning needs by providing alternative formats, flexibility, and translation capabilities. These accessibility features ensure that all students have equal access to education and opportunities.

Lifelong Learning and Professional Development: AI-powered adaptive learning platforms can facilitate lifelong learning and professional development by providing personalised learning experiences based on teachers' papers. needs and interests. These platforms allow teachers to keep up with new needs, learn new skills, and improve their teaching throughout their careers.

Collaboration and global learning: Artificial intelligence supports regional collaboration between students and teachers on online and virtual platforms. Classroom and shared tools. These collaborative learning spaces foster professional learning for all participants by encouraging interactive communication, peer learning, and global thinking.

Conclusion:

This review paper has illuminated the numerous obstacles and auspicious prospects that artificial intelligence brings to the field of education. AI has the enormous potential to completely transform education by automating administrative work, personalising learning experiences, and supporting adaptive instruction. However, it also faces challenges like bias, ethical concerns, and the digital divide. Nonetheless, for integration to be successful, educators, technologists, and legislators must work together, do continuing research, and give careful thought to pedagogical concepts. It is critical that we appropriately use AI to ensure fair access and create a supportive atmosphere that will enable both educators and students to succeed in the digital era as we navigate this quickly changing terrain.

References:

1. Jafari, F. and Keykha, A. (2023) "Identifying the opportunities and challenges of artificial intelligence in higher education: a qualitative study", *Journal of Applied Research in Higher Education*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JARHE-09-2023-0426>
2. Celik, I., Dindar, M., Muukkonen, H. *et al.* The Promises and Challenges of Artificial Intelligence for Teachers: a Systematic Review of Research. *TechTrends* 66, 616–630 (2022). <https://doi.org/10.1007/s11528-022-00715-y> Michel-Villarreal, R., Vilalta-Perdomo, E., Salinas-Navarro, D. E., Thierry-Aguilera, R., & Gerardou, F. S. (2023). Challenges and opportunities of generative AI for higher education as explained by ChatGPT. *Education Sciences*, 13(9), 856. <https://doi.org/10.3390/educsci13090856>

- Kuleto, V., Ilić, M., Dumangiu, M., Ranković, M., Martins, O.M.D., Păun, D., & Mihoreanu, L. (2021). Exploring opportunities and challenges of artificial intelligence and machine learning in higher education institutions. *Sustainability*, 13(18), 10424. <https://doi.org/10.3390/su131810424>
- Khawrin, M. K., & Nderego, E. (2023). Opportunities and challenges of AI towards education: A systematic literature review. *International Journal on Language Research and Education Studies*, 13(3), 266-271.
3. Zhai, X., Chu, X., Chai, C. S., Jong, M. S. Y., Istenic, A., Spector, M., Liu, J.-B., Yuan, J., & Li, Y. (2021). A review of artificial intelligence (AI) in education from 2010 to 2020. *Journal of Artificial Intelligence and Education*, Article ID 8812542. <https://doi.org/10.1155/2021/8812542>
4. Akinwalere, S. N. and Ivanov, V. (2022) “Artificial Intelligence in Higher Education: Challenges and Opportunities”, *Border Crossing*. London, UK, 12(1), pp. 1–15.
5. <https://doi.org/10.33182/bc.v12i1.2015>
6. Tundrea E. (2020) Artificial Intelligence in Higher Education: Challenges and Opportunities, *14th International Technology, Education and Development Conference*. Oradea (ROMANIA) [10.21125/inted.2020.0644](https://doi.org/10.21125/inted.2020.0644)
7. Kuleto, V., Ilić, M., Dumangiu, M., Ranković, M., Martins, O. M., Păun, D., & Mihoreanu, L. (2021). Exploring opportunities and challenges of artificial intelligence and machine learning in higher education institutions. *Sustainability*, 13(18), 10424.
8. Woolf, B. P., Lane, H. C., Chaudhri, V. K., & Kolodner, J. L. (2013). AI grand challenges for education. *AI magazine*, 34(4), 66-84.
9. Celik, I., Dindar, M., Muukkonen, H., & Järvelä, S. (2022). The promises and challenges of artificial intelligence for teachers: A systematic review of research. *TechTrends*, 66(4), 616-630.
10. Khawrin, M. K., & Nderego, E. F. (2023). Opportunities and Challenges of AI towards Education: A Systematic Literature Review. *International Journal of Education and Management Studies*, 13(3), 266-271.
11. Vargas-Murillo, A. R., de la Asunción, I. N. M., & de Jesús Guevara-Soto, F. (2023). Challenges and opportunities of AI-assisted learning: A systematic literature review on the impact of ChatGPT usage in higher education. *International Journal of Learning, Teaching and Educational Research*, 22(7), 122-135.
12. Akinwalere, S. N., & Ivanov, V. T. (2022). Artificial Intelligence in Higher Education: Challenges and Opportunities. *BORDER CROSSING*, 12(1), 1-15. [10.33182/bc.v12i1.2015](https://doi.org/10.33182/bc.v12i1.2015)
13. Challenges and Opportunities. *BORDER CROSSING*, 12(1), 1-15. [10.33182/bc.v12i1.2015](https://doi.org/10.33182/bc.v12i1.2015)

ATTITUDE OF HIGHER EDUCATION STUDENTS TOWARDS MOOCS: A LITERATURE REVIEW

Nilesh Kumar* and Anshu Narad

School of Education, Lovely Professional University, India

*Corresponding author E-mail: nilesh91045@gmail.com

Abstract:

The paper examined the attitude of higher education students towards Massive Open Online Courses (MOOCs). The paper focuses on the attitude that students in higher education have towards MOOCs, highlighting the advantages and disadvantages of these online learning environments. To help institutions improve learning experiences and adjust to digital learning trends, the study intends to shed light on the elements impacting students' opinions of MOOCs. In the current paper reviews have been taken from 2013 to 2023 years. The results indicate that although students typically have favourable opinions regarding MOOCs when they are aware of what is offered, obstacles like different course quality and little credit recognition for traditional degrees have an impact on their opinion. The consequences highlight how critical it is to solve these issues to lay a strong basis for MOOCs in higher education and influence the development of future educational paradigms that are more focused on MOOCs. Further it also emphasizes the necessity of more study and cooperation between the public and private sectors to incorporate MOOCs into conventional educational institutions successfully.

Keywords: Higher Education, MOOCs, Attitudes

Introduction:

In India, the field of education is vast and diverse. Three levels of government federal, state, and local provide money and oversight for the public and private sectors that deliver education. After the United States and China, India has the third-best higher education system globally. The University Grants Commission (UGC) is the tertiary level regulating authority. Its duties include advising the government and coordinating the enforcement of standards between federal and state entities.

The programmes of study given beyond senior secondary school that result in a degree or certification are referred to as higher education. All study curricula at the International standard classification of Education (ISCED) levels are included. Like in other nations, higher education in India consists of both university-based and non-university components. The universities are able to grant degrees and provide undergraduate and graduate-level courses. In the present time traditional teaching, or studying in a physical classroom, is becoming less and less prevalent as the sole method of instruction in the modern world (Nguyen, 2015). The early 1990s saw the establishment of online courses, and in the twenty-first century, MOOCs (Massive Open Online

Courses) revolutionized online learning. When MOOCs were first introduced in 2008 by Dave Cormier, they were only well-known abroad, in the United States, the United Kingdom, and certain Arab nations. However, the Indian government has recently started to take steps to make education flexible and accessible for all in the country.

MOOCs

Massive Open Online Courses (MOOCs), which offer new chances for learning and growth, have had a huge influence on higher education. Given that it speaks to broader trends in digital learning, accessibility, and changing student expectations in the face of technological breakthroughs, the attitude of college students towards MOOCs is an important and fascinating topic. MOOCs are free online courses in which anybody can enroll. Siemens (2013), a pioneer in MOOCs, identified three major forms based on pedagogical foundations and organizational strategies, including connectivism and 'cMOOCs', extended (or 'xMOOCs'), and quasi-MOOCs. MOOCs offer a cheap and flexible method to learn new skills, grow in your profession, and give high-quality educational experiences on a large scale. The flexibility and accessibility of MOOCs is one of their most appreciated features among students in higher education. Through MOOCs, students from all over the world can now receive famous universities' high-quality education that they might not have otherwise been able to physically attend or afford. Millions of people worldwide utilize MOOCs to learn for a number of purposes, including professional advancement, career change, college preparation, supplemental learning, lifelong learning, corporate eLearning and training, and more.

Evolution of MOOCs

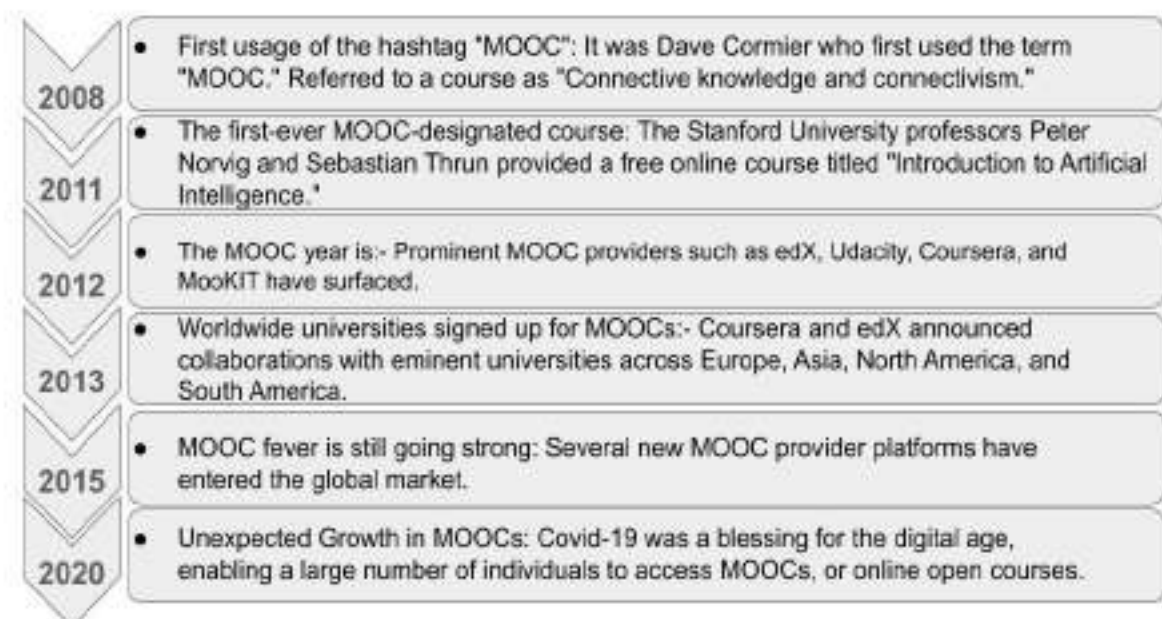


Figure 1: Evolution of MOOCs

Benefits and Features

Massive Open Online Courses (MOOCs) are online courses that provide students with unfettered access to any course they want. Aside from traditional ways of teaching such as lectures, videos, and reading materials, MOOCs also offer a platform for interactive forums.

Accessibility and flexibility: One of the main advantages of MOOCs is their accessibility. Students can access MOOCs from anywhere in the world as long as they have an internet connection. This accessibility removes geographical barriers and allows students to learn at their own speed, bringing education to a worldwide audience. MOOCs also provide students with greater freedom in terms of when and where they learn. This is especially useful for those with hectic schedules, such as working professionals, parents, or people who have other responsibilities in addition to their schooling.

Affordability: Traditional higher education may be costly, with tuition, textbooks, and living expenses piling up quickly. MOOCs, on the other hand, are frequently much cheaper. Many MOOC platforms provide free courses, and even premium choices are often less expensive than traditional schooling. This affordability makes education more accessible to students who might not have the financial resources to attend traditional institutions.

Diverse Course Offerings: MOOC platforms offer a vast array of courses on various subjects. Whether a student is interested in computer science, business, literature, or a niche topic, there is likely a MOOC available that matches their interests. This diversity allows students to explore new areas of knowledge or deepen their expertise in a specific field.

Self-paced Learning: MOOCs frequently use a self-paced learning model, which allows students to move through the course material at their own leisure. This flexibility is especially useful for those who have work or family responsibilities or want a more gradual approach to learning. Self-paced learning also accommodates diverse learning styles. Some students may absorb things quickly and want to move on, but others may require more time to process the information. MOOCs may accommodate both sorts of learners.

Learn from experts: MOOCs sometimes include courses offered by specialists, prominent professors, or industry executives. Students get the opportunity to learn from the greatest in their industry, obtaining insights and knowledge that may not be available elsewhere.

Massiveness, openness and online are some features of MOOCs known for their massive enrollment capacity, allowing for unlimited participation. Determining the number of learners required for a course to be considered large is challenging. Also MOOCs are accessible to learners regardless of location, income, or other barriers and the mode of MOOCs are purely online.

MOOC Courses

MOOCs include courses on a variety of topics, including emerging technology, business skills, and personal development, which students can utilize to boost their portfolios and advance

their careers. Around 30 thousand MOOC courses are offered on the different platforms. MOOCs are a cost-effective and flexible method to learn new skills, enhance your career, and give excellent online learning to anybody, anytime. Breslow *et al.* (2013) discovered that many students see the knowledge given in MOOCs as complimentary, boosting their grasp of subjects studied in traditional education settings. Massive Open Online Courses (MOOCs) are currently being given in India through platforms such as SWAYAM, NPTEL, Coursera, Edx and UGC MOOCs, all of which are backed by the Ministry of Education of the Indian Government. These platforms strive to provide high-quality education from prestigious schools for free, making learning available to anybody, anywhere, and at any time. Regarding certification, Lee, Watson, and Watson (2019) found varied assessments of the market worth of MOOC certificates, as well as worries about employer recognition. MOOCs are highly valued by higher education students for encouraging lifelong learning and constant skill development. In an increasingly competitive work market, the capacity to learn new skills and knowledge outside of the standard curriculum is extremely valuable. This component of MOOCs promotes a generally positive attitude, particularly among students interested in personal and professional development.

The response of higher education students towards the MOOCs is broad and nuanced. While many students embrace the accessibility, flexibility, and chances for lifelong learning that MOOCs provide, there are also worries regarding educational quality, certification worth, and the impact on established higher education institutions. As MOOCs expand and integrate into traditional educational systems, students' opinions are expected to vary, reflecting the changing dynamics of online and in-person learning experiences. Finally, understanding and correcting these attitudes is critical for educators, institutions, and stakeholders looking to use MOOCs effectively to improve higher education.

Literature Review

Yadav and Khandelwal (2023) reviewed the students' perception and attitude towards MOOCs. The review of the literature analysed described, evaluated and summarised previous studies carried out on the relevant topic. The findings show that students have a generally good attitude towards their courses. Personal relevance, educational value, and life skills are three factors that influence students' perceptions of MOOC courses: Reliability, accessibility, content.

Kumar and Nitisha (2023) studied students' attitudes towards MOOCs in higher education: an exploratory study. The study used a mixed approach to examine students' perception and motives towards MOOCs by quantitative surveys and qualitative interviews. The findings investigated students' perception towards MOOCs and the factors influencing learners in higher education towards MOOCs such as content quality, flexibility, course platform and the timing of the courses.

Panja *et al.* (2022) examined the attitude of students and teachers towards MOOCs usage for their academic and professional development: A comparative study of two case study sites.

This micro-study was carried out at two nearby national higher education institutes in India as case study locations to learn more about the attitudes of the students and faculty there. Initial research found that people can use MOOCs to achieve their academic and professional goals. The outcome showed the attitudes of all four groups were discovered to be favourable; they both displayed more optimistic attitudes towards MOOCs.

Jenifer *et al.* (2022) investigated students attitudes towards MOOCs the present study focuses on short duration courses offered in MOOCs and factors impacting MOOC selection, including the most popular course categories. According to the report, MOOCs are a significant tool for self-directed learning. MOOCs' success can be attributed to aspects such as educational quality, flexibility, study materials, video lectures, discussion forums, user experience, and collaboration with leading universities around the world. It has grown in popularity among students, increasing their satisfaction with MOOCs.

Al-Rahmi *et al.* (2021) examined integrating innovation diffusion theory with technology acceptance model: supporting students' attitude towards using Massive open online courses (MOOCs) systems. To meet the research purpose, testing data were collected from 1148 students in Malaysia who used MOOCs. The findings highlighted students' behavioural intentions towards using a massive open online courses (MOOCs) system. Using MOOCs improves students' learning performance, which helps decision makers to execute MOOCs in higher education, universities and colleges.

Altalhi (2020) conducted a study towards a model of acceptance of MOOCs in higher education: the modified UTAUT model for Saudi Arabia. The data were collected through an online survey, 169 students of Taif University in Saudi Arabia participated and structural equation modelling was used to analyse the data. The finding indicates that the academic acceptance of MOOCs remains low and the unified theory of acceptance and use of technology (UTAUT) model has a very critical role in defining intention towards MOOCs usage for students in higher education.

Tsuyoshi *et al.* (2019) conducted a study on students' perception and experience of Massive open online courses (MOOCs) in Mongolia. The study sought to investigate Mongolian students' perceptions and experiences with MOOCs, particularly the impact of access, skills, and preferences. The data were taken from a sample of 6846 respondents. According to the study's findings, students are not well-versed in MOOCs, and hence their experience with them is limited. The findings suggested that stakeholders should focus more on educating students about the benefits of educational technologies, as well as the facilitation and efficient delivery of courses.

Jesse (2019) examined students' attitudes toward use of massive open online courses. This study looked into students' perceptions about massive open online courses (MOOCs) and their desire to use them for learning. A hierarchical regression analysis revealed that gender

(females) contributed the most to the explanation of students' intention to use MOOCs in their learning process, followed by technology usage factors. Additionally, as online platforms continue to evolve, policymakers and higher education administrators should consider partnerships with industry leaders and MOOCs providers to develop innovative solutions for offering MOOCs in the workplace and in high schools.

Alanazi & Walker-Gleaves (2019) investigated student attitudes towards using hybrid MOOCs in the higher education of Saudi Arabia. This study used a mixed-method approach including survey and semi-structured interview instruments. The results show that students are enthusiastic about using hybrid MOOCs with flipped classrooms. In addition, student participants stated that hybrid MOOCs with Flipped classrooms had a high potential for assisting students in learning according to their individual talents both within and outside of the classroom.

Jayachithra (2019) studied "Students' teachers' perception and awareness on MOOCs: An exploratory study. The study focused on student teachers' opinions and awareness of MOOCs. A descriptive survey method was used in the study. A stratified random selection strategy was used to pick 160 student instructors from a college of education in Tamil Nadu. The data indicated that student teachers' awareness of MOOCs varied significantly. Thus, the study concludes that postgraduate, urban, and science student teachers are more aware of MOOCs and have a good attitude towards them than graduate, rural, and humanities student teachers.

Jalil *et al.* (2019) examined attitude and behavioural intention to develop and use MOOCs among academics. The data were collected from Malaysian public University, 238 students participated in the survey. The result showed students and academic staff's behaviour are receptive towards MOOCs as an alternative platform to deliver teaching content, they are ready to use MOOCs in their teaching learning process and there is significant relationship between attitude and behavioural intention to develop and use MOOCs.

Woon (2019) studied students' perception about learning using MOOCs. The study was conducted in the university at selangor, Malaysia. In which 87 students participated in a MOOC as offline course requirements and 66 students were randomly selected as respondents. This study shows that the platforms and contents of the MOOC have a major influence on the learning strategies and cognitive appraisal of the students. This mandates multiple options for the MOOCs platforms to accommodate learning experiences of students.

Aharony & Bar-Ilan (2016) examined students' perception on MOOCs: an exploratory study. In 2014, the study was conducted in Israel utilising quantitative and qualitative approaches, with 102 students participating in MOOCs as part of their offline course requirements. The study found that perceived utility and perceived ease of use have a significant impact on the propensity to enrol in MOOCs. The investigation revealed that students' attitudes

towards MOOCs fluctuate over time, and students have varying needs and expectations, therefore MOOC platforms should give a variety of options to meet these demands.

Gamage *et al.* (2015) undertook a literature review on effectiveness and quality aspects of MOOCs. The data were collected from past carried out research between 2012 and 2015 while focusing on MOOCs effectiveness. The finding indicates that the number of participants in MOOCs and the number of platforms offering MOOCs are increasing significantly, but the hype of MOOCs are fading and the quality is under criticism.

Joseph & Nath (2013) conducted a study in India regarding the students' attitudes towards integrating MOOCs within classrooms. They collected data through a pre and post survey. The pre-survey results revealed that 66% of students do not intend to take MOOC courses as part of their education. However, their sentiments shifted after the poll. According to the results of a post-survey, 60% of students want to enrol in MOOC courses as part of their study. Furthermore, 66% of students strongly believe that their university should implement MOOCs on college campuses.

Conclusion:

The present paper offers useful insights about the attitude of higher education students towards MOOCs. This paper highlights students' preferences and challenges MOOCs require taking into consideration. Understanding the elements influencing students' attitudes helps higher education institutions. MOOCs can enrich learning experiences and meet the changing demands of students in the digital age. MOOCs play a crucial role in education trends such as globalization, internationalization, lifelong learning, and ongoing development for diverse learners. MOOCs are still in their early stages of establishing themselves as an educational tool. The government of India recommended Higher education institutions to offer 20% of their course material through the MOOCs platform, known as Swayam, from the year 2017.

To integrate MOOCs into traditional learning paradigms and shape their future in higher education, more research and collaboration among academics, business, and government are needed. The new education policy 2020 also emphasized on integrating MOOCs in higher education in India for continuous professional enhancement. NEP 2020 also came with Academic Benefits Credits Scheme (ABC) aims to incentivize students to earn credits points by completing various online courses like MOOCs. Also, MOOCs have become a prominent trend in higher education in recent years. MOOCs offer a fresh direction for the existing education system. MOOCs stand apart from traditional educational systems due to their scale, accessibility, and online features. In reality, MOOCs are often given less weightage when compared to traditional educational courses. To establish a strong foundation for MOOCs in education and to make future education MOOCs centered, it is very important that the issues and challenges that affect MOOCs must be addressed properly.

Recommendation:

On the basis of literature review, it can be recommended that students in higher education have positive attitudes towards MOOCs whenever they get proper insight about the courses and proper credits given by the university or different educational institute. Some reviews also highlight the preference of MOOCs are fading among students due to less credit given to MOOC courses in the regular degrees. To increase the use of skill based courses and positive attitude towards MOOCs, universities should give proper credits in the regular curriculum and good insight about Massive open online courses (MOOCs).

References:

1. Sackey, D. J., Nguyen, M. T., & Grabill, J. T. (2015). Constructing learning spaces: What we can learn from studies of informal learning online. *Computers and Composition*, 35, 112-124.
2. Doe, J., Thompson, R., & Doe, S. (2021). Perception of online learning quality in higher education: A comparative study of MOOCs and traditional online courses. *Journal of Online Learning and Teaching*, 17(1), 15-28.
3. Breslow, L., Pritchard, D. E., DeBoer, J., Stump, G. S., Ho, A. D., & Seaton, D. T. (2013). Studying learning in the worldwide classroom: Research into edX's first MOOC. *Research & Practice in Assessment*, 8, 13-25.
4. Yadav R. and Khandelwal A. (2023) A study on students' perception and attitude towards Moocs.Madhya Bharti-83, ISSN 0974-0066, UGC Care List, (Multidisciplinary), <https://www.researchgate.net/publication/369626350>.
5. Panja S. K. *et al.* (2022) the attitude of students and teachers towards Mooc usage for their academic and professional development: A comparative study of two case study sites. Volume 10, Issue No. 2, May 2023, DOI: <https://doi.org/10.18543/tjhe1022023>.
6. Jesse, E. M. (2019). *Student Attitudes Toward Use of Massive Open Online Courses*. University of Dayton.
7. Alanazi, H., & Walker-Gleaves, C. (2019). Investigating student attitudes towards using hybrid MOOCs in the higher education of Saudi Arabia. *Literacy Information and Computer Education Journal (LICEJ)*, 10(1), 3140-3146.
8. Joseph, A. M., & Nath, B. A. (2013). Integration of massive open online education (MOOC) system with in-classroom interaction and assessment and accreditation: An extensive report from a pilot study. *Proceedings of the international conference on e-learning, e-business, enterprise information systems, and e-Government (EEE)* (p. 105). The Steering Committee of The World Congress in Computer Science, Computer Engineering and Applied Computing (WorldComp).

9. Aharony, N. & Bar-Ilan, J. (2016). Students' perceptions on MOOCs: An exploratory study. *Interdisciplinary Journal of e-Skills and LifeLong Learning*, 12, 145-162. Retrieved from <http://www.informingscience.org/Publications/3540>.
10. Jenifer V. et al. (2022). Investigating students' attitude towards MOOC. E-ISSN: 2708-4523, P-ISSN: 2708-4515, *AJMC* 2022; 3(2): 84-87. Retrieved from www.allcommercejournal.com.
11. Monicka, M., & Jayachithra, J. (2019). Student Teachers Perception and Awareness on Mooc: An Exploratory Study. *Adalya Journal (ISSN NO: 1301-2746) Volume, 8.*
12. You, H. (2019). Students' perception about learning using MOOC. *International Journal of Emerging Technologies in Learning (IJET)*, 14(18), 203-208. Retrieved from <https://www.learntechlib.org/p/217183/>.
13. Al-Rahmi, W. M., Yahaya, N., Alamri, M. M., Alyoussef, I. Y., Al-Rahmi, A. M., & Kamin, Y. B. (2021). Integrating innovation diffusion theory with technology acceptance model: supporting students' attitude towards using massive open online courses (MOOCs) systems. *Interactive Learning Environments*, 29(8), 1380–1392. <https://doi.org/10.1080/10494820.2019.1629599>.
14. Gamage, D., Fernando, S., & Perera, I. (2015, August). Quality of MOOCs: A review of literature on effectiveness and quality aspects. In *2015 8th international conference on Ubi-Media Computing (UMEDIA)* (pp. 224-229). IEEE.
15. Altalhi, M. (2021). Toward a model for acceptance of MOOCs in higher education: the modified UTAUT model for Saudi Arabia. *Education and Information Technologies*, 26(2), 1589-1605.
16. Ab Jalil, H., Ma'rof, A., & Omar, R. (2019). Attitude and behavioural intention to develop and use MOOCs among academics. *International Journal of Emerging Technologies in Learning (iJET)*, 14(24), 31-41.
17. Sukhbaatar, O., Choimaa, L., & Usagawa, T. (2018). Students' perception and experience of massive open online courses in Mongolia. *Creative Education*, 9(12), 1818-1828. Retrieved from DOI: [10.4236/ce.2018.912132](https://doi.org/10.4236/ce.2018.912132).
18. Kumar G. and Nitisha (2023). Students attitudes towards MOOCs in higher education: an exploratory study. Volume 10, Issue 5, (ISSN-2349-5162). Retrieved from <https://www.jetir.org/papers/JETIR2305B27>.
19. Basantia T. K. and Kumar V. (2022). Massive Open Online Courses as Alternatives to Conventional Education and Existing Distance Education, Volume 12, Issue 1. <https://orcid.org/0000-0001-6573-4740>.

THE ROLE OF SCIENTIFIC TEMPERAMENT IN FOSTERING SOCIAL HARMONY IN DEMOCRATIC SOCIETY

Suresh Kumar K. A.

Department of Botany,

Government College Chittur, Palakkad, 678 104 - Kerala, India.

Corresponding author E-mail: sureshtvmala74@gmail.com

Introduction:

In a democratic society, where diverse opinions, beliefs, and ideologies coexist, maintaining social harmony is essential for the stability and progress of the nation. Scientific temperament, characterized by rationality, critical thinking, and evidence-based reasoning, plays a crucial role in fostering understanding, tolerance, and cooperation among individuals and communities. This essay explores the significance of scientific temperament in promoting social harmony in democratic societies.

Understanding Scientific Temperament

Scientific temperament embodies a mindset that values empirical evidence, logical reasoning, and skepticism towards unsubstantiated claims. It encourages individuals to question assumptions, seek knowledge through experimentation and observation, and update their beliefs based on new evidence. At its core, scientific temperament promotes intellectual humility and openness to differing viewpoints, fostering a culture of constructive dialogue and mutual respect.

What is Democracy?

Democracy is a system of government in which power is vested in the people, who exercise it directly or through elected representatives. It is derived from the Greek words "demos, " meaning "the people, " and "kratos, " meaning "power" or "rule." In a democratic system, all eligible citizens have the opportunity to participate equally in the decision-making processes that affect their lives.

Mahatma Gandhi's perspective on democracy transcended mere institutional mechanics, delving deeply into its moral and ethical essence. His renowned quote, "I understand democracy as something that gives the weak the same chance as the strong, " encapsulates his profound conviction in the inclusive fabric of democracy. For Gandhi, democracy wasn't solely about voting rights or governance structures; it was about empowering the marginalized, ensuring their voices resonated equally alongside the powerful.

Democracy stands as a cornerstone of governance, celebrated for its multifaceted benefits. Through representation, citizens wield influence in decision-making processes, amplifying diverse perspectives and ensuring inclusivity in policy formulation. This participatory

ethos cultivates political engagement, nurturing a sense of empowerment and civic duty among the populace. Moreover, democracies safeguard individual liberties through legal frameworks, upholding the rule of law and fostering accountability. Conflict resolution occurs peacefully, underpinned by negotiation and compromise, mitigating the specter of violence. Transparency and accountability mechanisms, including regular elections and independent media, fortify democratic governance, instilling trust in leadership. Furthermore, democracy serves as a crucible for innovation and progress, fostering an environment where diverse ideas flourish. Its capacity to foster social cohesion and belonging among disparate groups bolsters stability and harmony within society. Despite facing challenges, democracy's core principles of representation, participation, and rights protection endure, forming the bedrock of a just and inclusive society.

Gandhi's vision of democracy transcended mere governance, embodying a profound moral imperative rooted in equality and compassion. He saw democracy as a vehicle for rectifying societal imbalances, providing a platform where the marginalized could confront the powerful on equal terms. For Gandhi, democracy wasn't just a political structure but a moral framework guided by truth and nonviolence, fostering dialogue and understanding over discord and coercion. His advocacy emphasized the importance of uplifting the downtrodden and recognizing the inherent dignity of every individual, regardless of their social or economic status. Gandhi's legacy reminds us that democracy's essence lies in creating a just and equitable society where every voice, especially those of the weak, is heard and respected.

Democracy stands as a cornerstone of governance, celebrated for its multifaceted benefits. Through representation, citizens wield influence in decision-making processes, amplifying diverse perspectives and ensuring inclusivity in policy formulation. This participatory ethos cultivates political engagement, nurturing a sense of empowerment and civic duty among the populace. Moreover, democracies safeguard individual liberties through legal frameworks, upholding the rule of law and fostering accountability. Conflict resolution occurs peacefully, underpinned by negotiation and compromise, mitigating the specter of violence. Transparency and accountability mechanisms, including regular elections and independent media, fortify democratic governance, instilling trust in leadership. Furthermore, democracy serves as a crucible for innovation and progress, fostering an environment where diverse ideas flourish. Its capacity to foster social cohesion and belonging among disparate groups bolsters stability and harmony within society. Despite facing challenges, democracy's core principles of representation, participation, and rights protection endure, forming the bedrock of a just and inclusive society.

Role of Scientific Temperament in Democratic Societies

Promoting critical thinking: In a democratic society, where citizens are expected to engage in informed decision-making, critical thinking skills are paramount. Scientific temperament cultivates the ability to analyze information objectively, discern fact from fiction, and evaluate the credibility of sources. This empowers individuals to make rational choices, resist manipulation by misinformation, and participate meaningfully in public discourse.

Fostering evidence-based policy: In democratic governance, policymakers are entrusted with shaping laws and policies that affect the well-being of society. A commitment to evidence-based decision-making, rooted in scientific principles, enhances the effectiveness and fairness of public policies. By prioritizing data-driven solutions over ideological agendas, scientific temperament contributes to the formulation of policies that address societal challenges while upholding principles of justice and equity.

Challenging prejudice and bias: Prejudice and bias thrive in environments where ignorance and superstition prevail. Scientific temperament encourages individuals to confront their implicit biases, question inherited beliefs, and confront uncomfortable truths. By promoting awareness of cognitive biases and encouraging introspection, it fosters empathy, understanding, and inclusivity across diverse social groups, mitigating conflicts arising from prejudice and discrimination.

Facilitating technological advancement: In an increasingly interconnected world driven by technological innovation, scientific literacy is indispensable for societal progress. Scientific temperament nurtures a culture of innovation, entrepreneurship, and lifelong learning, enabling individuals to adapt to rapid technological changes and harness the benefits of scientific discoveries for the common good. By promoting innovation ecosystems that prioritize collaboration and knowledge sharing, it drives economic development and enhances the quality of life for all citizens.

Safeguarding democratic values: Democracy is founded on the principles of freedom, equality, and respect for human rights. Scientific temperament serves as a bulwark against authoritarianism and totalitarianism by fostering a citizenry equipped with the tools to challenge authoritarian narratives, hold leaders accountable, and defend democratic institutions. By nurturing a culture of intellectual autonomy and civic engagement, it strengthens the social fabric and guards against the erosion of democratic norms and values.

Challenges and Opportunities

Despite its many benefits, cultivating scientific temperament faces several challenges in democratic societies. Misinformation, ideological polarization, and anti-intellectualism pose formidable obstacles to the promotion of rational discourse and evidence-based decision-making.

Moreover, disparities in access to education and resources exacerbate inequalities in scientific literacy, undermining efforts to foster inclusive and participatory societies.

However, there are also opportunities to nurture scientific temperament and promote social harmony. Investing in science education, promoting interdisciplinary research, and fostering collaboration between academia, government, and civil society can broaden access to scientific knowledge and empower individuals to become critical thinkers and informed citizens. Embracing diversity, equity, and inclusion in scientific institutions can also enrich the scientific community and ensure that marginalized voices are heard and valued.

Conclusion:

In conclusion, scientific temperament is indispensable for maintaining social harmony in democratic societies. By promoting critical thinking, evidence-based decision-making, and empathy, it fosters a culture of understanding, cooperation, and respect for diverse perspectives. As we confront the complex challenges of the 21st century, nurturing scientific temperament is not merely a matter of personal enrichment but a collective imperative for safeguarding democracy, promoting human flourishing, and building a more just and equitable world.

References:

1. Diamond, J. (1997). *Guns, Germs, and Steel: The Fates of Human Societies*. W.W. Norton & Company.
2. Gandhi, M. (1938). *Hind Swaraj or Indian Home Rule*. Navajivan Trust.
3. Kuhn, T. S. (1962). *The Structure of Scientific Revolutions*. University of Chicago Press.
4. Mooney, C., & Kirshenbaum, S. (2010). *Unscientific America: How Scientific Illiteracy Threatens our Future*. Basic Books.
5. National Academies of Sciences, Engineering, and Medicine. (2017). *Communicating Science Effectively: A Research Agenda*. National Academies Press.
6. National Research Council. (2016). *Science Literacy: Concepts, Contexts, and Consequences*. National Academies Press.
7. Nisbett, R. E., & Ross, L. (1980). *Human Inference: Strategies and Shortcomings of Social Judgment*. Prentice-Hall.
8. Pinker, S. (2018). *Enlightenment Now: The Case for Reason, Science, Humanism, and Progress*. Viking.
9. Popper, K. R. (2002). *The Logic of Scientific Discovery*. Routledge.
10. Sen, A. (2000). *Development as Freedom*. Anchor Books.

THE USE OF TECHNOLOGY IN CLASSROOM LEARNING

Puja Mandal* and Vishal Kumar

School of Education,

Lovely Professional University, Phagwara, Punjab, India.

*Corresponding author E-mail: puja.mandal852002@gmail.com

Abstract:

In the 21st century, role of technology in every facet of our life including education. The integration of technology in education has revolutionized teaching and learning processes, reshaping traditional classroom dynamics and offering unprecedented opportunities for both educators and learners. The role of technology in different aspects of educational process i.e., curriculum development and transaction process, assessment process, and others. So, The chapter provides a brief overview about the role of technology in providing quality education especially in curriculum development and curriculum transaction process, peer learning and self-learning process. This chapter also talk about the emphasis given on NEP 2020. This chapter finds that different technological process such as blended learning approach, flipped classroom approach, etc. and tools such as Kahoot, Google Classroom, . This chapter also finds different ways for peer learning and self- learning like social media, online meeting platforms.

Keywords: Information and Communication Technology (ICT), Online Education, MOOCs, NEP 2020

Introduction:

In the 21st century, role of technology in every facets of our life including education (Raja and Nagasubramnai, 2018, Kumar, 2022). Technology and education have been closely associated since the middle of the 1600s, when picture technology began to emerge. There has been a discernible drive over the last three decades to integrate technology into every aspect of teaching in the classroom. Several research works have indicated that the integration of technology in instructional design facilitates the development of higher order thinking abilities. A wide range of integration methodologies and concepts have been created by numerous academics to create blended learning environments. Over the past three decades, there has been a noticeable push to incorporate technology into every facet of classroom instruction. Several studies have shown that incorporating technology into instructional design promotes the growth of higher order thinking skills. To construct blended learning settings, many academics have developed a wide range of integration approaches and concepts.

When teachers employ technology in the classroom, even virtual classrooms, students take an active role in achieving the learning goals. Technology integration makes it easier to provide instruction that is specifically targeted to each student's needs while upholding a more

welcoming learning environment. Incorporating technology into class instruction has the potential to enhance student engagement to all types of learners, particularly for auditory and visual learners.

The integration of technology in education has revolutionized teaching and learning processes, reshaping traditional classroom dynamics and offering unprecedented opportunities for both educators and learners. The history of technology in education traces back to the emergence of educational technologies in the early 20th century, such as filmstrips, radio, and educational television. However, the real surge occurred with the advent of computers in the mid-20th century. In the 1970s and 1980s, computers started finding their way into educational settings, primarily as tools for programming and basic skills development. With the proliferation of personal computers in the 1990s, educational software and multimedia resources became more accessible, marking the onset of the digital age in education. The aim of this chapter is to provide a brief overview about the role of technology in providing quality education especially in curriculum development and curriculum transaction process, peer learning and self-learning process. This chapter also talk about the emphasis given on NEP 2020.

Role of Technology in Curriculum Development and Transaction Process:

Technology integration is the process of incorporating technology-based teaching techniques into the curriculum to help students gather, arrange, and present information. When technology is included into the curriculum, learning is transformed. An increasing number of studies demonstrate how incorporating technology into the curriculum enhances students' learning experiences and results. When educators embrace computers as resources for solving problems, their pedagogy is transformed from traditional way to constructivist way. Technological integration across the curriculum needs to be done effectively in ways that deepen and improve the learning experience. Even Mishra and Kohler (2006) gave a pedagogical framework to effectively integrate technology in teaching-learning process. The framework knows as Technological Pedagogical content knowledge (TPCK) that describe about the interplay among the three main content of teaching-learning process i.e., Content Knowledge, Pedagogical knowledge and technological knowledge. The effective use of technology facilitates the following four essential elements of learning: frequent interaction and feedback, group participation, active engagement, and connection to real-world experts. By incorporating cutting-edge digital creative technologies like 3D printers, approachable design software, and specific desktop machine tools into the curriculum, educators can foster students' creativity and innovation while also helping them get closer to contemporary STEM fields through a variety of means.

To successfully integrate technology into curriculum transaction procedures and encourage digital literacy among students and educators, educational institutions must invest in

infrastructure, training, and support. Teachers need to modify their methods in order to make the most of technology. They should adopt cutting-edge pedagogical strategies and make use of digital resources to improve student learning and instruction. Easy digital integrations in the classroom, such as online grading platforms, games, Power Point presentations, and homework assignments, can make a big difference in the way kids grow. When introducing a concept being taught in class, PowerPoint slideshows can be utilized to engage students. In addition to the use of graphics and bulleted information, links to movies that support the ideas presented in the PowerPoint presentation can be incorporated into the slides. Teachers can utilize educational apps like Kahoot to review information after a class or unit. To play the game, kids can create anonymous user accounts, but teachers can make and share Kahoots with one another. It is now possible for students who might normally be reluctant to participate in class to do so collectively. Instructors have the option of assigning students to play the computer game Kahoot alone or in groups on their phones. There are multiple benefits to technology that can improve any modern classroom. That being said, there will be variations in how technology is implemented and used in classrooms according to grade levels and topic areas. Younger students can create the core skills they'll need for independent study in the future by using technology. Spelling, phonemic awareness, reading, and numeracy can all be taught to kids through interactive games. For interactive games and practice pronouncing words correctly, educators and students can upload their own word lists to websites like Spelling Training. Parental practice of fundamental skills outside of the classroom is possible with these websites. Students who have finished secondary school can learn how to use technology for their college coursework and future employment. Learners who are comfortable with Google Drive and Microsoft Office acquire the skills necessary to generate and distribute documents, construct spreadsheets, and give and receive clear feedback on their completed work. Many different professions use these Google and Microsoft capabilities to organize information and promote teamwork among clients and coworkers. Teachers usually report success when they provide pupils the opportunity to use technology in the classroom. There are many benefits and drawbacks to using technology in the classroom, and not all of them are positive, in the opinion of some. While it is true that having a never-ending stream of information and entertainment available to oneself might be distracting, there are more advantages to technology use in the classroom when it is combined with established practices that are reviewed or observed. Active engagement is a crucial element of every lesson plan. Children find technology engaging because it allows them to participate, whether they are working alone or with others. Not every student learns and remembers information at the same pace or in the same way. Teachers can diversify their instruction and tailor information to the appropriate level of student learning with the help of technology. With technology, students may work at their own paces. Due to its widespread use in daily life,

technology has developed into a distinct form of literacy. Many occupations utilize Google Drive or Microsoft Office frequently for one or more of the following tasks: creating decks or slide shows for presentations, balancing budgets with spreadsheets, or emailing documents that contain important information. Encouraging kids to develop these skills prepares them for life after school. Traditional classroom instruction is unable to provide greater engagement, speedier assessments, and an instantaneous learning environment. However, this gap is filled by technology and digital learning resources. Certain technological efficiencies are beyond the reach of traditional learning methodologies. Schools and other educational institutions would be wise to make good use of smartphones and other wireless technology devices by incorporating them into the classroom, especially considering how prevalent these gadgets are becoming in society. Education is becoming more interesting to younger generations, in fact, because of the modern technology' versatility and non-intrusive character. However, it could be challenging to implement at first because conventional educators are hesitant to employ current technology and devices in the classroom and view them as distractions rather than as smart teaching aids. If we have an online calendar for the classroom that shows when classes, assignments, field trips, speaker events, exams, and semester breaks are scheduled, students will find it easier to stay organized. Instructors can quickly and easily determine whether more explanation is needed and how well their students are grasping the subject being presented by using student response technologies, such as clicker devices and cellphones. Utilizing digital learning may help cut costs, optimize resource utilization, promote sustainability, and expand the reach and influence for educators and learners. Because it saves time and permits convenient study, it also benefits the environment by using less paper for books and handouts. Technology has a major role in the modern world and all of its aspects.

Technology has brought about advancements in teaching approaches in a number of ways. From personalized learning to flipped classrooms, adaptive learning systems, and educational gaming, technology has opened up new possibilities for engaging students and improving academic outcomes. Over the last few years, technology has become an essential component of contemporary education, changing conventional teaching approaches and completely altering how teachers interact with their students and deliver lessons. Technology has enabled numerous innovations in teaching approaches, such as adaptive learning systems, flipped classrooms, personalized learning, and instructional games. With each of these developments, teaching and learning approaches have undergone a substantial transition, and educators now have more chances than ever to design dynamic, engaging, and student-centered learning environments. One of the most significant advancements in teaching methodology is the shift towards personalized learning. Personalized learning recognizes that each student has unique needs, preferences, and abilities, and seeks to tailor instruction to meet these individual

differences. Technology plays a crucial role in facilitating personalized learning by providing educators with the tools and resources they need to differentiate instruction effectively. Adaptive learning platforms, for example, use algorithms to analyze student data and provide customized learning pathways. By adjusting the pace, difficulty, and sequencing of instruction based on individual learner needs, adaptive learning systems ensure that each student receives instruction at their own level and pace. Thanks to technology improvements, the idea of the flipped classroom has gained popularity in recent years. In a flipped classroom, interactive activities, discussions, and problem-solving exercises take place during class time, with students accessing educational materials, such as books or lectures, outside of it. Because it makes it possible to create and share online information, technology is essential to the flipped classroom concept. Students can interact with course materials at their convenience by accessing online video lectures, interactive simulations, and multimedia tools. This method gives students the chance to apply their knowledge in a group-based, interactive setting, which promotes active learning and deeper engagement with the material. Some of the advantages of flipped classroom are it encourages student participation and active learning also makes it possible for more specialized guidance and assistance even encourages peer connection and group learning along with that offers chances for prompt clarification and input.

Another important development in teaching style made possible by technology is adaptive learning systems. These technologies give students individualized training and support through the use of artificial intelligence and data analytics. Adaptive learning systems examine data on learning habits and student performance to pinpoint areas of strength and weakness and provide focused treatments. For instance, the adaptive learning system can offer more practice problems or different explanations to a student who is having trouble understanding a certain idea. With this individualized approach to learning, every student is certain to get the help they require to excel academically.

Blended learning combines traditional face-to-face instruction with online learning activities and resources. In a blended learning environment, students have the flexibility to engage with course materials online, participate in virtual discussions, and collaborate with peers, while also attending in-person classes for hands-on activities, group projects, and face-to-face interactions with the instructor. It provides flexibility and accessibility for students with diverse learning needs and preferences. Integrates technology seamlessly into the learning experience. Promotes self-directed learning and digital literacy skills. Allows for a more personalized and adaptive approach to instruction.

Gamification, often known as educational gaming, has become a potent tool for improving teaching strategies and involving students in the learning process. Technology increases the interaction, motivation, and fun factor of learning by incorporating gaming

mechanics and components into educational encounters. Immersion environments are offered via educational games and simulations, allowing students to learn concepts, work through issues, and apply their knowledge in an engaging and dynamic manner. Through group projects and cooperative learning, this method fosters critical thinking, active learning, and teamwork among students. Furthermore, instructional gaming can assist kids in acquiring critical abilities like decision-making, problem-solving, and teamwork—all of which are necessary for success in the twenty-first century.

Although technology can improve teaching methods in many ways, there are certain issues and concerns that educators need to be aware of. Ensuring that all pupils have equitable access to technology and digital resources is one of the main problems. Education equity is still severely hampered by the digital divide, or the difference in access to technology between those who have it and those who do not. Furthermore, teachers must carefully plan and prepare before using technology into their lesson plans. To guarantee that teachers have the information and abilities necessary to successfully integrate technology into the classroom, professional development and training are crucial. Educators also need to think about data security and privacy concerns while collecting and analyzing student data via technology. Future developments in educational technology and pedagogical research will probably propel the further evolution and growth of technology integration into teaching approaches. New technologies that have the potential to improve teaching strategies and change the learning process include virtual reality, augmented reality, and artificial intelligence. By enabling educators to better satisfy the varied requirements of today's learners, these technologies offer the potential to create even more immersive, interactive, and individualized learning environments. Furthermore, the COVID-19 epidemic has expedited the integration of technology in education, underscoring the significance of versatile and adjustable pedagogical approaches. It is critical for educators to stay up to date on new trends and industry best practices as they continue to handle the benefits and difficulties posed by technology.

It being concluded that, technology has significantly improved teaching approaches by providing teachers with a variety of tools and techniques to engage students and raise academic performance. Technology has created new opportunities for developing dynamic, interactive, and student-centered learning environments, from customized learning to flipped classrooms, adaptive learning systems, and educational gaming. Although there are risks and issues when using technology into teaching techniques, they are outweighed by the potential advantages. Through the adoption of technology and the creative use of it, educators can produce more inclusive, productive, and engaging learning environments for their students.

Technology helps the learner for self-learning as well as peer learning:

Collaborative learning, which involves students learning from and with one another, is an effective teaching strategy that promotes sharing of knowledge, critical thinking, and teamwork. Peer learning has been transformed in the digital age by technology, which offers students cutting-edge platforms and tools for connection, cooperation, and co-creation of knowledge. Peer learning is supported by a variety of technological tools, such as social learning networks, adaptive learning platforms, online peer review systems, peer-to-peer communication tools, collaborative learning settings, and peer tutoring and mentoring programs. Peer learning has long been acknowledged as an effective teaching strategy that encourages student participation, knowledge creation, and interpersonal communication. Peer learning has historically taken place through in-person interactions in study groups, classrooms, and peer tutoring sessions. But as technology has advanced, peer learning has expanded to include a variety of online resources and platforms that let students work together, communicate, and share information.

Platforms for Online Collaboration:

Online discussion forums give students the opportunity to participate in asynchronous conversations about a range of subjects linked to their course or subject matter. Students can converse with their friends, discuss ideas, and pose questions, encouraging peer-to-peer interaction and information sharing. Social media sites give students the chance to interact with classmates, join communities or groups that interest them academically, and take part in debates and information-sharing exercises. Google Docs and other similar programs allow students to work together in real time on documents, presentations, and other projects. Documents can be edited and commented on by multiple people at once, allowing for peer review and collaborative work.

Tools for Peer-to-Peer Communication:

Learners can quickly exchange questions, ideas, and information with their peers by using instant messaging systems to communicate with them in real-time. With the use of video conferencing capabilities, students can communicate and work together in person. This opens up the possibility of online meetings, study groups, and cooperative projects. These online learning environments enable students to participate in group discussions, cooperative exercises, and peer-to-peer engagement through interactive elements like chat, polls, and breakout rooms.

Peer review systems available online:

Peer review methods offered online give students the chance to get comments and advice on their work from other students. Peer review services enable students to bring in assignments, essays, or projects for assessment by their peers, get helpful criticism, and give feedback back to their peers. As students participate in peer-to-peer assessment and improvement, this method fosters critical thinking, introspection, and collaborative learning.

Collaborative Educational Settings:

Collaborative learning settings help students collaborate in groups, solve problems, and create new knowledge. Real-time collaboration on shared activities, projects, or assignments is made possible for students by wikis, online whiteboards, and project management tools. These platforms encourage a culture of cooperation and teamwork among students by supporting group projects, idea exchanges, and group decision-making.

Programs for Peer Tutoring and Mentoring:

Programs for peer tutoring and mentorship match students with more seasoned peers who can offer support, direction, and help with their academic work. Peer tutors or mentors who provide assistance with certain subjects or themes are connected to learners through online tutoring platforms, virtual study groups, and peer mentoring programs. Peer-to-peer learning, collaboration, and support are encouraged by these programs because students gain from the experience and advice of their peers.

Social Media for Education:

Social learning networks give students the chance to interact, work together, and exchange resources with other members of online communities. Learners can participate in discussions, pose questions, and seek guidance from peers who share their interests or areas of expertise through online learning communities, forums, and specialized networks. Because they connect with other students who share their interests and exchange knowledge and experiences, these networks help learners feel a feeling of community, friendship, and cooperation.

Adaptive Educational Resources:

Learning experiences are tailored by adaptive learning platforms to each learner's requirements and preferences. These platforms create customized learning routes, adaptive quizzes, and learner-specific resources using data analytics and artificial intelligence. To encourage peer contact, cooperation, and knowledge sharing, peer learning components are incorporated into these tailored paths, such as group projects or collaborative exercises.

Technology's Advantages for Peer Learning:

Through the use of technology, students can communicate, exchange ideas, and work together on projects in virtual settings. Through encouraging active engagement and participation, technology helps students feel more in control of and accountable for their education. Peer learning experiences enhanced by technology result in better learning outcomes, such as better comprehension, recall, and application of the material covered in the course. Peer support, teamwork, and knowledge sharing are all encouraged by technology's ability to improve social contact and communication among students. Learning experiences that are specifically catered to each learner's requirements and preferences are made possible by technology, which promotes autonomy and self-directed learning. In the digital era, technology plays a critical role

in facilitating peer learning by giving students cutting-edge tools and platforms to connect, communicate, and co-create knowledge. Diverse opportunities for learners to participate in peer learning activities are provided by collaborative online platforms, peer-to-peer communication tools, online peer review systems, collaborative learning environments, peer tutoring and mentoring programs, social learning networks, and adaptive learning platforms. Through the utilization of technology-assisted peer learning, educators may establish dynamic and inclusive learning environments that equip students with the necessary skills to prosper in the current digital landscape.

Technology in education as per NEP 2020:

Recently adopted national education policy (NEP) 2020 also gives emphasis on use of technology in education and for within this policy one specific section about the technology integration. NEP (2020) have some specific visions about use of technology for access, equity and quality education for all. The visions are

- Initiatives like digital repositories and online courses, research funding, better student services, credit-based acknowledgment of MOOCs, etc., Measures will be implemented to guarantee that remote learning is on par with the best in-person programs.
- A thorough set of suggestions for boosting online education in response to the recent surge in pandemics and epidemics has been covered. The goal is to assure preparation with high-quality alternative forms of education whenever and wherever traditional modes of education are not feasible.
- To handle the e-education needs of both school and higher education, the HRD ministry will establish a specialized unit with the aim of coordinating the creation of digital infrastructure, digital content, and capacity building.”

Additionally, the NEP urges widespread use of digital technologies for language instruction and learning, as well as for Promote the study of languages. Making picture books, audio books, and video stories on a big scale by educators using FOSS apps can help make language learning more common. As part of college, university and school teachers’ in-service continuous professional development, the NEP recommends significant use of technological platforms like SWAYAM and DIKSHA for online training. It suggests that opportunities for teachers to grow should be ongoing, including learning about new developments in their field.

For effective use and integration of technology in Indian education system, NEP 2020 recommended about to establish a National educational technology forum (NETF) an autonomous platform for the free exchange of ideas on the use of technology to enhance learning, assessment, planning, administration, and so on, both for school and higher education.

Conclusion:

The integration of ICT into the curriculum is a positive move because it has been shown to have a substantial impact on raising educational standards. Participants in if schools are to succeed in the future, they must gain ICT knowledge, skills, and awareness. As a developing nation, India will need its citizens to have a high degree of ICT proficiency in the future if it hopes to advance technologically and compete globally.

All subjects are supported by computers, and communication networks give students searching access to a wealth of knowledge. It also helps with a host of other more general educational goals, such as communication skills, group collaboration, and autonomous learning. This paper makes the case that in order for teachers to effectively incorporate and integrate ICT into teaching and learning process as per the TPACK framework, they must comprehend the relationship between a variety of ICT resources and the concepts, procedures, and skills in their subject; choose appropriate ICT resources using their subject-matter expertise; gain confidence using a variety of ICT resources; and know how to organize and plan lessons where ICT is used in ways that will push students' understanding and encourage deeper thinking and reflection. Technology also helps in terms of peer learning and self- learning. With the use of different technological apps and process such as Google classroom, Google Docs, wikis, online whiteboards, and project management tools, provide a better scope of peer learnings and self-learning.

In light of the national education policy (2020) technology can facilitate collaborative learning, increase educational access with help of different online and MOOC course, and boost students' motivation and engagement. To sum up, the National Education Policy (NEP) 2020 acknowledges that role of technology is very much important to enhance the quality of education.

References:

1. Raja, R. & Nagasubramani, P.C. (2018). Impact of modern technology in Education. *Journal of Applied and Advanced Research*, 2018 (3), 533-535.
2. Alam, A. (2023, March). Leveraging the power of ‘modeling and computer simulation ‘for education: an exploration of its potential for improved learning outcomes and enhanced student engagement. In 2023 International Conference on Device Intelligence, Computing and Communication Technologies, (DICCT) (pp. 445-450). IEEE.
3. Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275-285.
4. Arora, C., & Chander, S. (2020). Integrating technology into classroom learning. *Indian Journal of Educational Technology*, 2(1), 84-105.

5. Rambe, P., & Bere, A. (2013). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African university of technology. *British Journal of Educational Technology*, 44(4), 544-561.
6. Warschauer, M., & Matuchniak, T. (2010). New technology and digital worlds: Analyzing evidence of equity in access, use, and outcomes. *Review of research in education*, 34(1), 179-225.
7. Beldarrain, Y. (2006). Distance education trends: Integrating new technologies to foster student interaction and collaboration. *Distance education*, 27(2), 139-153.
8. Bonk, C. J., & Khoo, E. (2014). Adding some TEC-VARIETY: 100+ activities for motivating and retaining learner's online (pp. 1-368). OpenWorldBooks. Com and Amazon Create Space.
9. Easterlin, R. A. (2009). *Growth triumphant: The twenty-first century in historical perspective*. University of Michigan Press.
10. Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., & Rumble, M. (2012). Defining twenty-first century skills. *Assessment and teaching of 21st century skills*, 17-66.
11. Bates, T. (2008). Transforming distance education through new technologies. *International handbook of distance education*, 217-236.
12. Gunawardena, C. N., & McIsaac, M. S. (2013). Distance education. In *Handbook of research on educational communications and technology* (pp. 361-401). Routledge.
13. Mani, S. (2014). Emergence of India as the world leader in computer and information services. *Economic and Political Weekly*, 51-61.
14. Fatima, I. (2023). Role of Teachers to impart quality education for equitable learning. *Shodh Sari-An International Multidisciplinary Journal*, 2(3), 462-471.
15. Dhokare, C. S., & Gaikwad, A. " Transforming Higher Education: Exploring the Impact of NEP 2020 Implementation in India.
16. Booth, K. (1991). Security in anarchy: Utopian realism in theory and practice. *International Affairs* (Royal Institute of International Affairs 1944), 527-545.
17. Horn, M. B., & Staker, H. (2017). *Blended: Using disruptive innovation to improve schools*. John Wiley & Sons.
18. Singh, I. (2021). Role of Modern Technology in Education: An Overview of Indian National Education Policy 2020. *Multidisciplinary Issues in Social Science Research*, 101-120.
19. Disale, M. S. Role of Technology in NEP 2019 for Improving Teaching, Learning and Evaluation.

REVIEWING THE LATEST CHANGE IN CONSTITUTION OF INDIA – (ONE HUNDRED AND FIFTH AMENDMENT) ACT, 2021

Sakshi Sahni*¹, Rawal Singh Aulakh², Ritu Raj Kaur¹,

Gursharan Kaur¹ and Ravi Inder Singh¹

¹GRD School of Planning, GNDU, Amritsar

²Department of Architecture, GNDU, Amritsar

*Corresponding author E-mail: sakshisahni2000@gmail.com

Abstract:

The constitution refers to the supreme law of the land. The Indian Constitution having about 448 articles is divided into 25 parts, 12 schedules. And 104 amendments. This article will discuss about the Constitution (One Hundred and Fifth Amendment) Act, 2021. The amendment explains that the state can keep and maintain the “state list” of OBCs. This amendment defined the social and economically backward classes for which special provision were made. The data collected for reviewing the article is all secondary data based on various websites, newspapers, research articles. The paper is an explanatory kind of research for understanding the 105 Constitution Amendment Act.

Introduction of Constitution:

The term 'Constitution' is of French origin and is commonly used to refer to rules and regulations. Any country's Constitution is the supreme law of the land, with higher power and sanctity. It not only outlines the fundamentals ideals of the state, government structures and procedures, and people's fundamental rights, but it also projects a path of growth and progress for a nation¹. The Indian Constitution now has 448 articles in 25 parts, 12 schedules, and 104 amendments; in 1949, it only had 395 articles in 22 parts. The Indian Constitution establishes a framework for political, economic, and social democracy. It emphasises the Indian people's commitment to declaring, guaranteeing, and accomplishing diverse national goals in peaceful and democratic methods. It is more than just a legal document; it is a vehicle that guides the nation towards realising the people's hopes and aspirations by adjusting and adapting to changing requirements and realities of the times².

¹64128ad9-d1bb-4477-9310-da1bfc3906d5.pdf (loksabhadocs.nic.in)

² Ibid

Defining OBCs in India

The Indian government uses the term "Other Backward Class" (OBC) to refer to castes that are socially or educationally behind. It is among the official categories of India's population, along with Scheduled Castes (SCs and STs), General Castes, and Scheduled Tribes.

The Indian government is required by Article 340 of the Constitution to assist the Other Backward Classes (OBC)³. The Mandal Commission was established to reserve 27% of government jobs for Other Backward Classes (OBCs)⁴.

The Constitution (One Hundred and Fifth Amendment) Act, 2021

The Constitution (One Hundred and Fifth Amendment) Act, 2021 is intended to explain that the states can keep and maintain the "state list" of OBCs. After getting the approval of then-President Ramnath Kovind, the 105th Amendment to the Indian Constitution was notified on August 19, 2021. The 105th Constitutional Amendment Act seeks to empower governments to designate socially and educationally disadvantaged groups. The 105th Amendment to the Indian Constitution was necessary to address the impact of a Supreme Court judgement that States had lost their jurisdiction to include or omit groups from the 'Backward Classes' list after Parliament enacted the 102nd Amendment to the Indian Constitution.⁵

The Constitution (One Hundred and Fifth Amendments) Act, popularly known as the 105 Amendment to the Indian Constitution, 2021, restored the right of state governments to define SEBCs, or Socially and Educationally Backward Classes. SEBCs are community classes, such as OBCs (Other Backward Classes), for which the Indian state may make special provisions or take affirmative action. On August 18, 2021, the President of India signed the 105th Amendment to the Indian Constitution into law⁶.

Key Highlights of the Amendment

- The 127th constitutional Amendment Bill included the 105th Amendment Act.
- The National Commission for Backward Classes (NCBC) obtained constitutional status in 2018 through the 102nd Amendment Act, which specified that the President and Central Government shall maintain the list of Backward Classes, which states lost the right to keep⁷.

³ https://www.jstor.org/stable/pdf/4398478.pdf?refreqid=fastly-default%3Af51a2db46ba5e5ec2c875bccd759d181&ab_segments=&origin=&initiator=&acceptTC=1

⁴ Ibid

⁵ 105th Amendment of Indian Constitution- 105 Constitutional Amendment Act (adda247.com)

⁶ 105 Amendment of Indian Constitution - Act, Impact, Significance (byjusexamprep.com)

⁷ The 105th Amendment of Indian Constitution (finology.in)

- The Maharashtra government gave 16% quota to the Maratha Quota in 2019, however the court overturned this decision for two reasons: first, it exceeded the reservation ceiling imposed in the famous Indira Sawhney case. The second reason mentioned by the Supreme Court was that the ability to offer OBC reservation was taken away by the state under the 102nd amendment⁸.
- The 105th amendment was then ratified, reinstating the jurisdiction of the state government to recognise Socially and Economically Backward Classes.
- The 102nd Amendment introduced Article 338 B and Article 342 A, where Article 338B granted NCBC constitutional legitimacy and Article 342A granted the Central Government the authority to maintain the OBC list.
- The 105th Amendment included Article 366 (26C), which designated the Socially and Educationally Backward Classes (SEBC)⁹.

Article 366 (26C)

Article 366 (26C) defines “socially and educationally backward classes” meaning such backward classes as are so deemed under article 342A for the purposes of the Central Government or the State or Union Territory, as the case may be.¹⁰

The Parliamentary Privileges

The parliamentary privileges of both Houses of Parliament, as well as its members and committees, are defined in Article 105 of the Indian Constitution. The Constitution bestows specific rights and immunities on each member of the House and each committee established by it, such that Parliament can do out its duties appropriately. Furthermore, the text of Article 105 is identical to that of Article 194, with the only variation being that the phrase "Parliament" is used in Article 105, whilst "legislature of a State" is used in Article 194¹¹.

The 127th Amendment Bill, 2021

The 127th Amendment Bill, 2021, seeks to reinstate state governments' ability to establish additional socially and economically backward classes. The Supreme Court interpretation in May 2021 took away the power of the states. Articles 15(4), 15(5), and 16(4) of the Indian Constitution empower states to define and proclaim a list of socially and educationally backward castes. As a matter of practise, the Centre and each state create different OBC lists. In May 2021,

⁸ Ibid

⁹ Ibid

¹⁰ 105th-constitutional-amendment-act-398950.pdf (livelaw.in)

¹¹ Lama Kang et al. (Analysing Article 105 of Indian Constitution). Journal on Contemporary Issues of Law.vol. 7, issue 3. p12

the Supreme Court issued the order that only the Central government was authorised to do such identification¹². The Supreme Court affirmed the 102nd Constitutional Amendment Act, which placed Articles 338B and 342 A (with two clauses) after Article 342. It said that the President of India, in collaboration with governors, would identify socially and economically backward groups, removing state governments' ability to do so. Article 338B outlines the structure, responsibilities, and powers of the National Commission for Backward Classes. According to Article 342A, the president, in collaboration with the governor, would identify the socially and educationally disadvantaged groups. The amendment restores state governments' authority to keep a state list of OBCs¹³.

Conclusion:

The act restored state governments' jurisdiction to notify socially and educationally disadvantaged populations. For many years, people have discussed the constitutional reserve provision. Even after many years of independence, we continue to work towards providing equal rights for all members of our community and removing prejudice and discrimination via reservation¹⁴. Therefore, the above amendment is an important landmark for SEBC.

¹² 127th Constitution Amendment Bill (iastoppers.com)

¹³ Ibid

¹⁴ The 105th Amendment of Indian Constitution (finology.in)

THE ROLE OF LITERATURE IN SOCIETY

P. Prasantham

Department of English, Aditya Institute of Technology and Management, SKLM

Corresponding author E-mail: prasantham3455@gmail.com

Abstract:

The role of literature in society is a subject of profound significance, encapsulating a diverse array of functions and influences that collectively shape the fabric of human civilization. This paper delves into the multifaceted nature of literature's impact on individuals, communities, and cultures, elucidating its pivotal role in fostering empathy, preserving cultural heritage, stimulating critical reflection, and inspiring social change. At its essence, literature serves as a powerful mirror reflecting the complexities of human experience. Through narratives, characters, and themes, literature captures the nuances of emotions, struggles, and triumphs, offering readers a window into the rich tapestry of the human condition. Moreover, literature functions as a conduit for cultural transmission, preserving the collective wisdom, values, and traditions of societies across generations. By engaging with literary works, individuals connect with their cultural heritage, fostering a sense of identity and belonging within communities.

Keywords: Empathy, Cultural Heritage, Critical Reflection, Social Change, Wisdom

Reflection of Human Experience

Literature's profound ability to serve as a mirror reflecting the intricacies of human experience is a testament to its enduring relevance and impact on individuals and societies alike. At the heart of this capacity lies the intricate interplay between narratives, characters, settings, and themes, which collectively offer profound insights into the diverse spectrum of human existence.

Characters within literary works embody the complexities of human nature, serving as conduits through which readers can explore the depths of emotions, motivations, and relationships. From tragic heroes grappling with existential angst to ordinary individuals navigating the complexities of everyday life, characters serve as mirrors reflecting the multifaceted nature of human identity and experience. By embodying diverse perspectives and lived realities, characters invite readers to empathize, relate, and introspect, fostering a deeper understanding of the human condition.

Similarly, settings within literature play a pivotal role in contextualizing human experiences and shaping narrative dynamics. Whether depicting bustling urban landscapes, idyllic rural settings, or otherworldly realms, settings serve as backdrops against which human dramas unfold. Through vivid descriptions and sensory details, literature transports readers to immersive worlds, inviting them to experience the sights, sounds, and textures of different environments. In doing so, literature not only provides a sense of place but also illuminates the

ways in which geographical, historical, and cultural contexts influence human behavior and relationships.

Narratives, the threads that weave together characters, settings, and themes, serve as vehicles for storytelling, enabling authors to craft compelling narratives that resonate with readers on emotional, intellectual, and philosophical levels. From epic sagas spanning generations to intimate character studies exploring individual psyches, narratives offer diverse perspectives on the human experience. Through plot twists, character arcs, and thematic motifs, narratives engage readers in a journey of discovery, prompting them to reflect on their own lives, values, and beliefs.

Furthermore, literature's exploration of emotions, struggles, triumphs, and moral dilemmas serves as a testament to the universal aspects of the human condition. Across cultures, languages, and time periods, literature has served as a repository of shared human experiences, offering solace, inspiration, and catharsis to readers navigating the complexities of existence. Whether grappling with themes of love, loss, redemption, or identity, literature provides a lens through which individuals can make sense of their own experiences and find meaning in the midst of uncertainty.

Literature's role as a mirror of human experience is characterized by its nuanced portrayal of characters, settings, narratives, and themes. By offering insights into the diversity of human perspectives and the universal aspects of the human condition, literature invites readers to engage with the complexities of existence, fostering empathy, introspection, and a deeper appreciation for the rich tapestry of human life.

Cultural Preservation and Transmission

Literature serves as a vessel that carries the essence of a society from one generation to another, safeguarding its cultural heritage, values, and traditions. From the epic poems of ancient civilizations to the modern-day novels exploring contemporary issues, literature encapsulates the collective experiences, beliefs, and aspirations of humanity. At the heart of this transmission lies the rich tapestry of folk tales, myths, and epics, which have been passed down orally and through written texts, weaving together the intricate fabric of cultural identity and collective memory.

Folk tales, with their timeless narratives and moral lessons, serve as windows into the values and beliefs of a bygone era. Through the retelling of these stories, often infused with elements of magic and symbolism, communities pass down their wisdom and cultural ethos to successive generations. Whether it's the cautionary tales of the Brothers Grimm or the fables of Aesop, these stories transcend the boundaries of time and geography, resonating with audiences across cultures and ages.

Similarly, myths and legends offer glimpses into the spiritual and cosmological beliefs of different societies. From the creation myths of ancient civilizations to the heroic exploits of legendary figures, myths provide a framework for understanding the origins of the world and

humanity's place within it. These narratives not only shape cultural identities but also foster a sense of interconnectedness with the natural world and the divine. Whether it's the Greek myths of gods and heroes or the Norse sagas of gods and giants, these stories continue to captivate the imagination and inspire artistic expression.

Epics, with their grand scope and epic heroes, embody the collective aspirations and struggles of a people. From the Homeric epics of ancient Greece to the Indian epics of the Ramayana and Mahabharata, these monumental works of literature depict the triumphs and tribulations of human existence on a mythic scale. Through their epic journeys and moral dilemmas, these narratives impart timeless lessons about courage, honor, and the pursuit of justice. Moreover, epics often serve as foundational texts for entire cultures, shaping their language, literature, and social institutions.

The preservation and transmission of cultural heritage through literature are not merely acts of nostalgia but vital processes for maintaining cultural continuity and resilience. In an increasingly interconnected world, where traditional customs and languages face the pressures of globalization, literature serves as a bulwark against cultural homogenization and assimilation. By preserving the stories, languages, and customs of their ancestors, communities reaffirm their unique identities and assert their right to self-determination. Furthermore, literature fosters empathy and understanding by exposing readers to diverse perspectives and experiences. Through the exploration of different cultures and historical periods, readers gain insights into the common humanity that unites us all, transcending barriers of time, space, and ideology. In this way, literature becomes a bridge that connects past, present, and future, enriching our lives and expanding our horizons.

Literature's role in preserving and transmitting cultural heritage is indispensable to the preservation of human civilization itself. Through folk tales, myths, epics, and other forms of storytelling, literature captures the essence of a society and passes it on to future generations, ensuring that our collective memory endures and our cultural identities thrive. As guardians of this literary legacy, we have a responsibility to cherish and protect it, recognizing its power to inspire, enlighten, and unite us in our shared journey through time.

Exploration of Social Issues and Themes

Literature has long served as a powerful tool for exploring and critiquing the myriad social issues that shape our world. From the injustices of inequality to the insidious nature of prejudice and political oppression, writers harness the transformative power of storytelling to shed light on pressing societal concerns. Through vivid characters, compelling narratives, and thought-provoking themes, literature confronts readers with uncomfortable truths, challenges prevailing norms, and inspires collective action for positive change.

Injustice takes many forms, whether it's economic inequality, racial discrimination, or gender-based violence. Literature serves as a mirror that reflects the harsh realities of

marginalized communities, exposing the systemic barriers they face and the human cost of social inequities. Through the experiences of fictional characters, readers confront the injustices of the world and are compelled to confront their own complicity or apathy. Whether it's the depiction of poverty in Dickens' "Oliver Twist" or the racial prejudice in Harper Lee's "To Kill a Mockingbird," literature prompts readers to question the status quo and advocate for a more just and equitable society.

Similarly, literature confronts the pervasive influence of prejudice and stereotypes, challenging readers to examine their own biases and assumptions. By humanizing marginalized groups and giving voice to their experiences, writers dismantle stereotypes and foster empathy and understanding. Whether it's the exploration of LGBTQ+ issues in novels like "Giovanni's Room" by James Baldwin or the portrayal of immigrant struggles in "The Joy Luck Club" by Amy Tan, literature celebrates the richness of diversity and underscores the importance of inclusivity and acceptance. Political oppression is another recurring theme in literature, as writers grapple with the abuse of power and the erosion of democratic values. Through dystopian fiction, allegorical narratives, and historical novels, literature warns of the dangers of authoritarianism and the fragility of civil liberties. By depicting the consequences of unchecked tyranny, writers inspire readers to safeguard their freedoms and resist oppression in all its forms. Whether it's George Orwell's "1984," Aldous Huxley's "Brave New World," or Margaret Atwood's "The Handmaid's Tale," literature serves as a cautionary tale, urging vigilance in the face of encroaching authoritarianism.

Moreover, literature fosters dialogue and critical thinking by engaging readers in complex moral and ethical dilemmas. Through the exploration of conflicting perspectives and ethical quandaries, writers challenge readers to question their own beliefs and values. By grappling with difficult issues such as euthanasia in "The Fault in Our Stars" by John Green or environmental degradation in "Silent Spring" by Rachel Carson, literature encourages readers to reflect on the consequences of their actions and consider alternative paths forward.

Literature's exploration of social issues and themes is essential for fostering empathy, raising awareness, and inspiring action on pressing societal concerns. By confronting readers with uncomfortable truths and challenging prevailing norms, literature serves as a catalyst for social change and collective empowerment. As readers, we have a responsibility to engage critically with the issues presented in literature and to advocate for a more just, equitable, and compassionate world. Through the transformative power of storytelling, literature has the potential to shape hearts and minds, igniting the flame of social justice and illuminating the path towards a brighter future for all.

Empathy and Understanding

Literature stands as a timeless conduit for fostering empathy and understanding among its readers. Its unique ability to transport individuals into the lives and minds of characters from

diverse backgrounds and experiences facilitates a profound connection that transcends boundaries of time, space, and circumstance. By immersing themselves in the narratives of others, readers undergo a transformative journey of empathetic engagement, gaining insight into the complexities of human relationships and social dynamics.

At the heart of literature's capacity to cultivate empathy lies its portrayal of diverse perspectives and lived experiences. Through the lens of storytelling, authors illuminate the multifaceted nature of human existence, presenting characters who grapple with a myriad of challenges, triumphs, and contradictions. Whether it's the struggles of a young immigrant navigating a new culture in "The Namesake" by Jhumpa Lahiri or the existential crises of an aging protagonist in "The Catcher in the Rye" by J.D. Salinger, literature invites readers to inhabit the inner worlds of its characters, bridging the gap between their own lived experiences and those of others.

By inhabiting the perspectives of characters from diverse backgrounds, readers develop a heightened sense of empathy and compassion towards individuals whose lives may differ vastly from their own. Through empathetic identification with fictional protagonists, readers come to recognize the universal emotions and desires that unite humanity, transcending cultural, social, and ideological divides. Whether it's the exploration of race and identity in "To Kill a Mockingbird" by Harper Lee or the examination of class and privilege in "The Great Gatsby" by F. Scott Fitzgerald, literature fosters empathy by inviting readers to see the world through the eyes of others, fostering a deeper appreciation for the richness and diversity of human experience.

Moreover, literature serves as a mirror that reflects the complexities of human relationships and social dynamics, prompting readers to reflect on their own interactions and behaviors. By witnessing the triumphs and tribulations of fictional characters, readers gain insight into the intricacies of interpersonal communication, empathy, and conflict resolution. Whether it's the exploration of family dynamics in "Little Women" by Louisa May Alcott or the examination of friendship and betrayal in "The Kite Runner" by Khaled Hosseini, literature provides readers with a lens through which to examine their own relationships and cultivate greater empathy and understanding towards others.

In addition to fostering empathy towards individual characters, literature also cultivates empathy towards broader social issues and injustices. By shining a light on the struggles of marginalized communities and giving voice to the voiceless, literature inspires readers to confront systemic inequalities and advocate for social change. Whether it's the exploration of gender inequality in "The Color Purple" by Alice Walker or the portrayal of racial injustice in "Beloved" by Toni Morrison, literature serves as a catalyst for empathy-driven action, empowering readers to challenge injustice and work towards a more equitable society.

Literature's role in fostering empathy and understanding is indispensable to the fabric of human society. By inviting readers to inhabit the perspectives of characters from diverse backgrounds and experiences, literature cultivates a deeper appreciation for the complexities of human existence and the richness of human diversity. Through empathetic engagement with fictional worlds, readers develop greater sensitivity to the struggles, triumphs, and contradictions of others, inspiring compassion, empathy, and action in the pursuit of a more just and compassionate world.

Catalyst for Social Change

Literature stands as a potent catalyst for social change, wielding the power of words to challenge entrenched injustices, dismantle oppressive systems, and advocate for a more just and equitable society. Throughout history, writers have fearlessly used their pens as weapons of resistance, addressing pressing issues such as slavery, women's rights, environmental degradation, and LGBTQ+ rights, igniting movements for social reform and activism.

At its core, literature serves as a mirror that reflects the realities of the world, exposing the injustices and inequalities that permeate society. By shining a light on the lived experiences of marginalized communities and giving voice to their struggles, literature compels readers to confront uncomfortable truths and question the status quo. Whether it's the searing indictment of slavery in Harriet Beecher Stowe's "Uncle Tom's Cabin" or the exploration of racial injustice in Toni Morrison's "The Bluest Eye," literature serves as a rallying cry for social change, inspiring readers to take action against injustice.

Moreover, literature challenges prevailing norms and values, urging readers to reevaluate their assumptions and beliefs. By presenting alternative perspectives and challenging dominant narratives, literature fosters critical thinking and encourages readers to question ingrained prejudices and biases. Whether it's the subversion of gender roles in Virginia Woolf's "Orlando" or the critique of consumer culture in Aldous Huxley's "Brave New World," literature pushes boundaries and expands the collective imagination, paving the way for new ideas and perspectives to emerge.

Writers have historically used their platforms to advocate for marginalized communities and amplify their voices. Through the power of storytelling, authors create empathetic connections between readers and characters from diverse backgrounds, fostering a sense of solidarity and empathy. By humanizing the struggles of marginalized groups, literature inspires readers to confront their own privilege and work towards a more inclusive and equitable society. Whether it's the depiction of women's rights in Margaret Atwood's "The Handmaid's Tale" or the exploration of LGBTQ+ issues in James Baldwin's "Giovanni's Room," literature serves as a catalyst for empathy-driven activism, galvanizing readers to stand up against oppression and discrimination.

Furthermore, literature has the ability to spark movements for social reform and activism. By articulating the aspirations and grievances of marginalized communities, writers mobilize public sentiment and galvanize collective action. Whether it's the abolitionist literature of Frederick Douglass and Harriet Jacobs or the feminist writings of Mary Wollstonecraft and Simone de Beauvoir, literature has played a central role in driving social change and advancing the cause of justice and equality.

Literature's power to inspire social change is unparalleled, as writers harness the transformative potential of storytelling to challenge prevailing norms, advocate for justice and equality, and spark movements for social reform and activism. By giving voice to the marginalized and shining a light on the injustices that permeate society, literature empowers readers to confront their own complicity, challenge systemic inequalities, and work towards a more just and equitable world. As guardians of this literary legacy, we have a responsibility to heed the call to action embedded within the pages of our favorite books and to strive for a future where justice, equality, and compassion reign supreme.

Formation of Cultural Identity

Literature stands as a cornerstone in the construction of cultural identity, wielding the power to shape how individuals and communities perceive themselves and their place in the world. From national epics to regional folklore and the voices of marginalized communities, literature weaves a tapestry of narratives that contribute to the mosaic of cultural identities within a society, fostering a sense of belonging, pride, and shared heritage.

National literature serves as a reflection of a country's collective consciousness, capturing the essence of its history, values, and aspirations. Through iconic works of literature, nations articulate their unique cultural identities and assert their place in the global landscape. Whether it's the exploration of American identity in Mark Twain's "Adventures of Huckleberry Finn" or the celebration of Indian culture in Rabindranath Tagore's "Gitanjali," national literature embodies the spirit of a people, shaping how they perceive themselves and are perceived by others.

Regional literature, on the other hand, celebrates the diverse cultural tapestry within a nation, giving voice to the nuances and complexities of local identity. From the rich traditions of Southern literature in the United States to the vibrant literary landscapes of Latin America, regional literature captures the unique flavors, dialects, and customs that define a particular geographic area. Through the works of regional writers, communities affirm their distinctiveness and forge connections with others who share similar experiences and values.

Moreover, literature serves as a platform for marginalized voices to reclaim their stories and assert their cultural identities. From indigenous literature that celebrates ancestral wisdom and traditions to immigrant literature that explores the complexities of cultural assimilation and identity, marginalized voices challenge dominant narratives and expand the boundaries of

representation. Through their stories, writers from marginalized communities affirm their humanity, resilience, and right to self-determination, contributing to a more inclusive and diverse literary landscape.

Literature not only reflects cultural identity but also actively shapes it, influencing how individuals perceive themselves and others. Through the identification with fictional characters and the exploration of different cultural perspectives, readers develop a deeper understanding and appreciation of the complexities of human experience. Whether it's the celebration of African American culture in Zora Neale Hurston's "Their Eyes Were Watching God" or the exploration of immigrant identity in Jhumpa Lahiri's "The Interpreter of Maladies, " literature fosters empathy, connection, and solidarity across cultural divides.

Furthermore, literature serves as a reservoir of collective memory, preserving the stories, traditions, and values that bind communities together across generations. From oral folk tales passed down through the ages to canonical works of literature that have stood the test of time, literature ensures that cultural identity endures amidst the currents of change. By engaging with their cultural heritage through literature, individuals forge a deeper connection to their roots and find a sense of continuity and belonging in an ever-changing world.

Literature's role in the formation of cultural identity is profound and multifaceted, shaping how individuals and communities perceive themselves and others. From national epics to regional folklore and the voices of marginalized communities, literature celebrates the rich diversity of human experience and fosters a sense of belonging, pride, and shared heritage. As guardians of this cultural legacy, we have a responsibility to cherish and celebrate the diverse voices and narratives that contribute to the vibrant mosaic of cultural identities within our society.

Education and Intellectual Development

Literature stands as a cornerstone of education and intellectual development, enriching the minds of readers by exposing them to a vast array of literary traditions, genres, and styles. From the epic poems of antiquity to the contemporary works of fiction, literature serves as a gateway to different cultures, perspectives, and modes of expression. Through the process of literary analysis and interpretation, readers not only deepen their understanding of the texts they encounter but also cultivate critical thinking skills, linguistic proficiency, and an appreciation for aesthetic expression.

At the heart of literature's role in education lies its ability to spark curiosity and ignite imagination. By immersing readers in the worlds of fiction, poetry, and drama, literature invites them to explore new ideas, grapple with complex themes, and engage with the human condition in all its myriad facets. Whether it's the exploration of existential angst in Albert Camus' "The Stranger" or the examination of social injustice in Charles Dickens' "Great Expectations, "

literature challenges readers to confront uncomfortable truths and expand their intellectual horizons.

Literature also serves as a vehicle for linguistic development, enhancing readers' vocabulary, grammar, and linguistic fluency. Through exposure to a diverse range of writing styles and literary techniques, readers sharpen their language skills and deepen their appreciation for the nuances of language. Whether it's the lyrical prose of Virginia Woolf or the sparse, Hemingwayesque dialogue of Ernest Hemingway, literature offers a rich tapestry of linguistic diversity for readers to explore and emulate.

Moreover, literature fosters critical thinking skills by encouraging readers to analyze, evaluate, and interpret texts from multiple perspectives. Through close reading and textual analysis, readers learn to identify themes, motifs, and symbols, uncovering deeper layers of meaning within the text. Literature also challenges readers to interrogate their own assumptions and biases, prompting them to consider alternative interpretations and viewpoints. Whether it's the exploration of unreliable narration in Vladimir Nabokov's "Lolita" or the examination of intertextuality in James Joyce's "Ulysses," literature cultivates a spirit of inquiry and intellectual curiosity that is essential for lifelong learning.

Literary analysis also fosters empathy and emotional intelligence by encouraging readers to empathize with the experiences and emotions of fictional characters. Through the process of literary empathy, readers develop a greater understanding of human psychology, emotions, and motivations, enhancing their capacity for empathy and compassion in real-world interactions. Whether it's the exploration of grief and loss in Toni Morrison's "Beloved" or the depiction of love and longing in Gabriel García Márquez's "One Hundred Years of Solitude," literature offers readers a window into the complexities of the human heart and soul.

Furthermore, literature promotes aesthetic appreciation by exposing readers to the beauty and power of language and storytelling. Through the study of literary form, structure, and technique, readers gain an appreciation for the artistry and craftsmanship of great writers. Whether it's the intricate narrative structure of Italo Calvino's "Invisible Cities" or the innovative use of stream-of-consciousness in Virginia Woolf's "Mrs. Dalloway," literature offers readers a wealth of aesthetic pleasures to savor and admire.

Literature enriches education and intellectual development by exposing readers to diverse literary traditions, genres, and styles. Through literary analysis and interpretation, readers develop critical thinking skills, linguistic proficiency, and an appreciation for aesthetic expression. Moreover, literature fosters empathy, emotional intelligence, and aesthetic appreciation, nurturing well-rounded individuals who are equipped to navigate the complexities of the world with insight, empathy, and creativity. As educators and readers, we have a responsibility to champion the value of literature in education and to cultivate a lifelong love of reading and learning in ourselves and others.

Entertainment and Escapism

Literature serves as a sanctuary for entertainment and escapism, beckoning readers into realms of imagination and wonder where the constraints of reality dissolve, and the possibilities are boundless. Through imaginative storytelling, humor, and fantasy, literature offers readers a respite from the demands of everyday life, transporting them to worlds where the ordinary gives way to the extraordinary and the mundane is transformed into the magical.

At its core, literature provides a form of entertainment that transcends the boundaries of time and space. Whether it's the gripping suspense of a mystery novel, the heart-pounding excitement of a fantasy epic, or the laugh-out-loud humor of a comedic satire, literature offers readers an immersive experience that captivates the senses and stimulates the imagination. Through the power of narrative, writers transport readers to distant lands, introduce them to captivating characters, and invite them on thrilling adventures that leave them eagerly turning the pages in anticipation of what comes next.

Moreover, literature offers a form of escapism that allows readers to temporarily disconnect from the pressures and stresses of everyday life. In the pages of a book, readers can leave behind their worries and cares, entering into a world where anything is possible and the rules of reality need not apply. Whether it's the enchanted realms of J.R.R. Tolkien's Middle-earth, the whimsical landscapes of Lewis Carroll's Wonderland, or the dystopian future of Margaret Atwood's Gilead, literature offers readers a refuge from the trials and tribulations of the world outside, allowing them to lose themselves in the magic of storytelling.

Fictional worlds offer readers a space to explore alternative realities and experience vicarious adventures. Through the eyes of fictional characters, readers can embark on journeys of self-discovery, confront their fears, and fulfill their deepest desires. Whether it's the epic heroics of Frodo Baggins in "The Lord of the Rings" or the romantic escapades of Elizabeth Bennet in "Pride and Prejudice, " literature allows readers to live vicariously through the experiences of characters who are larger than life, inspiring them to dream big and embrace the possibilities that lie beyond the confines of their own lives.

Humor also plays a vital role in literature's ability to entertain and provide escapism. From witty banter and clever wordplay to slapstick comedy and absurd situations, humor infuses literature with joy and laughter, lifting readers' spirits and bringing a smile to their faces. Whether it's the sharp satire of Jonathan Swift's "Gulliver's Travels" or the irreverent humor of Douglas Adams' "The Hitchhiker's Guide to the Galaxy, " literature offers readers a welcome reprieve from the seriousness of life, reminding them not to take themselves too seriously and to find joy in the absurdities of the world.

Literature's ability to entertain and provide escapism is a testament to the power of storytelling to transport readers to worlds of imagination and wonder. Through imaginative storytelling, humor, and fantasy, literature offers readers a respite from the demands of everyday

life, allowing them to lose themselves in the magic of storytelling and experience vicarious adventures beyond the confines of their own lives. As readers, we have a responsibility to embrace the joy and wonder of literature and to savor the moments of entertainment and escapism that it offers, knowing that within the pages of a book, anything is possible.

Promotion of Literacy and Language Skills

Literature stands as a steadfast advocate for literacy and language skills, serving as a gateway to the world of written communication and linguistic exploration. Through its rich tapestry of words and narratives, literature engages readers in the written word, expands their vocabulary, enhances their linguistic fluency, and deepens their comprehension abilities. From the pages of picture books read aloud to children to the complex prose of classic novels, literature offers readers of all ages a treasure trove of linguistic riches to explore and enjoy.

At its core, literature serves as a catalyst for literacy by igniting a passion for reading and storytelling from an early age. Through exposure to the written word, children develop foundational literacy skills such as phonemic awareness, vocabulary acquisition, and reading comprehension. Picture books, with their vibrant illustrations and simple text, introduce young readers to the joys of storytelling and help build their confidence as emerging readers. As children progress in their reading journey, they encounter a diverse range of literary genres and styles, from fairy tales and fables to adventure stories and poetry, each offering new opportunities for linguistic discovery and mastery.

Moreover, literature fosters a deeper connection to language by exposing readers to a rich variety of words, phrases, and idiomatic expressions. Through exposure to diverse literary traditions and styles, readers expand their vocabulary, learning new words and their meanings in context. From the poetic language of Shakespeare's sonnets to the evocative imagery of contemporary poetry, literature offers readers a wealth of linguistic treasures to uncover and explore. By encountering unfamiliar words in the context of literary texts, readers develop strategies for deciphering meaning and expanding their linguistic repertoire, enhancing their ability to communicate effectively and express themselves with clarity and precision.

Literature also cultivates linguistic fluency by immersing readers in the nuances of language and communication. Through the study of literary form, structure, and technique, readers gain insight into the mechanics of language and the artistry of storytelling. Whether it's the rhythmic cadence of poetry, the vivid imagery of descriptive prose, or the concise dialogue of dramatic dialogue, literature offers readers a masterclass in the intricacies of linguistic expression. By analyzing and interpreting literary texts, readers develop an appreciation for the ways in which language can be used to evoke emotions, convey meaning, and shape our understanding of the world.

Furthermore, literature deepens readers' comprehension abilities by challenging them to engage with complex ideas, themes, and narratives. Through close reading and critical analysis,

readers learn to extract meaning from text, discern authorial intent, and interpret symbolism and metaphor. Whether it's the exploration of moral dilemmas in classic literature or the examination of social issues in contemporary fiction, literature prompts readers to think critically, question assumptions, and consider alternative perspectives. By grappling with the complexities of literary texts, readers develop higher-order thinking skills such as inference, analysis, and synthesis, equipping them with the tools they need to navigate the complexities of the world around them.

Literature's promotion of literacy and language skills is paramount to the cultivation of informed, engaged, and articulate individuals. By engaging readers in the written word, expanding their vocabulary, enhancing their linguistic fluency, and deepening their comprehension abilities, literature empowers individuals to communicate effectively, think critically, and navigate the complexities of the world with confidence and insight. As educators, parents, and readers, we have a responsibility to champion the value of literature in promoting literacy and language skills and to cultivate a lifelong love of reading and learning in ourselves and others.

Inspiration and Creativity

Literature stands as an endless reservoir of inspiration and creativity, fueling the imaginations of writers, artists, and creators across disciplines. Through its evocative language, vivid imagery, and compelling narratives, literature showcases the boundless possibilities of language and storytelling, inviting readers to embark on journeys of imagination and exploration. From the timeless classics of world literature to contemporary works of fiction, literature inspires creativity by igniting the spark of imagination and encouraging individuals to express themselves through their own artistic endeavors.

At the heart of literature's role in inspiring creativity lies its ability to transport readers to worlds of imagination and wonder, where the ordinary gives way to the extraordinary and the impossible becomes possible. Through the power of storytelling, literature invites readers to suspend disbelief and enter into realms of fantasy, adventure, and possibility. Whether it's the magical realism of Gabriel García Márquez's "One Hundred Years of Solitude" or the fantastical worlds of J. K. Rowling's "Harry Potter" series, literature offers readers a canvas upon which to paint their own dreams and aspirations, inspiring them to envision new possibilities and explore the depths of their creativity.

Moreover, literature serves as a wellspring of ideas and inspiration for writers, artists, and creators seeking to infuse their own work with depth, richness, and meaning. From the archetypal characters of myth and legend to the universal themes of love, loss, and redemption, literature provides a wealth of material for creative exploration and reinterpretation. Writers draw inspiration from literary works, incorporating themes, characters, and motifs into their own stories, poems, and plays. Artists find inspiration in the visual imagery and symbolism of

literature, translating words into images that capture the imagination and evoke powerful emotions. Musicians and composers draw inspiration from the rhythm and cadence of language, weaving melodies and harmonies that echo the beauty and complexity of literary prose.

Furthermore, literature inspires creativity by challenging individuals to think outside the box, question assumptions, and explore new perspectives. Through the exploration of diverse cultures, historical periods, and social issues, literature broadens readers' horizons and encourages them to consider alternative ways of seeing the world. Whether it's the exploration of identity and belonging in Chimamanda Ngozi Adichie's "Americanah" or the examination of power and corruption in George Orwell's "Animal Farm," literature prompts readers to engage with complex ideas and grapple with the complexities of the human experience.

Literature also serves as a source of catharsis and self-expression, offering readers a space to explore their own thoughts, emotions, and experiences through the lens of fiction and poetry. By identifying with the struggles and triumphs of fictional characters, readers find solace, validation, and inspiration in the pages of a book. Whether it's the exploration of grief and loss in Joan Didion's "The Year of Magical Thinking" or the celebration of resilience and hope in Khaled Hosseini's "The Kite Runner," literature offers readers a mirror in which to reflect upon their own lives and a canvas upon which to paint their own stories.

Literature's ability to inspire creativity is a testament to the transformative power of storytelling to ignite the imagination, provoke thought, and evoke emotion. By showcasing the boundless possibilities of language and storytelling, literature invites readers to embark on journeys of exploration and self-discovery, inspiring them to express themselves through their own artistic endeavors. As creators and consumers of literature, we have a responsibility to cherish and celebrate the role of literature in fostering creativity and imagination and to recognize its power to inspire, uplift, and enrich our lives.

Conclusion:

Literature stands as an ever-evolving testament to the human experience, weaving together the threads of our collective consciousness into a rich tapestry of narratives, ideas, and emotions. Its influence transcends the boundaries of time and space, resonating with individuals across generations and cultures, and serving as a timeless repository of wisdom and insight.

At its core, literature possesses the remarkable ability to enrich the lives of individuals on a deeply personal level. Through the pages of a novel, the verses of a poem, or the lines of a play, readers are transported to worlds both familiar and fantastical, where they encounter characters who mirror their own struggles, aspirations, and triumphs. In this way, literature acts as a mirror, reflecting back to us the complexities of the human condition and offering solace, inspiration, and catharsis.

Moreover, literature serves as a unifying force within society, fostering connections between people and communities through shared stories and cultural touchstones. Whether

gathered around a campfire, discussing the latest bestseller in a book club, or attending a performance of a beloved classic, individuals come together through their engagement with literature, forging bonds that transcend differences in background, ideology, and identity. In this sense, literature serves as a bridge, spanning the divides that often separate us and reminding us of our common humanity.

Furthermore, literature contributes to the cultural vibrancy and intellectual richness of society by challenging prevailing norms, sparking dialogue, and pushing the boundaries of thought and expression. From the stirring prose of a revolutionary manifesto to the avant-garde experiments of a postmodern novel, literature has the power to provoke, provoke, provoke, and provoke us to reconsider our assumptions, expand our horizons, and envision new possibilities for ourselves and our world.

In essence, literature is a dynamic force that not only shapes individual lives but also serves as a cornerstone of societal progress and enlightenment. Its enduring legacy reminds us of the power of words to inspire, transform, and unite us in our shared journey through the complexities of existence.

References:

1. Achebe, C. (1958). *Things Fall Apart*. London: Heinemann.
2. Atwood, M. (1985). *The Handmaid's Tale*. Toronto: McClelland and Stewart.
3. Baldwin, J. (1956). *Giovanni's Room*. New York: Dial Press.
4. Carson, R. (1962). *Silent Spring*. Boston: Houghton Mifflin.
5. Hurston, Z. N. (1937). *Their Eyes Were Watching God*. Philadelphia: J.B. Lippincott.
6. Lahiri, J. (2003). *The Namesake*. Boston: Houghton Mifflin.
7. Morrison, T. (1987). *Beloved*. New York: Alfred A. Knopf.
8. Orwell, G. (1949). *Nineteen Eighty-Four*. London: Secker & Warburg.
9. Stowe, H. B. (1852). *Uncle Tom's Cabin*. Boston: John P. Jewett & Company.
10. Woolf, V. (1928). *Orlando*. London: Hogarth Press.

HARMONY IN ACADEMIA: STRIKING THE PERFECT WORK-LIFE BALANCE FOR EDUCATORS

Deepti D. Dhere

Department of Microbiology,

Dayanand Science College, Latur, Maharashtra, India

Affiliated to Swami Ramanand Teerth Marathwada University, Nanded, Maharashtra, India

Corresponding author E-mail: deepti.dhere@gmail.com

Abstract:

In academia, educators grapple with the delicate balance between professional demands and personal well-being. This article explores the vital role of work-life balance for teachers, professors, and researchers, addressing challenges like heavy workloads and the pressure to publish. It emphasizes the benefits of balance, including improved health, productivity, relationships, and career longevity. Practical strategies, from setting boundaries to self-care, are provided to help educators find equilibrium in this demanding landscape. This article highlights the importance of educators' well-being for themselves, their students, and the field of education, urging them to embrace a balanced life for a fulfilling academic journey.

Keywords: Work-Life Balance, Academia, Educators, Challenges

Introduction:

The pursuit of knowledge and the art of teaching are noble endeavors, but they often come at a price: a challenging work-life balance for educators. Academic professionals, including teachers, professors, and researchers, are known for their dedication to their work, but it's essential to strike a balance between professional and personal life to lead a fulfilling and healthy lifestyle. In this article, we will explore the importance of work-life balance in academia and provide practical tips for educators to find harmony in their lives. Academia, often heralded as the bastion of knowledge and intellectual exploration, is a realm where educators play a pivotal role in shaping the minds of the future. This world encompasses a diverse spectrum of individuals—teachers nurturing young minds, professors conducting groundbreaking research, and scholars pushing the boundaries of human understanding. These educators are bound by a shared passion for learning and a commitment to imparting knowledge, but they also face a unique challenge that can cast a long shadow over their professional lives: the quest to strike a perfect work-life balance.

Within the hallowed halls of academia, the pursuit of knowledge is not merely a profession; it is a calling—a vocation driven by an insatiable thirst for discovery and a profound

love for teaching. Yet, this unwavering dedication often blurs the boundaries between personal and professional life, making the quest for balance an elusive one.

In this article author embark on a journey to explore the intricate tapestry of academia and the compelling need for harmony within it. We shall delve into the distinctive challenges faced by educators, from the relentless demands of teaching and the ever-present pressure to publish to the specter of job insecurity that looms large in some academic circles. We shall scrutinize the passion that fuels educators and how, paradoxically, this very passion can sometimes tip the scales, leading to over-commitment and the erosion of the work-life boundary.

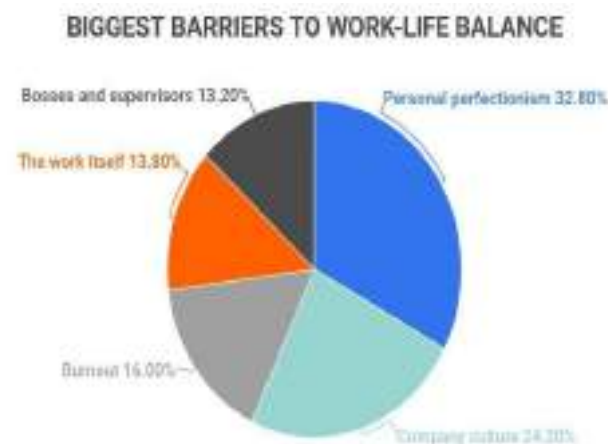


Need to Maintain Work-Life Balance

Maintaining a work-life balance is essential for several important reasons:

1. **Physical and Mental Health:** A proper work-life balance reduces the risk of burnout, stress-related illnesses, and mental health issues such as anxiety and depression. Chronic stress from overworking can lead to physical health problems like high blood pressure, heart disease, and compromised immune function.
2. **Improved Productivity:** When you maintain a balance between work and personal life, you are more likely to be productive during your working hours. Regular breaks and time away from work allow you to recharge and return to tasks with renewed focus and creativity.
3. **Enhanced Relationships:** Neglecting personal relationships due to excessive work can strain family and social bonds. Maintaining a work-life balance allows you to invest time in nurturing these connections, leading to healthier and more fulfilling relationships.
4. **Career Longevity:** Consistently overworking without breaks can lead to burnout and ultimately harm your career. Maintaining a work-life balance helps you sustain a successful and fulfilling career over the long term.
5. **Personal Fulfillment:** A balanced life allows you to pursue personal interests, hobbies, and passions outside of work. Engaging in these activities provides a sense of fulfillment and happiness beyond professional achievements.

6. **Reduced Stress:** A work-life balance reduces stress levels and promotes a sense of well-being. When you're less stressed, you're better equipped to handle challenges and make sound decisions.
7. **Improved Creativity:** Time away from work can lead to increased creativity. Engaging in leisure activities and relaxation can stimulate your mind and lead to innovative thinking and problem-solving.
8. **Better Time Management:** Striving for a balance between work and personal life encourages you to become more efficient in managing your time. You become better at prioritizing tasks and avoiding procrastination.
9. **Long-Term Goals:** Maintaining a balance allows you to set and work toward long-term personal and career goals. It ensures that you have the energy and motivation to pursue these goals over time.
10. **Happiness and Well-Being:** Ultimately, work-life balance contributes to your overall happiness and well-being. A balanced life provides a sense of fulfillment, contentment, and a higher quality of life.



The Challenge of Academia

Academia is a unique field with its set of challenges that can make achieving a work-life balance difficult. Here are some of the factors that contribute to this challenge:

A. **Heavy Workloads:** Educators often juggle multiple responsibilities, including teaching, research, administrative duties, and mentoring students. These demands can lead to long working hours and high stress levels. A heavy workload can have significant and multifaceted effects on the productivity of educators. While educators are typically dedicated and passionate about their work, an excessively heavy workload can lead to various challenges that ultimately hinder their productivity. Here's how a heavy workload can impact educators' productivity:

- a) **Increased Stress Levels:** A heavy workload often leads to heightened stress levels. When educators feel overwhelmed by the sheer volume of tasks, they may experience anxiety and

mental exhaustion. This stress can negatively impact their ability to focus and concentrate on their work.

- b) **Burnout:** Prolonged exposure to a heavy workload can lead to burnout—a state of physical and emotional exhaustion. Burnout can result in decreased motivation, reduced enthusiasm for teaching or research, and a feeling of being emotionally drained.
- c) **Diminished Quality of Work:** When educators are overburdened with work, they may not have sufficient time to devote to each task or project. This can result in a drop in the quality of their teaching, research, or administrative work, as they may be forced to rush through tasks or cut corners.
- d) **Reduced Creativity and Innovation:** Creativity often thrives in a relaxed and balanced work environment. A heavy workload leaves little time for educators to engage in creative thinking and brainstorming, which are essential for innovation in teaching and research.
- e) **Increased Risk of Errors:** Working under constant pressure and with tight deadlines can increase the likelihood of errors and oversights. These errors can have detrimental consequences, particularly in research or grading assignments.
- f) **Limited Time for Professional Development:** Continuous learning and professional development are crucial for educators to stay updated with the latest teaching methods and research trends. A heavy workload may leave little time or energy for educators to invest in their own growth and development.
- g) **Impact on Work-Life Balance:** A heavy workload often spills into personal time, encroaching on weekends and evenings. This imbalance between work and personal life can lead to fatigue, strained relationships, and a reduced capacity to recharge and be productive at work.
- h) **Negative Impact on Student Interaction:** Educators who are overwhelmed with work may have limited time and energy to engage with their students effectively. This can hinder the quality of interactions and mentoring, which are vital aspects of the educational process.
- i) **Reduced Job Satisfaction:** Over time, a heavy workload can erode job satisfaction. Educators may start to feel that their work is a never-ending cycle of tasks, leading to a decline in their overall morale and enthusiasm for their profession.
- j) **Difficulty in Long-Term Planning:** With a constant focus on immediate tasks and deadlines, educators may struggle to engage in long-term planning for their courses, research projects, or career development, which is essential for sustainable success in academia.

B. Pressure to Publish: In the academic world, publishing research is paramount for career advancement. The pressure to publish can lead to burnout as educators strive to produce high-quality work consistently. The pressure to publish can have significant and wide-ranging effects on educators, particularly in the academic world. This pressure is often driven by the "publish or

perish" culture, which places a high value on research productivity and the publication of scholarly work. Here's how the pressure to publish can impact educators:

- a. **Stress and Anxiety:** The pressure to publish can create high levels of stress and anxiety among educators. The expectation to produce research regularly and meet publication quotas can be mentally taxing.
- b. **Time Constraints:** The time and effort required for research, data collection, analysis, and manuscript preparation can be substantial. This can lead to time constraints, making it challenging for educators to balance their research responsibilities with teaching and other obligations.
- c. **Resource Allocation:** Conducting research often requires resources such as funding, laboratory equipment, and access to databases. The need to secure these resources can be competitive and time-consuming.
- d. **Impact on Teaching:** For educators who also teach, the pressure to publish can sometimes detract from their teaching responsibilities. They may have less time and energy to devote to course preparation, grading, and student mentoring.
- e. **Publication Pressure vs. Quality:** The pressure to publish can sometimes lead to a focus on quantity over quality. Educators may rush through research projects to meet deadlines, potentially compromising the rigor and validity of their work.
- f. **Narrow Research Focus:** To increase their publication output, educators may narrow their research focus or pursue topics that are more likely to yield quick results. This can limit the diversity and depth of research in their field.
- g. **Impact on Work-Life Balance:** The demand for research productivity can encroach on personal time, affecting work-life balance. Long hours in the laboratory or at the computer can lead to burnout and strained personal relationships.
- h. **Job Insecurity:** In some academic institutions, tenure and promotion decisions are closely tied to research productivity. Educators may feel that their job security and career advancement hinge on their ability to publish, adding to the pressure.
- i. **Competitive Environment:** The academic publishing landscape is highly competitive. Getting research published in prestigious journals can be challenging, and rejection rates are often high. Facing repeated rejections can be demoralizing.
- j. **Ethical Concerns:** In the quest to publish, some educators may succumb to ethical dilemmas, such as plagiarism, data fabrication, or salami slicing (dividing one study into multiple smaller publications). These actions can have severe consequences for their careers if discovered.

- k. **Mental Health Implications:** The pressure to publish can lead to mental health issues, including depression and anxiety. The fear of not meeting publication expectations or experiencing academic setbacks can take a toll on educators' well-being.
 - l. **Impact on Collaborative Research:** The focus on individual productivity can sometimes hinder collaborative research efforts, as educators may be hesitant to share credit or resources with colleagues.
 - m. The pressure to publish can have both positive and negative effects on educators. While it can drive innovation and scholarly advancement, it can also lead to stress, ethical dilemmas, and challenges in maintaining a healthy work-life balance. Educational institutions and academic communities need to strike a balance between promoting research excellence and supporting the well-being of educators to ensure a healthy and sustainable academic environment.
- C. **Limited Job Security:** Many educators work on temporary contracts or as adjunct professors, which can create uncertainty and job instability, making it challenging to plan for the future.
- D. **Passion for Teaching:** While educators are passionate about their work, this passion can lead to over commitment, blurring the boundaries between work and personal life.

Practical Tips for Educators

Now that we understand the importance of work-life balance in academia, let's explore some practical strategies to achieve it:

Prioritize and Delegate: Identify your most critical tasks and focus on them. Delegate tasks when possible, and learn to say no to additional responsibilities that may overload you.

Set Boundaries: Establish clear boundaries between work and personal life. Create designated work hours and stick to them, avoiding the temptation to work late into the evening or on weekends.

Time Management: Develop effective time management skills to make the most of your work hours. Use tools like calendars and to-do lists to stay organized and prioritize tasks.

Take Breaks: Regular breaks during the workday are essential for maintaining productivity and reducing stress. Step away from your desk, stretch, and recharge.

Self-Care: Prioritize self-care activities such as exercise, meditation, and hobbies. These activities are essential for your well-being and can help you relax and recharge.

Seek Support: Don't hesitate to seek support from mentors, colleagues, or counselors if you're feeling overwhelmed or stressed. Talking to someone can provide valuable perspective and coping strategies.

Plan Vacations: Take advantage of your breaks and plan vacations or time off. A change of scenery and a break from work can rejuvenate your spirit.

Conclusion:

In summary, maintaining a work-life balance is not just a luxury but a necessity for your physical and mental health, productivity, and overall life satisfaction. It helps you lead a more fulfilling and successful life, both personally and professionally.

Achieving work-life balance in academia is a challenge, but it's essential for personal well-being and long-term success. Educators should recognize the unique demands of their profession and take proactive steps to maintain a healthy balance between work and personal life. By setting boundaries, managing time effectively, and prioritizing self-care, educators can find harmony in academia and lead fulfilling lives both professionally and personally. Remember that striking the perfect work-life balance is an ongoing journey, and it's worth the effort to create a meaningful and balanced life in academia.

References:

1. Zippia. "20+ Vital Work-Life Balance Statistics [2023]: Is Work Life Balance Your Second Priority?" Zippia.com. Jun. 29, 2023, <https://www.zippia.com/advice/work-life-balance-statistics/>
2. Ganiyu, Idris & Derera, Evelyn & Atiku, Sulaiman & Fields, Ziska. (2020). Measuring the effectiveness of work–life balance strategies in the manufacturing sector. SA Journal of Human Resource Management. 18. 10.4102/sajhrm.v18i0.1216.
3. <https://teambuildinghub.com/wp-content/uploads/2022/05/work-life-alance.webp>

A COMPREHENSIVE REVIEW AND ANALYSIS OF EXPLORING THE ROLE OF MEDIA AND INTERNET PLATFORMS IN ADVANCING PHYSICS EDUCATION

Aloke Verma*¹ and Payal Goswami²

¹Department of Physics, Kalinga University, Naya Raipur (CG) India 492101

²Department of Mathematics,

Govt. Pt. J. L. N. Arts and Science PG College Bemetara (CG) India 491335

*Corresponding author E-mail: alokeverma1785@gmail.com,

aloke.verma@kalingauniversity.ac.in

Abstract:

This paper presents a comprehensive review and analysis of the role of media and internet platforms in advancing physics education. In recent years, technological advancements have revolutionized the way physics is taught and learned, with media and internet platforms playing a significant role in this transformation. This paper examines various forms of media and internet resources utilized in physics education, including online videos, simulations, interactive tutorials, virtual laboratories, and social media platforms. It explores the benefits and challenges associated with integrating these resources into physics education, as well as their impact on student learning outcomes, engagement, and interest in physics. Furthermore, this paper discusses the pedagogical approaches and strategies employed in utilizing media and internet platforms effectively in physics education. Through a comprehensive review of existing literature and analysis of empirical studies, this paper aims to provide insights into the potential of media and internet platforms to enhance physics education and contribute to the development of innovative teaching practices in the field.

Keywords: Physics Education, Internet Platforms, Online Resources, Student Engagement, Pedagogical Approaches.

Introduction:

Physics education has transformed due to technological advancements and the availability of media and internet platforms. These tools offer a wealth of resources, enhancing the learning experience and promoting deeper understanding of complex concepts [1]. However, challenges such as access, equity, and quality of online resources need to be addressed. This paper reviews the role of media and internet platforms in physics education, exploring their forms, benefits, and challenges. It examines the impact of these resources on student learning outcomes, engagement, and interest in physics, as well as the pedagogical approaches used. The goal is to inform educators, policymakers, and researchers about the opportunities and challenges of integrating technology into physics education and identify areas for future research [2-3].

Methodology:

Methodology should be mentioned in this study, encompassing both primary and secondary data sources. Primary data collection methods may involve surveys, interviews, or observations to gather insights directly from educators, students, and other stakeholders involved in physics education [4]. Secondary data sources could include scholarly articles, reports, and existing educational literature to provide a comprehensive overview of the current landscape of media and internet platforms in physics education [5]. This dual approach ensures a robust understanding of the topic, incorporating both empirical evidence and theoretical frameworks to analyze the role of these platforms in enhancing student learning outcomes and addressing challenges in physics education [6].

Table 1: Educational Background

Valid	Frequency	Percent
High School or below	104	20.8
Bachelor's degree	189	37.8
Master's degree	171	34.2
Ph.D. or other advanced degree	18	3.6
Other	18	3.6
Total	500	100.0

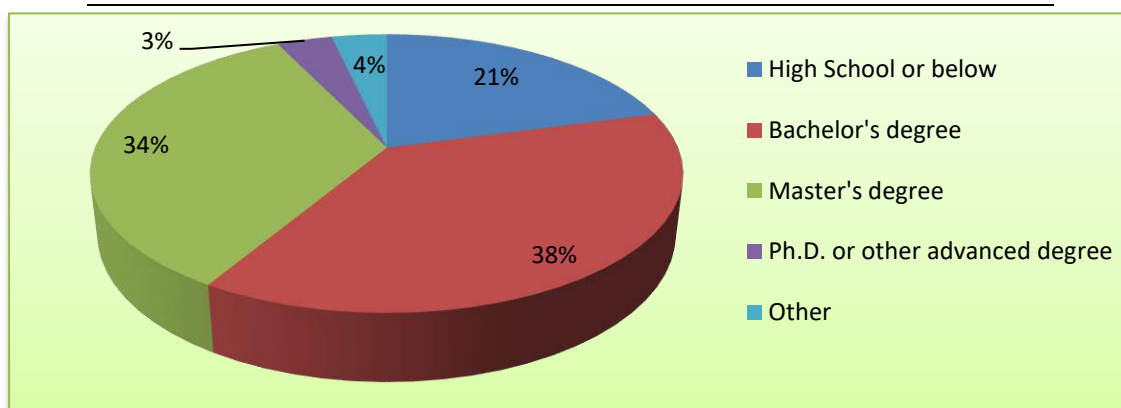


Figure 1: π -chart of Educational Background data survey

Result and Discussions:

The use of media and internet resources in physics education offers a variety of tools and platforms to enhance learning experiences [7-8]. Online videos, simulations, and virtual laboratories are widely adopted, providing visual demonstrations and immersive experiences for complex concepts exploration. These platforms offer flexibility, allowing students to engage at their own pace and reinforce their understanding. Interactive tutorials and e-learning platforms further personalize learning experiences, catering to individual learning styles. Social media platforms like Twitter, Facebook, and Reddit offer unique avenues for community engagement

and resource sharing [9]. Emerging technologies like augmented reality, virtual reality, and artificial intelligence hold promise in further augmenting physics education, inspiring curiosity and innovation among learners.

The integration of media and internet platforms into physics education yields numerous benefits, including enhanced accessibility, visual and interactive learning experiences, flexibility in learning schedules, and community building. However, challenges such as ensuring the quality and reliability of online resources, addressing the digital divide, and pedagogical integration and teacher training are essential [10]. Overreliance on technology may lead to passive learning and privacy concerns, necessitating careful navigation of digital spaces.

Various pedagogical approaches and strategies can maximize the efficacy of media and internet platforms in physics education, such as the flipped classroom model, inquiry-based learning, collaborative learning, personalized learning, and multimedia integration [11]. Future directions and recommendations include embracing emerging technologies, addressing equity, inclusion, and pedagogical efficacy, and fostering collaboration among stakeholders to ensure high-quality physics education for all students [12].

Conclusion:

The integration of media and internet platforms in physics education has significantly improved teaching and learning experiences. Through multimedia resources, interactive simulations, and online communities, educators can engage students in deeper understanding and critical thinking. This has democratized access to high-quality educational materials, breaking down traditional barriers and empowering students from diverse backgrounds. The personalized learning environments have propelled student learning outcomes. Emerging technologies like augmented reality and artificial intelligence offer innovative ways to engage students. The expansion of open educational resources, professional development, and equity promotion ensure all students have access to high-quality physics education.

References:

1. Adams, W. K., Perkins, K. K., Podolefsky, N. S., Dubson, M., Finkelstein, N. D., & Wieman, C. E. (2008). New instrument for measuring student beliefs about physics and learning physics: The Colorado Learning Attitudes about Science Survey. *Physical Review Special Topics - Physics Education Research*, 4(1), 010101.
2. Stieff, M., Lira, M. E., & Scopelitis, S. A. (2016). Inquiry in physics classrooms: How students navigate simulated workspaces. *Journal of Research in Science Teaching*, 53(3), 398-425.
3. Hake, R. R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. *American Journal of Physics*, 66(1), 64-74.

4. Kozma, R. B., Chin, E., Russell, J., & Marx, N. (2000). The roles of representations and tools in the chemistry laboratory and their implications for chemistry learning. *Journal of the Learning Sciences*, 9(2), 105-143.
5. National Research Council. (2012). *A framework for K-12 science education: Practices, crosscutting concepts, and core ideas*. National Academies Press.
6. Squire, K. (2008). *Video games and learning: Teaching and participatory culture in the digital age*. Teachers College Press.
7. Verma, A. (2023). *Physics Education: The Role and Benefits of Cutting-Edge Technology*. Proceedings of National Webinar on Applications & Utility of Modern Technology in Teaching-Learning Process. Pahale Pahal Prakashan. ISBN: 978-93-92212-96-3.
8. Trundle, K. C., & Bell, R. L. (2010). The use of a computer simulation to promote scientific conceptions of moon phases. *Journal of Research in Science Teaching*, 47(11), 1376-1395.
9. Wieman, C., & Perkins, K. (2005). Transforming physics education. *Physics Today*, 58(11), 36-41.
10. Zacharia, Z. C., Olympiou, G., & Papaevripidou, M. (2008). Effects of experimenting with physical and virtual manipulatives on students' conceptual understanding in heat and temperature. *Journal of Research in Science Teaching*, 45(9), 1021-1035.
11. Papert, S. (1980). *Mindstorms: Children, computers, and powerful ideas*. Basic Books.
12. Verma, A., Goswami, P., & Diwakar, A. K. (2023). *National Education Policy 2020: A Comprehensive Analysis and Implications for Educational Development*. In *Research Trends in Environmental Science Volume I*. Bhumi Publishing, India. ISBN: 978-93-88901-66-6.

EMBRACING A PARADIGM SHIFT: TRANSITIONING FROM TRADITIONAL TEACHING METHODS TO AI-BASED NLP EDUCATION

Ritesh Mishra

Dr. C. V. Raman, University, Kota, Bilaspur

Corresponding author E-mail: drdmishracvru@gmail.com

Introduction:

Education, the cornerstone of societal progress, has always evolved in tandem with technological advancements. Throughout history, educators have continually sought innovative ways to enhance the learning experience, striving to engage and empower students in increasingly meaningful ways. In recent years, one of the most transformative shifts has been the integration of Artificial Intelligence (AI) into education, particularly through Natural Language Processing (NLP) technologies.

Traditional teaching methods, though time-honored, often face limitations in catering to the diverse needs and learning styles of modern students. The one-size-fits-all approach can inadvertently leave some learners behind, failing to tap into their full potential. Recognizing this challenge, educators are turning to AI-based teaching methodologies, leveraging the power of NLP to personalize and optimize the learning journey for each individual.

This paradigm shift from traditional to AI-based teaching represents a seismic change in how education is conceptualized, delivered, and experienced. It marks a departure from rote memorization and passive learning towards interactive, adaptive, and immersive educational experiences. At its core, AI-based NLP education holds the promise of democratizing access to quality learning resources, transcending geographical and socioeconomic barriers to education.

In this exploration, we delve into the rationale behind this paradigm shift, examining the shortcomings of traditional teaching methods and the transformative potential of AI-driven NLP technologies in education. We will explore how NLP, by enabling machines to understand, interpret, and generate human language, can revolutionize various facets of the learning process, from content creation and delivery to assessment and feedback.

Moreover, we will highlight real-world examples and case studies showcasing the tangible benefits of AI-based NLP education across diverse educational settings and disciplines. From personalized tutoring systems and intelligent chatbots to interactive language learning platforms, the applications of NLP in education are as varied as they are promising.

As we embark on this journey of exploration, it becomes increasingly evident that the fusion of AI and NLP with education has the potential to redefine the very essence of teaching and learning, ushering in a new era of educational innovation, accessibility, and efficacy.

Through this paradigm shift, we endeavor to unlock the full spectrum of human potential, empowering learners of all ages and backgrounds to thrive in an ever-evolving global landscape.

Components of the Paradigm Shift from Traditional Teaching to AI-based Teaching in Relation to NLP:

Personalized Learning: Traditional Method: In traditional teaching, instruction tends to follow a one-size-fits-all approach, where the same content is delivered to all students regardless of their individual learning styles, preferences, or proficiency levels. AI-based Teaching with NLP: NLP-powered educational systems can analyze individual student data, including their learning history, preferences, and performance, to tailor instruction and content delivery to each student's unique needs. This personalized approach enhances engagement, comprehension, and retention, ultimately fostering more effective learning outcomes.

Adaptive Assessment: Traditional Method: Assessment in traditional teaching often relies on standardized tests or exams that measure a narrow range of skills and knowledge, offering limited insights into students' true capabilities. AI-based Teaching with NLP: AI-driven assessment tools leverage NLP algorithms to analyze students' written or spoken responses, providing immediate, detailed feedback on their comprehension, critical thinking skills, and language proficiency. These adaptive assessments can dynamically adjust difficulty levels based on students' performance, offering a more accurate and holistic evaluation of their abilities.

Interactive Feedback: Traditional Method: Feedback in traditional teaching typically occurs sporadically, with limited opportunities for students to receive timely and constructive input on their work. AI-based Teaching with NLP: NLP-powered feedback systems can offer real-time, personalized feedback to students as they engage with learning materials, guiding them through misconceptions, suggesting improvements, and reinforcing positive learning behaviors. This continuous feedback loop promotes active reflection, refinement, and growth, enhancing students' mastery of content and skills.

Natural Language Interaction: Traditional Method: Communication in traditional teaching often relies on one-way dissemination of information from the instructor to the students, with limited opportunities for interactive dialogue or collaboration. AI-based Teaching with NLP: NLP technologies enable natural language interaction between students and educational systems, allowing for conversational interfaces, intelligent tutoring systems, and interactive learning experiences. Students can ask questions, seek clarification, and engage in meaningful dialogue with AI-powered virtual tutors or chatbots, promoting deeper understanding and engagement with the subject matter.

Content Generation and Curation: Traditional Method: Content creation and curation in traditional teaching typically involve manual processes, with educators relying on textbooks, lectures, and supplementary materials to convey information. AI-based Teaching with NLP: NLP

algorithms can automate content generation and curation, synthesizing vast amounts of textual data into customized learning resources, such as adaptive textbooks, multimedia presentations, and interactive simulations. These AI-generated materials can be tailored to align with students' interests, learning objectives, and proficiency levels, enriching their educational experience and facilitating self-directed learning.

By integrating these components into educational practices, the paradigm shift from traditional teaching to AI-based teaching with NLP holds the potential to revolutionize the way knowledge is imparted, acquired, and applied in diverse learning environments.

Uses of the Paradigm Shift from Traditional Teaching to AI-based Teaching in Relation to NLP:

Enhanced Learning Outcomes: By leveraging AI-based teaching methods with NLP, educators can personalize instruction, provide adaptive feedback, and create interactive learning experiences tailored to individual students' needs. This personalized approach enhances comprehension, engagement, and retention, leading to improved learning outcomes across diverse subjects and student populations.

Increased Accessibility: AI-powered NLP technologies can transcend geographical and socioeconomic barriers to education, providing learners with anytime, anywhere access to high-quality learning resources. By democratizing access to education, this paradigm shift ensures that all students, regardless of their background or circumstances, have the opportunity to pursue their educational goals and aspirations.

Efficient Resource Allocation: AI-based teaching with NLP enables educators to optimize resource allocation by automating routine tasks, such as content generation, assessment, and feedback. By streamlining administrative processes and reducing manual workload, educators can focus their time and energy on more strategic activities, such as curriculum design, instructional planning, and individualized support for students.

Data-Driven Decision Making: NLP-powered educational systems generate vast amounts of data on students' learning behaviors, preferences, and performance. By analyzing this data using AI algorithms, educators can gain valuable insights into students' strengths, weaknesses, and learning trajectories, enabling data-driven decision making to tailor instruction, interventions, and support services more effectively.

Lifelong Learning and Skill Development: AI-based teaching with NLP fosters a culture of lifelong learning and skill development, empowering learners to acquire new knowledge and competencies continuously. Through personalized learning pathways, adaptive assessments, and interactive feedback mechanisms, individuals can engage in self-directed learning journeys that align with their evolving interests, goals, and career aspirations.

Innovation in Education: The paradigm shifts from traditional teaching to AI-based teaching with NLP fuels innovation in education, catalyzing the development of new instructional models, learning technologies, and pedagogical approaches. By embracing emerging technologies and interdisciplinary collaborations, educators can pioneer transformative practices that reimagine the future of teaching and learning in the digital age.

Global Collaboration and Exchange: AI-powered NLP technologies facilitate global collaboration and knowledge exchange by breaking down language barriers and enabling cross-cultural communication. Through online collaboration platforms, virtual classrooms, and multilingual educational resources, students and educators can engage in meaningful dialogue, share diverse perspectives, and collaborate on projects that transcend geographical boundaries.

Conclusion:

The paradigm shift from traditional teaching to AI-based teaching in relation to NLP represents a monumental leap forward in the evolution of education. By harnessing the power of artificial intelligence and natural language processing, educators are poised to revolutionize the way knowledge is imparted, acquired, and applied in diverse learning environments.

This transformative shift holds immense promise for enhancing learning outcomes, increasing accessibility, optimizing resource allocation, and fostering innovation in education. Through personalized instruction, adaptive assessments, interactive feedback, and data-driven decision making, AI-powered NLP technologies empower educators to meet the individual needs of each student, unlocking their full potential and facilitating lifelong learning and skill development.

Moreover, this paradigm shift transcends geographical and socioeconomic barriers to education, democratizing access to high-quality learning resources and fostering global collaboration and exchange. By embracing emerging technologies and pioneering transformative practices, educators can lead the charge towards a future where education is more inclusive, equitable, and effective.

As we navigate this dynamic landscape of change and innovation, it is essential to remain mindful of the ethical, social, and cultural implications of AI-based teaching with NLP. By prioritizing equity, transparency, and responsible use of technology, educators can ensure that the benefits of this paradigm shift are equitably distributed and that no learner is left behind.

In essence, the paradigm shift from traditional teaching to AI-based teaching with NLP represents a pivotal moment in the history of education, offering boundless opportunities to reimagine the possibilities of teaching and learning in the digital age. As we embrace this transformational journey, let us continue to collaborate, innovate, and inspire each other to create a brighter future for education, where every learner has the opportunity to thrive and succeed.

References:

1. Li, S., Wang, J., & Wang, H. (2020). Integrating Natural Language Processing into AI-based Education: Opportunities and Challenges. *Journal of Educational Technology & Society*, 23(4), 154-167.
2. Brown, P. C., Roediger III, H. L., & McDaniel, M. A. (2014). *Make it stick: The science of successful learning*. Harvard University Press.
3. Graesser, A. C., VanLehn, K., Rose, C. P., Jordan, P., & Harter, D. (2001). Intelligent tutoring systems with conversational dialogue. *AI magazine*, 22(4), 39-51.
4. Liu, D., & Caverly, D. C. (2006). The role of natural language processing in computer-assisted language learning: Recent developments and future prospects. *Journal of Educational Computing Research*, 35(3), 243-265.
5. McLaren, B. M., Scheuer, O., & Mikšátko, J. (2019). Natural language processing in education. *International Journal of Artificial Intelligence in Education*, 29(3), 436-478.
6. Resnik, P., & Elkiss, A. (2013). A discourse-level annotation scheme for natural language understanding in educational context. In *Proceedings of the 8th Workshop on Innovative Use of NLP for Building Educational Applications*, 144-153.

ROLE OF NGOS IN SCHOOL EDUCATION IN INDIA: A REVIEW

Subroto Mandal* and Vishal Kumar**

School of Education,

Lovely Professional University, Punjab

*Corresponding author E-mail: subroto.m11@gmail.com

Abstract:

For a developing nation like India, making education accessible to all its citizens has to be one of its highest priorities. Since India's independence, there have been many efforts taken to provide education to all. These efforts came in the form of policy changes like education policies and Right to Education Act, or in the form of programmes like Sarva Shiksha Abhiyan and Mid-Day Meal Scheme. Over the years, NGOs have played a major role in providing formal and non-formal education in places where regular schooling is not feasible. This paper aims to explore the impact that NGOs have made on Indian education, the various challenges and barriers they face and how the impact of NGOs in Indian education can be improved. The paper concluded that NGOs have made a significant impact on Indian education, especially in marginalised sections of society. There are various challenges and barriers that NGOs face, but despite these, most researchers identified the merits of NGOs when it comes to providing education.

Keywords: NGO, School Education, Marginalised Sections

Introduction:

The foundation of social advancement is education, which acts as a spur for both individual and community growth. Even with significant progress in education, issues including poor infrastructure, a lack of teachers, and socioeconomic inequality still exist in India. In the face of these obstacles, non-governmental organisations (NGOs) have become important players in the educational system, assisting the state's initiatives and filling in gaps to guarantee that all students have fair access to high-quality education. With facts and references to back it up, this essay examines the many facets of non-governmental organisations' (NGOs') involvement in Indian education, emphasising their achievements, difficulties, and potential. In India, one of the main responsibilities of non-governmental organisations (NGOs) is to bridge infrastructure gaps, especially in underprivileged areas. The Annual Status of Education Report (ASER) 2019 states that basic amenities like electricity and restrooms are unavailable in approximately 20% of government schools. The establishment and renovation of schools, as well as the provision of classrooms, libraries, and sanitary facilities, have all been made possible by NGOs such as Pratham and Teach For India. This has improved the learning environment. The Ministry of Human Resource Development's data shows that non-governmental organisations (NGOs) have played a major role in enhancing educational access in India by contributing to the construction of thousands of school buildings. The Akshaya Patra Foundation, for example, runs midday meal

programmes that not only combat malnutrition but also encourage children, particularly those from disadvantaged backgrounds, to attend school on a regular basis.

Improving teacher quality and ability is a critical component of NGO involvement in Indian education. The continuous dilemma of a shortage of qualified instructors persists, particularly in rural areas. Organisations such as Room to Read and Pratham have introduced creative programs for teacher preparation that give teachers subject-matter expertise, digital literacy, and pedagogical skills. Research by the Abdul Latif Jameel Poverty Action Lab (J-PAL) found that teacher mentoring programs, among other interventions, carried out by NGOs significantly improved student learning results. These NGOs address the shortage of trained teachers and promote a culture of ongoing professional development within the education sector by supporting government initiatives.

NGOs are essential in tackling socioeconomic gaps in education since they target underprivileged groups, such as girls, rural residents, and kids with disabilities. According to the ASER 2020 research, there is still a gender gap in education, and enrollment and retention challenges affect girls from underprivileged families. Organisations that focus on promoting girls' education include Educate Girls and Nanhi Kali. They also offer community outreach programs, mentorship programs, and scholarships. These initiatives have helped close the gender gap in literacy rates and increase the number of girls enrolled in elementary and secondary education. Moreover, organisations that promote inclusive education, such as the Blind People's Association and Enable India, guarantee that kids with disabilities have access to the right educational materials and assistance programs. These groups fight for the rights of children with disabilities to a high-quality education and advance inclusive practices in schools through grassroots campaigns and policy advocacy.

Despite their considerable contributions, non-governmental organisations (NGOs) working in the education sector in India confront a number of problems, including funding restrictions, regulatory hurdles, and scaling issues. Limited financial resources frequently hamper the viability of NGO-led projects, necessitating collaboration with governments, corporations, and philanthropic groups. Furthermore, assuring the scalability and reproducibility of successful NGO models remains a daunting task. Many beneficial initiatives are implemented on a modest scale, reducing their overall impact. Addressing these problems would necessitate a collaborative approach incorporating multi-stakeholder partnerships, evidence-based interventions, and regulatory reforms to establish an enabling environment for NGO involvement in education.

This review paper aims to explore the impact that NGOs have made on Indian education, the various challenges and barriers they face and how the impact of NGOs in Indian education can be improved. For this, a qualitative approach was taken. Google scholar was the main database consulted for the reviews. A total of 25 papers were consulted for this paper, out of which 11 were included in this paper.

Review of Literature

Jagannathan (2001) conducted the survey on six Non-Governmental Organisations in Primary Education in India and this report suggested that the government could support the efforts of NGOs and collaborate with them to bring out-of-school children into schools through supply of teachers, classroom space, and other methods. However it also said that without safeguards, large-scale replication without safeguards by the government of such NGO innovations as the 'alternative school' and the 'voluntary teacher' could lower the quality of education.

Furuta and Thamburaj (2014) conducted a study to identify the role played by NGOs in promoting inclusive education under the Sarva Shiksha Abhiyan (SSA) scheme in the state of Tamil Nadu. It found that under the SSA scheme the NGOs played a pioneering role in preparing for inclusive education and providing a transitional period towards its establishment where the state governments were able to take over these responsibilities. It also identified certain problems, such as the positions of teachers not being secure and them being paid less than government school teachers. Teachers who worked under NGOs were not regarded as proper staff in schools. The paper also pointed out that selection and hiring of resource teachers and other personnel, the formulation of budgets, expenditures, etc. have been an issue of concern.

Guha (2019) conducted a case study of an Indian educational NGO that has scaled up rapidly and effectively in order to explore the reasons for choice of scaling-up strategy, the particular barriers to scaling-up in the education sector, and how these barriers can be overcome. The NGO under study relied on expansion to scale up impact. One of the difficulties it mentions is recruiting suitable candidates. Other external barriers such as the difficulty of building relationships with key stakeholders like government officials, school teachers, and corporate donors, however, continue to pose significant challenges for the organisation. The paper claims that these barriers can be overcome through a combination of good leadership, commitment to a decentralised organisational structure, employee empowerment, and close attention to employee recruitment and training.

Kumar (2019) conducted a study that compared the culture of learning of government teachers and NGO teachers. As per the paper, government-teacher classrooms tended to exhibit discrimination against supposed non-learners, a focus on discipline and rote learning, and inefficient time use. On the other hand, NGO-teacher classrooms featured inclusive, creative teaching styles and more efficient time use. Government teachers were not observed to adopt NGO-specific behaviours, while NGO teachers appeared to be limited by the government school environment.

Bordoloi *et al.* (2017) wrote a paper to analyse the role played by the NGOs in promoting the right to education and to focus on the achievements made by them. They found that NGOs have contributed tremendously in safeguarding and promoting the right to education. The

Government of India laid emphasis on implementation of non-formal education through local and national NGOs as well as other voluntary agencies. It viewed NGOs as vibrant partners in the process of moving towards the goals of Education for All (EFA). One of the best things about NGOs is that they work at the grassroots level. Further they try to connect the masses and spread awareness on the importance of getting good education to march ahead in life. The paper suggested that NGOs must emphasise girls' education along with education for physically and mentally challenged children and spread moral and value education.

Blum (2009) did research to critically examine the nature and potential of NGO provision of primary schooling in India. The research found that NGO programmes have had positive impacts in terms of both access and quality because, firstly, the programmes are small-scale and locally-rooted, and secondly, their organisation allows for greater flexibility and room for innovation in areas such as curriculum design, teacher education, and school networking than is commonly possible within government schools.

Batley and Rose (2010) wrote a paper that aimed to understand the relationships between governments and non-state service providers. It studied the strategies NGOs use to balance independence, financial survival and commitment to their own goals. These are avoiding dependence on government or donors, collaborating on a voluntary and equal basis; avoiding dependence on any one funding source, to retain capacity to shape relationships; and accepting dependence on one or a few sources of funding, and adapting the NGO to funders' requirements. This paper helps understand how NGOs can engage in advocacy and service provision simultaneously.

MacKenzie (2003) did research on a multilingual education project in Andhra Pradesh, India to study the networks of relationships and expertise required to support such an initiative. This paper provided some insights into the language aspect of NGOs teaching in tribal and remote areas. The paper concluded that it is better to learn to read in a language with which the child is familiar and it is better to use the mother tongue as a medium of instruction. Some of the benefits are it maintains local languages and culture, provides a more effective education for minority language children, contributes to a decrease in the dropout rate, provides a smoother transition to state and national languages and it increases access to secondary and higher education.

Dahl (2017) did a case study on the NGO Mother Miracle, a local actor in the field of Education and Poverty Reduction (EPR) in Rishikesh, Uttarakhand to analyse the issue of accountability. This study concluded that an NGO's accountability can be measured from various angles. The paper brings up the issue of NGOs fund-chasing resulting in launched projects with questionable efficiency. The paper points out that proper check on accountability of NGOs will ensure better funding and better impact of the NGO.

Lakshmi (2018) conducted a study to examine the role of NGOs in the promotion of primary education for tribals in non formal mode. For the NGO observed under this study, the grants from the government are the most important source of funds for the NGOs involved in primary level education followed by donations and service charges. The problems encountered by the NGOs includes poor attendance by the tribals, lack of cooperation from beneficiaries, user charges are not acceptable to tribals, mismatch of timings, decline in the funds from the state, high amount of salaries for the staff, inadequate grants, irregular flows of income, venue selection, and increasing expenditure on overheads. The direct benefits attributable to primary education facilitated by the NGO includes knowledge levels, listening skills, reading skills, writing skills, awareness levels and speaking skills. The paper suggests a collaborative effort between government and NGOs to promote non-formal education.

Reza (2022) wrote a paper which examined the role of NGOs in promoting education in developing countries and explored their successes and challenges. The researcher did a case study of six NGOs in south east Asia to find out where these NGOs were successful and made suggestions for improvement. It noted that for an NGO to be successful, their efforts and solutions must be sustainable, therefore, all NGOs require continued and consistent funding from their donors, which can be a significant challenge. It also listed other challenges such as finding quality teachers and language barriers. The paper also pointed out that extreme poverty can prevent some from continuing their education, despite the support provided by NGO. The paper suggested that NGOs should focus on professional development and developing curriculum that is culturally relevant. It also recommended adult literacy programs to increase parental involvement.

Analysis:

Based on the reviews, it was found that NGOs have a major impact in providing education in places where regular school education is either not available or not as impactful. Under the SSA scheme the NGOs played a pioneering role in preparing for inclusive education and providing a transitional period towards its establishment where the state governments were able to take over these responsibilities (Furuta and Thamburaj, 2014). NGOs have also contributed tremendously in safeguarding and promoting the right to education. The Government of India laid emphasis on implementation of non-formal education through local and national NGOs as well as other voluntary agencies. It viewed NGOs as vibrant partners in the process of moving towards the goals of Education for All (EFA). One of the best things about NGOs is that they work at the grassroot level. Further they try to connect the masses and spread awareness on the importance of getting a good education to march ahead in life (Bordoloi et al., 2017). NGO programmes have had positive impacts in terms of both access and quality because, firstly, the programmes are small-scale and locally-rooted, and secondly, their organisation allows for greater flexibility and room for innovation in areas such as curriculum design, teacher education,

and school networking than is commonly possible within government schools (Blum, 2009). NGO-teacher classrooms were also found to feature inclusive, creative teaching styles and more efficient time use (Kumar, 2019).

Various challenges faced by the NGOs were also noted. Without safeguards, large-scale replication without safeguards by the government of such NGO innovations as the 'alternative school' and the 'voluntary teacher' could lower the quality of education (Jagannathan, 2001). Some of the other problems include positions of teachers not being secure and them being paid less than government school teachers. Teachers who worked under NGOs were not regarded as proper staff in schools. (Furuta and Thamburaj 2014). Selection and hiring of resource teachers and other personnel, the formulation of budgets, expenditures, etc. have been an issue of concern (Furuta and Thamburaj, 2014, Guha, 2019, Reza, 2022). The difficulty of building relationships with key stakeholders like government officials, school teachers, and corporate donors is also a huge challenge (Guha, 2019). Kumar (2019) found that NGO teachers appeared to be limited by the government school environment. Poor attendance, lack of cooperation from beneficiaries, user charges are not being acceptable, mismatch of timings, decline in the funds from the state, high amount of salaries for the staff, inadequate grants, irregular flows of income, venue selection, and increasing expenditure on overheads were some of the challenges identified by Lakshmi (2018). Language barriers and extreme poverty were identified as barriers by Reza (2022).

Despite these problems and challenges, most of the papers identified the merits of NGOs in providing non-formal education and made suggestions to improve their effectiveness. The most common suggestion in one form or another was better collaboration between the government and the NGOs (Jagannathan, 2001, Lakshmi, 2018). Muralidharan *et al.* (2010) suggested that there should be regular rigorous evaluation methodologies to measure the effectiveness of NGO interventions. Good leadership, commitment to a decentralised organisational structure, employee empowerment, and close attention to employee recruitment and training could also help overcome some of the barriers commonly faced by NGOs (Guha, 2019). NGOs should emphasise girls' education along with education for physically and mentally challenged children and spread moral and value education (Bordoloi *et al.*, 2017). Batley and Rose (2010) noted that the NGOs under their case study must find the proper balance between their donors and their own values to maintain independence, financial survival and commitment to their own goals. In remote areas and places with language barriers, it is better to learn to read in a language with which the child is familiar and it is better to use the mother tongue as a medium of instruction, as it maintains local languages and culture, provides a more effective education for minority language children, contributes to a decrease in the dropout rate, provides a smoother transition to state and national languages and it increases access to secondary and higher education (MacKenzie, 2003). There should also be proper checks on

accountability of NGOs to ensure better funding and better impact of the NGO (Dahl, 2017). Reza (2022) found that for an NGO to be successful, their efforts and solutions must be sustainable, therefore, all NGOs require continued and consistent funding from their donors. The paper suggested that NGOs should focus on professional development and developing curriculum that is culturally relevant. It also recommended adult literacy programs to increase parental involvement.

Conclusion:

Education for all is essential for all a developing nation like India. This means that active steps need to be taken to make education accessible to all children of India. Despite all the steps taken by the government, we still have a long way to go for universalising education. NGOs play a major role in pushing this process along. They are great for providing formal or non formal education in places where regular school education is either not available or not as impactful. They help provide education to marginalised groups such as girls, lower sections of society and people with disabilities. They do face many challenges, such as finding competent teachers, problems with funding and proper cooperation with the beneficiaries. However despite all the barriers and challenges, the researchers unanimously agreed that NGOs have a significant impact on universalizing education in India and thus made suggestions to negate the barriers and make the NGOs more impactful.

References:

1. Jagannathan, S. (2001). The Role of Nongovernmental Organisations in Primary Education. World Bank Institute, The World Bank. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/19714/multi0page.pdf?sequence=1&isAllowed=y>
2. Furuta, H. and Thamburaj, R. (2014). Promoting Inclusive Education in India: Roles played by NGOs under the Sarva Shiksha Abhiyan scheme in the State of Tamil Nadu. *Journal of Special Education Research*. DOI: <https://doi.org/10.6033/specialeducation.3.15>
3. Guha, P. (2019). Going to Scale: A Case Study of an Indian Educational NGO. *Voluntas* 30, 1365–1379 (2019). DOI: <https://doi.org/10.1007/s11266-019-00099-3>
4. Kumar, A. (2019). Cultures of learning in developing education systems: Government and
5. NGO classrooms in India. *International Journal of Educational Research*, Volume 95, Pages 76-89, ISSN 0883-0355. DOI: <https://doi.org/10.1016/j.ijer.2019.02.009>
6. Bordoloi, C., Kumar, D., & Bordoloi, C. (2017). A review on the role of non-governmental organizations in achieving right to education. *National Journal of Multidisciplinary Research and Development*, 2(3), 7-11. Retrieved from: <https://www.academia.edu/download/104980251/2-2-58-166.pdf>

7. Blum, N. (2009). Small NGO schools in India: Implications for access and innovation. *Compare*, 39(2), 235-248. Retrieved from: <https://www.tandfonline.com/doi/abs/10.1080/03057920902750491>
8. Batley, R., & Rose, P. (2013). Collaboration in delivering education: relations between governments and NGOs in South Asia. In *Achieving Education for All through Public–Private Partnerships?* (pp. 107-113). Routledge. Retrieved from: <https://api.taylorfrancis.com/content/chapters/edit/download?identifierName=doi&identifier Value=10.4324/9781315879383-9&type=chapterpdf>
9. MacKenzie, P. (2003). Relationship between government and NGOs in a multilingual education project in Andhra Pradesh, India. *International Network for Development, United Kingdom*, Retrieved December, 15, 2007. Retrieved from: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=b85695c47db92e2e120bb6d9e0982e92615ceb74>
10. Dahl, P. (2017). NGOs, EDUCATION & ACCOUNTABILITY (Bachelor's thesis, Lund University of Sociology, Lund, Sweden). Retrieved from: <https://lup.lub.lu.se/student-papers/record/8913465/file/8913467.pdf>
11. Lakshmi, A. (2018). The Role of NGOs in Providing Non Formal Primary Education: A Case Study of Khammam District in Telangana. *International Journal of Research in Social Sciences*, 8(6), 210-219. Retrieved from: <https://www.academia.edu/download/57204053/9IJRSSJune-7385P-.pdf>
12. Reza, F. (2022). The role of NGOS in promoting education: Successes and challenges. *International Journal of Education, Learning and Development*, 10(1), 24-43. DOI:<https://doi.org/10.37745/ijeld.2013>
13. <https://asercentre.org/>
14. <http://www.education.nic.in/>
15. <https://www.povertyactionlab.org/south-asia>
16. <https://www.pratham.org/>
17. <https://www.teachforindia.org/>
18. <https://www.akshayapatra.org/>
19. <https://www.roomtoread.org/>
20. <https://www.nanhikali.org/>
21. <https://www.educategirls.ngo/>
22. <http://www.bpaindia.org/>
23. <https://enableindia.org/>
24. <http://uis.unesco.org/en/country/in>

A STUDY ON THE ROLE OF RUMINATION AND DEPRESSION ON THE MENTAL HEALTH OF ADOLESCENTS

Rehna Chandran K* and Parminder

School of Education, Lovely Professional University, India

*Corresponding author E-mail: rehnak638@gmail.com

Introduction:

Nowadays, the stress levels are remarkably increased due to multiple health factors, and now it becomes significantly inflamed among adolescents for several reasons like academics as well personal issues. Positive mental health is essential among adolescents / school going children, which helps them to deal with stressful situations that gradually leads them to make healthy interactions around them. Adolescence is basically the phase of life between childhood and adulthood. It is one of the remarkable aspects of human development which is laying the foundation of good health. These include physical, psychological, intellectual and also the development of their own moral compass. In today's fast-paced world, the mental well-being of adolescents is increasingly under scrutiny, particularly within the context of the school education system. The pressures and challenges faced by young minds in navigating academic expectations, social dynamics, and personal growth can often lead to heightened levels of mental stress. This stress manifests in various forms, with rumination and depression emerging as significant factors affecting the mental health of adolescents.

Rumination, characterized by repetitive and intrusive thoughts about past experiences or concerns about the future, plays a pivotal role in amplifying the negative impact of stressors on adolescents' mental health. As young individuals grapple with academic performance, peer relationships, and self-identity, the tendency to ruminate on perceived failures or anxieties can exacerbate feelings of inadequacy and hopelessness. Moreover, within the school environment, where achievement is often equated with worth, the relentless cycle of rumination can intensify the pressure to excel, perpetuating a detrimental cycle of stress and self-doubt. Depression, a prevalent mental health condition among adolescents, further compounds the challenges faced within the school education system. The onset of depressive symptoms, ranging from persistent sadness to loss of interest in activities, can significantly impair academic performance and social functioning. As adolescents navigate the complexities of adolescence, including hormonal changes and societal expectations, the presence of depression can impede their ability to cope effectively with stressors, exacerbating feelings of isolation and helplessness. Within the school context, where the emphasis on achievement and conformity can exacerbate feelings of inadequacy, depression can further undermine adolescents' sense of self-worth and belonging.

In addressing the intertwined dynamics of rumination, depression, and mental health among adolescents, it is crucial to recognize the multifaceted nature of the challenges they face. Beyond academic achievement, fostering a supportive school environment that prioritizes holistic well-being is essential in mitigating the negative impact of stressors on adolescents' mental health. By promoting resilience, fostering healthy coping mechanisms, and destigmatizing mental health issues, educators and policymakers can empower adolescents to navigate the complexities of adolescence with confidence and resilience.

Rumination

Rumination involves when people are stuck in a cycle of negative thoughts. The repetitive thinking or negative thoughts will aggravate anxiety or other related disorders. While people tend to be prone to rumination from time to time, it can lead to stress and further problems. However, rumination might have a negative aspect which include continuous pessimistic behavior, cognitive distortions and major focus on the negative sphere of a situation. In young adults and youths there might be chances for depression symptoms which is a key response of rumination. But it is unclear in the case of anxiety and externalizing behavior which are co-occurring symptoms of depression.

Katie, McLaughlin, Susan Noeln - Hoeksema a study based on 'The role of rumination in promoting and preventing depression In adolescent girls' (2013) states that twice a day women are more likely to get into depression when compared to men. And, these gender differences emerged in early adolescents. The main reason for this depression among adolescent girls is the distress in females compared to males. Lindsey B. Stone, Brandon E gibb (2015) stated that the tendency of being co-ruminate with fellow peers regarding on-going problems increase adolescents' depression risk. Clorinda E Velez and Elizabeth D Krause in 2016 made a related paper regarding how social support seeking and rumination can predict depression and anxiety symptoms. This particular paper examined that social support seeking would lead to low or high levels of rumination and that would be more helpful for adolescents. Studies found that rumination has a negative and weak correlation with students' academic performance. The study states that rumination has been related with mental health issues in adolescents. Kryz et al investigates that psychological distress is being a key product of goal - directed rumination. And, another more study reveals that test anxiety, academic procrastination has a remarkable positive relationship with rumination and worry.

Adolescents

According to the Oxford dictionary, adolescence is the transitional and developmental period occurring between childhood and adulthood. So, the period between the ages of 13 and 19 that marks the transition from childhood to adulthood is known as adolescence. Research shows that adolescents undergo remarkable brain development which impacts their behavior when they

are functioning in this phase. When children step into the adolescents it also marks their changes in social, emotional and physical spheres as well. They are starting to form independent identities developing their independence and abilities. These adolescent changes are greatly intertwined and developed by experiences and environments.

Adolescent physical and psychological changes typically begin earlier, in the preteen or "tween" years, which are between the ages of 9 and 12. Adolescence may be a period of confusion as well as exploration. During this phase of transition, teenagers may have to make tough decisions regarding their education, friendships, sexual orientation, gender identity, drugs, and alcohol. These decisions can lead to issues about independence and identity as they develop their sense of self. Anxiety over one's physical growth, changing connections with others, and one's role in the wider world might naturally arise throughout this transition. Adolescence is a time when major mental health disorders also occur, albeit mild anxiety and other challenges are common. Early intervention for a condition can assist to achieve the best potential result.

According to the Department of Health and Human Services, one in five young adults has a diagnosable disease. However, adolescents may also experience anxiety, depression, and other forms of distress that are developmentally appropriate and may not last. It's difficult to know when a problem needs clinical attention, but when in doubt, asking a school counselor or other mental health professional is the best course of action. Parents can help by learning to recognize early warning signs of worrisome disorders and not being afraid to ask about their child's thoughts and experiences. Addressing mental illness and receiving early treatment can help prevent an increase in the severity and duration of the disorder. If treated early, most symptoms can be effectively managed or treated.

Mental Health

Basically, mental health includes a person's emotional, psychological and social well-being. It basically has an enormous impact on how they think, feel, make choices etc. Mental health is actually important for adolescents because they are actually undergoing remarkable developmental changes, for example, brain development - in this particular period they are making important choices and decisions.

Depression

Depression causes sentiments of sadness and/or a misfortune of intrigued in activities you once enjoyed. It can lead to a variety of emotional and physical problems and can diminish the capacity to function at work and at home. Depression influences an estimated one in 15 adults (6.7%) in any given year. And one in six individuals (16.6%) will encounter sadness at a few times in their life. Sadness can happen at any time, but on normal, to begin with shows up amid the late high schoolers to mid-20s. Ladies are more likely than men to encounter sadness. A few things appear that one-third of ladies will encounter a major depressive scene in their lifetime.

Depression can affect anybody — including children and grown-ups. Ladies and individuals relegated female at birth are more likely to have sadness than men and individuals assigned male at birth.

Review of Literature

The purpose of this study is to explore the role of rumination and depression on the mental health of adolescents. So, this section includes the reviews related to the role of rumination and depression which impacts the mental health of adolescents.

Willem Kuyken, E.D Watkins et al (2006), A study on ‘Rumination in adolescents a risk for depression’. The study tends to identify the high risk depression among adolescents and the important steps to reduce this depression morbidity. The current study differentiated a sample of 326 adolescents whose ages ranged from 14 - 18 through a test. This particular study finds that adolescents who are at risk for depression reported higher rumination than adolescents not at risk of depression.

Benjamin Hankin (2009), A study on “Rumination and depression in adolescents : investigating symptom specificity in a multiwave prospective study”. The study analyzes the response of 467 students from the selected schools in Chicago. The students from those selected schools completed a series of questionnaires and were debriefed. The study highlights that the role of rumination contributes to depressive symptoms over time.

Katie McLaughlin, Susan Noeln - Hoeksema (2013), Presented a paper on the topic ‘The role of rumination in promoting and preventing depression in adolescent girls’. This particular paper deals with how women are more likely to get depression compared to men twice a day. This study concluded that the ongoing gender differences emerged in early adolescents, and the major reason for this depression among adolescent girls is distress in females rather than males.

Paul o Wilkinson, Tim J Croudace *et al.* (2013). Made a paper of “Rumination, anxiety depressive symptoms and subsequent depression in adolescents at risk for psychopathology : a longitudinal cohort study”. The study compressed the sample of 658 healthy adolescents through a self-report questionnaire, and the study identified that a single rumination factor was correlated with cognitive and somatic symptoms of depression and one factor representing adaptive responses to low mood.

Alison a papadakis, Neil p Jones *et al.* (2015), A study based on “self regulation, Rumination and vulnerability to depression in adolescent girls. The data analysis of the sample of 223 girls ranging from 7th to 12th grades revealed that emerging gender differences lead to higher risks of depression and ruminative behavior among adolescent girls than boys.

Arin Connel, Sarah Danzo *et al.* (2019), Published a paper on ‘Rumination in early adolescent girls: An EEG study of cognitive control and emotional responding in an emotional Go/NOGO task’. This particular paper examines the neurocognitive process related to

Rumination among 60 mother - daughter dyads through children's depression inventory (CDI), center for epidemiological studies depression scale (CES -D), cognitive, emotion regulation questionnaire child version (CERQ). diagnostic interview and emotional Go/NoGo task. The data was recorded using a Biopac MP 150 system. The overall study found that ten mothers reported clinically depressive symptoms on the CES - D scale and four girls diagnosed depressive symptoms on the CDI scale.

Michael J Tumminia, Blake A Colainne *et al.* (2020), Made a paper on 'How is mindfulness linked to negative and positive affect? Rumination as an explanatory process in a prospective longitudinal study of adolescents'. The research study was conducted among 519 adolescents in a large suburban high school in the northeastern United States. The students completed a series of self - reported questionnaires which assessed mindfulness, rumination and negative and positive affect three times during a single academic year. The results of this particular study shows that the students who were better able to observe difficult experiences along with openness and curiosity were less likely to go through the causes and consequences of such an experience.

Niyousha Hisseinichimeh, Andrea K *et al.* (2020), Made a paper on the topic 'Modelling and estimating the feedback mechanisms among depression, rumination and stressors in adolescents'. The study investigated the systematic interactions and relationship between depressive symptoms, rumination and stress. The study was conducted among 1057 participants from grade 6 to 8 from two middle schools in central Connecticut. The data were collected over a span of seven months through, The Life event scale for Children (LESC), The children's responsive style questionnaire (CRSQ) and The Children's depression Inventory (CDI). Through this study and based on the findings, the author concluded that individualized prevention and intervention is important for depression. And, the study also supports the idea that rumination contributes to depression by keeping stressors active.

Henrietta Roberts, Rachel h Jacobs *et al.* (2021), made a paper on the "mechanisms of rumination change in adolescent depression: study protocol for a randomized controlled trial of rumination focused cognitive behavioral therapy to reduce ruminative habit and risk of depressive lapse in high-ruminating". The study analyzes the high ruminating behavior and risk of depression through RCT of depression prevention and rumination-focused cognitive behavioral therapy (RFCBT). The particular study takes place at the University of Utah in the USA. The eligible participants of this study were postpubertal adolescents aged 14-17 with a previous diagnosis of major depressive disorder. The current study revealed that adolescent onset depression often follows a chronic and recurrent course and it is also associated with a number of long-term negative outcomes.

Sarah T. Malamut, Christina Salmivalli (2021), A study of the “Rumination as a mediator of the prospective association between victimization and bullying”. The study investigates victimization in childhood as a risk factor for bully committal in early adolescents and examines how rumination as a socio - cognitive factor mediates this. The study was conducted through a set of questionnaires which were given to students from grade 3 to 4. This particular longitudinal study found that victimization is positively associated with bullying and also the general rumination was positively related to this bullying.

Tiago Castro, Tiago Miguel Pinto *et al.* (2023), Made a paper on ‘The effect of parenting behavior on adolescents' rumination: a system review of longitudinal studies’. The study was conducted among adolescents aged 1 to 13 years old through an assessment. This particular paper indicates that positive affectivity, authoritative parenting, low control are associated with lower rumination.

Lindsey b stone, Brandon E gibb (2024), Through the study about the “Brief report: preliminary evidence that co-rumination fosters adolescents' depression risks by increasing rumination “. The particular research was conducted in a local high school of 336 students through an assessment administered six months in a group setting, and out of 336, 195 students completed the assessment. The current study reveals that the co -rumination did not directly increase depressive symptoms, but indirectly increased depressive symptoms by increasing adolescents' tendency to ruminate.

Overview of Review

The purpose of this study is to explore the role of rumination and depression on the mental health of adolescents. So this section includes the overview of reviews related to the role of rumination and depression which impacts the mental health of adolescents.

The primary set of reviews which highlights the high risk of depressive behavior among adolescent girls. Katie McLaughlin, Susan Noeln - Hoeksema (2013). Presented a paper on the topic ‘The role of rumination in promoting and preventing depression in adolescent girls’. This study concluded that the ongoing gender differences emerged in early adolescents, and the major reason for this depression among adolescent girls is distress in females rather than males. Alison a papadakis, Neil p Jones *et al.* (2015). A study based on “self regulation, Rumination and vulnerability to depression in adolescent girls”. The data analysis of the sample of 223 girls ranging from 7th to 12th grades revealed that emerging gender differences lead to higher risks of depression and ruminative behavior among adolescent girls than boys. Another study by Arin Connel, Sarah Danzo *et al.* (2019). Published a paper on ‘Rumination in early adolescent girls: An EEG study of cognitive control and emotional responding in an emotional Go/NOGO task’. This particular paper examines the neurocognitive process related to Rumination among 60 mother - daughter dyads through children's depression inventory (CDI), center for

epidemiological studies depression scale (CES -D), cognitive, emotion regulation questionnaire child version (CERQ). diagnostic interview and emotional Go/NoGo task. The data was recorded using a Biopac MP 150 system. The overall study found that ten mothers reported clinically depressive symptoms on the CES - D scale and four girls diagnosed depressive symptoms on the CDI scale.

Further it is related with the relationship of depression, rumination, childhood trauma and stress that impacts the mental health of adolescents. Willem Kuyken, E.D Watkins *et al.* (2006). A study on 'Rumination in adolescents a risk for depression'. The study tends to identify the high risk depression among adolescents and the important steps to reduce this depression morbidity. The current study differentiated a sample of 326 adolescents whose ages ranged from 14 - 18 through a test. This particular study finds that adolescents who are at risk for depression reported higher rumination than adolescents not at risk of depression. Benjamin I Hankin (2009). A study on "Rumination and depression in adolescents: investigating symptom specificity in a multiwave prospective study". The study highlights that the role of rumination contributes to depressive symptoms over time. Niyousha Hisseinichimeh, Andrea K *et al.* (2020). Made a paper on the topic 'Modelling and estimating the feedback mechanisms among depression, rumination and stressors in adolescents'. The study investigated the systematic interactions and relationship between depressive symptoms, rumination and stress. The study was conducted among 1057 participants from grade 6 to 8 from two middle schools in central Connecticut. Through this study and based on the findings, the author concluded that individualized prevention and intervention is important for depression. And, the study also supports the idea that rumination contributes to depression by keeping stressors active. Henrietta Roberts, Rachel h Jacobs *et al.* (2021) made a paper on the "mechanisms of rumination change in adolescent depression: study protocol for a randomized controlled trial of rumination focused cognitive behavioral therapy to reduce ruminative habit and risk of depressive lapse in high-ruminating". The current study revealed that adolescent onset depression often follows a chronic and recurrent course and it is also associated with a number of long-term negative outcomes. Sarah T. Malamut, Christina Salmivalli (2021). A study of the "Rumination as a mediator of the prospective association between victimization and bullying". The study investigates victimization in childhood as a risk factor for bully committal in early adolescents and examines how rumination as a socio cognitive factor mediates this. The study was conducted through a set of questionnaires which were given to students from grade 3 to 4. This particular longitudinal study found that victimization is positively associated with bullying and also the general rumination was positively related to this bullying. Lindsey b stone, Brandon E gibb (2024). Through the study about the "Brief report: preliminary evidence that co-rumination fosters adolescents' depression risks by increasing rumination". The current study reveals that the co -rumination did not directly increase

depressive symptoms, but indirectly increased depressive symptoms by increasing adolescents' tendency to ruminate.

The final part of the overview which deals with the two longitudinal study that highlights Paul o Wilkinson, Tim J Croudace *et al.* (2013). Made a paper of “Rumination, anxiety depressive symptoms and subsequent depression in adolescents at risk for psychopathology: a longitudinal cohort study”. The study compressed the sample of 658 healthy adolescents through a self-report questionnaire, and the study identified that a single rumination factor was correlated with cognitive and somatic symptoms of depression and one factor representing adaptive responses to low mood. Michael J Tumminia, Blake A Colainne *et al.* (2020). Made a paper on ‘How is mindfulness linked to negative and positive affect? Rumination as an explanatory process in a prospective longitudinal study of adolescents’. The research study was conducted among 519 adolescents in a large suburban high school in the northeastern United States. The students completed a series of self - reported questionnaires which assessed mindfulness, rumination and negative and positive affect three times during a single academic year. The results of this particular study shows that the students who were better able to observe difficult experiences along with openness and curiosity were less likely to go through the causes and consequences of such an experience. Tiago Castro, Tiago Miguel Pinto *et al.* (2023). Made a paper on ‘The effect of parenting behavior on adolescents' rumination : a system review of longitudinal studies’. The study was conducted among adolescents aged 1 to 13 years old through an assessment. This particular paper indicates that positive affectivity, authoritative parenting, low control are associated with lower rumination.

Significance of the Study

This present study delves into the crucial relationship between rumination, depression, and the mental health of adolescents. By examining the role of rumination and depression, the paper shed light on how these factors intertwine and impact the well-being of young individuals. This study is significant because adolescence is a pivotal stage where mental health issues often emerge, and understanding the mechanisms behind them is essential for effective intervention and support. Furthermore, the paper contributes to existing knowledge by highlighting the nuanced influence of rumination on depression in adolescents. Rumination, or repetitive negative thinking, can exacerbate depressive symptoms, leading to a vicious cycle of negative thoughts and emotions.

By elucidating this relationship, this work provides valuable insights into potential targets for intervention and prevention strategies aimed at mitigating the adverse effects of rumination and depression on adolescent mental health. Overall, the study holds significance in advancing our understanding of how rumination and depression intersect and impact the mental well-being of adolescents, thereby paving the way for more targeted and effective interventions in this

vulnerable population. Hence, this study explores the connection between rumination, depression, and adolescent mental health. It sheds light on how these factors interact and affect well-being during this crucial stage of development. By uncovering the role of rumination in exacerbating depression, it offers insights for targeted interventions and support strategies. Overall, it contributes to understanding and addressing mental health challenges in adolescents more effectively.

Objective of the Study

1. To study the role of rumination and depression on the mental health of adolescents.
2. To study the relationship between rumination and depression.

Role of Rumination and Depression

Rumination and depression among adolescents are interconnected phenomena that can significantly impact mental health and well-being during a crucial developmental stage. Understanding their role and relationship is essential for effective prevention and intervention strategies. Rumination, defined as repetitive and intrusive thinking about negative experiences, feelings, and problems, plays a central role in the maintenance and intensity of depression among adolescents. Adolescents who engage in rumination tend to dwell on their distress without actively seeking solutions or positive distractions, which can prolong and intensify feelings of sadness, hopelessness, and helplessness. This cognitive pattern becomes a vicious cycle, reinforcing negative emotions and impairing problem-solving abilities.

Several factors contribute to the development and persistence of rumination among adolescents.

- Personality traits such as neuroticism and low self-esteem predispose individuals to engage in rumination as a maladaptive coping mechanism.
- Environmental stressors such as academic pressure, family conflicts, peer rejection, and social media comparisons can trigger rumination, especially when adolescents lack adequate coping skills or social support networks.
- The relationship between rumination and depression is bidirectional and complex.
- Rumination exacerbates depressive symptoms, depression also enhances rumination tendencies, creating a self-perpetuating cycle.

This reciprocal relationship underscores the importance of addressing both rumination and depression simultaneously in adolescent mental health interventions.

Preventive interventions aimed at reducing the risk of rumination and depression among adolescents should focus on building resilience and enhancing coping skills. School-based programs that promote emotional regulation, problem-solving, social skills, and positive peer relationships can mitigate the impact of stressors and foster adaptive responses to adversity. Parental involvement and family-based interventions are also crucial in addressing rumination

and depression among adolescents. Creating a supportive and nurturing family environment, improving communication and conflict resolution skills, and fostering emotional regulation within the family can buffer adolescents against the development of rumination and depression. In conclusion, rumination and depression are intertwined processes that significantly affect the mental health and well-being of adolescents. Understanding the mechanisms underlying their relationship is essential for designing effective prevention and intervention strategies. By targeting rumination and depression simultaneously and addressing predisposing factors and environmental stressors, mental health professionals can help adolescents build resilience and navigate the challenges of adolescence more effectively.

Conclusion:

In conclusion, this chapter has delved into the intricate relationship between rumination, depression, and the mental health of adolescents. Through a comprehensive exploration, we have elucidated the significant impact of rumination and depression on the psychological well-being of this vulnerable population. By examining existing literature and theoretical frameworks, we have gained insights into how rumination and depression intertwine, exacerbating the challenges faced by adolescents in maintaining optimal mental health. And, the study has underscored the detrimental effects of rumination on adolescents, serving as a precursor to the development and exacerbation of depressive symptoms. The cyclical nature of rumination can trap individuals in negative thought patterns, further amplifying feelings of hopelessness and despair. Moreover, the compounding effects of rumination and depression can impede adolescents' ability to cope with stressors and navigate daily challenges, potentially leading to long-term consequences for their mental well-being.

Furthermore, this chapter has highlighted the importance of early identification and intervention strategies to address rumination and depression among adolescents. By implementing targeted interventions such as cognitive-behavioral therapy and mindfulness-based approaches, mental health professionals can equip adolescents with effective coping mechanisms to manage rumination and mitigate its impact on depressive symptoms. Additionally, fostering supportive environments within families, schools, and communities can provide adolescents with the necessary resources and social support to navigate these challenges more effectively. In conclusion, this chapter underscores the critical need for continued research and interventions aimed at understanding and addressing the role of rumination and depression in shaping the mental health of adolescents. By fostering a deeper understanding of these interconnected factors, we can strive towards promoting resilience and well-being among adolescents, ensuring they have the support and resources needed to thrive in today's complex world.

References:

1. Hankin L. Benjamin. (2009, August 21). 'Rumination and depression in adolescents : Investigating symptoms specificity in a multiwave prospective study '. *National library of medicine*. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2730221/>
2. Roberts. Henrietta & Jacob. H. Rachel. (2021, April 23). 'Mechanisms of rumination change in adolescent depression (RuMeChange): study protocol for a randomized controlled trial of rumination-focused cognitive behavioral therapy to reduce ruminative habit and risk of depressive relapse in high-ruminating adolescents'. *National Library of medicine*. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8062943/>
3. McLaughlin. Katie & Nolen-Hoksema. Susan. The Role of Rumination in Promoting and Preventing Depression in Adolescent Girls In: T. Strauman, Costanzo, Garber, & Abramson (Eds.). *Depression in Adolescent Girls*, (pp. 112-129). New York: Guilford Press.
4. Stone B. Lindsey & Gibb. E. Brandon. (2015). 'Brief report: Preliminary evidence that co-rumination fosters adolescents' depression risk by increasing rumination'. *Journal of adolescents*. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0140197114001791>
5. Velez. E. Clorinda & Krause. E. Elizabeth. (2016, July 27). 'Social Support Seeking and Early Adolescent Depression and Anxiety Symptoms: The Moderating Role of Rumination'. *The journal of early adolescents*. Retrieved from <https://journals.sagepub.com/doi/10.1177/0272431615594460>
6. Hisseinichimeh. Niyousha & K. Andrea. (2007). 'Modeling and estimating the feedback mechanisms among depression, rumination, and stressors in adolescents'. *Ploze one*. Retrieved from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0204389>
7. Papadakis. A. Alison. & Prince. P. Rebecca. (2006, August 9). 'Self-regulation, rumination, and vulnerability to depression in adolescent girls'. *Cambridge University press*. Retrieved from <https://www.cambridge.org/core/journals/development-and-psychopathology/article/abs/selfregulation-rumination-and-vulnerability-to-depression-in-adolescent-girls/19A90A963>
8. Wilkinson. O. Paul. & Croudace. J. Tim. (2013, October 8). 'Rumination, anxiety, depressive symptoms and subsequent depression in adolescents at risk for psychopathology: a longitudinal cohort study'. *BMC Psychiatry*. Retrieved from <https://bmcpsy psychiatry.biomedcentral.com/articles/10.1186/1471-244X-13-250>
9. Malamut. T. Sarah. & Salmivalli Christina. (2021, January 6). 'Rumination as a Mediator of the Prospective Association Between Victimization and Bullying'. *Research on child and*

adolescent psychopathology. Retrieved from
<https://link.springer.com/article/10.1007/s10802-020-00755-z>

10. Castro. Tiago. & Miguel. Tiago (2023, October 9). 'The effect of parenting behaviors on adolescents' rumination: a systematic review of longitudinal studies'. *European child and adolescent psychiatry*. Retrieved from <https://link.springer.com/article/10.1007/s00787-023-02309-2>
11. Connel. Arin. & Danzo. Sarah. (2019, December 16). 'Rumination in Early Adolescent Girls: An EEG Study of Cognitive Control and Emotional Responding in an Emotional Go/NoGo Task'. *Cognitive, affective, & behavioral neuroscience*. Retrieved from. <https://link.springer.com/article/10.3758/s13415-019-00761-9>
12. Marshchall. Amy. (2022, August 7). 'What is adolescent psychology?'. *Very well mind*. Retrieved from. <https://www.verywellmind.com/what-is-adolescent-psychology-5201894>
13. Juby. Bethany. (2024, March 22). 'What is mental health?'. *Medical news today*. Retrieved from. <https://www.medicalnewstoday.com/articles/154543>

ETHICAL NAVIGATION IN AI-DRIVEN HR: REVOLUTIONIZING PROCESSES WHILE MITIGATING BIAS AND ENSURING ACCOUNTABILITY

John Wesley¹, Laxman Singh², Santosh Yadav³, Kalyanrao Kulkarni*⁴ and Rahul S.⁴

¹Department of CSE,

²Department of AI & ML,

³Department of ECE,

⁴Department of MBA,

Guru Nanak Dev Engineering College, Bidar, Karnataka, India

*Corresponding author E-mail: rao.kalyan999@gmail.com

Abstract:

An Artificial Intelligence (AI) is rapidly transforming the landscape of Human Resource Management by revolutionizing processes from recruitment to performance management. While offering significant potential for efficiency and decision-making enhancement, AI integration raises complex ethical considerations, particularly regarding bias and fairness. This research paper provides a comprehensive analysis of the multifaceted impacts of AI on HR, exploring both its benefits and ethical challenges. Through in-depth examination of current trends, case studies, and scholarly research, the paper navigates the ethical landscape of AI in HR. It provides valuable perspectives on tactics for harnessing AI benefits while mitigating risks, emphasizing the importance of accountability.

Keywords: Human Resource Management, Artificial Intelligence, Ethics and Bias, Recruitment, Performance Management, Employee Engagement

Objectives of the Study

1. To investigate AI's transformative impact on HRM processes.
2. To examine ethical implications of AI-driven HR decision-making.
3. To explore practical approaches for ethical AI implementation in HR.
4. To assess challenges and ethical concerns in AI integration for HR.
5. To anticipate future trends and societal impacts of AI in HRM.
6. To identify areas for further research in ethical AI integration for HR.

Introduction:

Artificial Intelligence (AI) is significantly transforming traditional approaches in Human Resource Management (HRM) in the present-day context. The advent of The digital revolution has caused a time where artificial intelligence (AI) is not just a technology tool, but a crucial catalyst for creativity in various organizational processes. AI has the potential to revolutionize

HRM by automating chores, improving decision-making with data-driven insights, and personalizing employee experiences.

However, amidst this wave of transformation, it becomes imperative to pause and reflect on the ethical implications accompanying the rapid integration of AI in HR processes. While AI presents unparalleled opportunities for streamlining operations and boosting efficiency, it also raises profound ethical concerns. These concerns encompass issues of bias, fairness, privacy, and accountability, demanding careful consideration alongside technological advancements.

As organizations increasingly embrace AI-driven solutions in HR, it becomes essential to navigate this ethical landscape with diligence and foresight. This paper explores the intricate intersection of AI and HRM, delving into both its transformative potential and the ethical challenges it presents. Through a comprehensive analysis of current trends, case studies, and scholarly research, this paper aims to shed light on the ethical nuances inherent in AI-driven HR practices.

Thus, against the backdrop of rapid technological evolution, this paper underscores the importance of ethical navigation in AI-driven HR. It advocates for a balanced approach that harnesses the revolutionary potential of AI while actively mitigating bias and ensuring accountability. By critically examining the ethical dimensions of AI integration, organizations can pave the way for responsible innovation in HRM, thereby fostering a workplace environment that is both efficient and ethically sound.

Role of AI in HR:

Artificial Intelligence (AI) plays a transformative role in reshaping various functions within Human Resources (HR), driving efficiency, enhancing decision-making, and personalizing the employee experience. As organizations navigate the integration of AI in HR processes, it becomes crucial to understand its multifaceted applications and the corresponding benefits it brings while ensuring ethical navigation.

1. **Automation of Recruitment Processes:** AI-driven tools streamline recruitment processes by automating tasks such as resume screening, candidate sourcing, and initial interview screenings. By leveraging AI algorithms, organizations can efficiently identify top candidates based on skills, experience, and cultural fit, thereby reducing time-to-hire and enhancing recruitment outcomes.
2. **Enhancing Employee Engagement and Productivity:** AI-powered analytics enable HR professionals to gain deeper insights into employee behavior, preferences, and performance patterns. Through the analysis of extensive data, artificial intelligence (AI) has the capability to discover the various aspects that impact employee engagement and productivity. This enables firms to customize interventions and projects in order to

address unique needs. This customized strategy promotes a workforce that is more involved and motivated, ultimately leading to the success of the firm.

3. **Leveraging AI for Personalized Learning and Development:** AI facilitates personalized learning and development programs by analyzing individual employee data and preferences. Through adaptive learning algorithms, AI can recommend relevant training modules, development opportunities, and career pathways tailored to each employee's skills, aspirations, and performance. This customized method of learning not only improves the abilities of employees but also promotes a culture of ongoing progress and advancement inside the firm.

Ethical Considerations in AI-Driven HR:

As organizations embrace the incorporation of Artificial Intelligence (AI) into Human Resources (HR) processes, it becomes imperative to address the ethical considerations inherent in AI-driven HR practices. These considerations encompass various aspects, including bias and discrimination in algorithmic decision-making, privacy concerns in employee data collection and analysis, transparency and accountability in AI systems, and potential job displacement and workforce implications.

1. **Bias and Discrimination in Algorithmic Decision-Making:** AI algorithms, if not carefully designed and trained, have the potential to perpetuate existing biases and discrimination prevalent in society. Biased data sets or flawed algorithms can result in discriminatory outcomes in recruitment, performance evaluation, and other HR processes, thereby exacerbating inequalities and undermining organizational diversity and inclusion efforts.
2. **Privacy Concerns in Employee Data Collection and Analysis:** The utilization and examination of huge quantities of employee data by artificial intelligence systems give rise to notable privacy concerns. Employees may experience discomfort with the degree to which their personal information is being monitored, scrutinized, and even utilized to make decisions that impact their employment. It is crucial to prioritize transparent data practices and gain informed consent from employees in order to protect privacy rights in AI-driven HR.
3. **Transparency and Accountability in AI Systems:** Maintaining transparency and accountability in AI systems is paramount to building trust and ensuring responsible AI usage in HR. Organizations must be transparent about the criteria and algorithms used in AI-driven decision-making processes. Moreover, mechanisms for accountability, such as regular audits and assessments of AI systems, are necessary to detect and rectify potential biases or errors.
4. **Potential Job Displacement and Workforce Implications:** The automation of tasks through AI technologies may lead to job displacement and workforce restructuring, impacting

employee livelihoods and organizational dynamics. It is crucial for organizations to proactively address these implications by upskilling and reskilling employees, fostering a culture of lifelong learning, and implementing measures to mitigate the adverse effects of technological disruptions on the workforce.

Challenges and Ethical Concerns of AI in HR:

In addition to ethical considerations, AI integration in HR presents various challenges and ethical concerns that organizations must navigate to ensure responsible and ethical AI-driven HR practices. These challenges include bias in algorithms, loss of human interaction, and employee privacy concerns.

1. **Bias in Algorithms:** AI algorithms are susceptible to bias, particularly if trained on biased data sets or programmed with flawed decision-making criteria. Biased algorithms can perpetuate inequalities and discrimination in HR processes, leading to unfair outcomes for employees and undermining organizational values of diversity and inclusion.
2. **Loss of Human Interaction:** Overreliance on AI in HR processes may lead to a loss of human interaction, creating a dehumanized work environment. Reduced opportunities for face-to-face interaction and mentorship can diminish employee engagement, satisfaction, and overall well-being, fostering a sense of isolation among employees.
3. **Employee Privacy Concerns:** The use of AI for employee monitoring or performance management raises significant privacy concerns. Employees may feel uneasy about the extent to which their personal data is being collected, analyzed, and used to make decisions affecting their employment. Ensuring transparency, consent, and data protection measures are essential for safeguarding employee privacy rights in AI-driven HR practices.

In summary, addressing the ethical considerations, challenges, and ethical concerns inherent in AI-driven HR is essential for organizations to navigate the ethical landscape responsibly while revolutionizing processes, mitigating bias, and ensuring accountability.

Strategies for Ethical AI Integration in HR:

When firms incorporate Artificial Intelligence (AI) into Human Resources (HR) procedures, it is crucial to implement ethical practices for integrating AI to ensure fairness, transparency, and responsibility. The following tactics are included:

1. **Establishing Ethical Guidelines and Frameworks for AI Usage:** Organizations need to develop clear ethical guidelines and frameworks governing the usage of AI in HR. These guidelines should outline principles for fairness, non-discrimination, privacy protection, and accountability in AI-driven decision-making processes.
2. **Implementing Regular Audits and Assessments of AI Systems:** Regular audits and assessments of AI systems are essential to rectify potential biases, errors, or ethical

lapses. Organizations need to establish mechanisms for ongoing monitoring, evaluation, and improvement of AI algorithms to ensure their alignment with ethical standards.

3. **Promoting Diversity and Inclusivity in AI Development and Implementation:** Diversity and inclusivity should be prioritized in the development and implementation of AI technologies in HR. This involves ensuring diverse representation in AI development teams, considering the perspectives and needs of diverse employee groups, and actively mitigating biases in AI algorithms to promote fairness and inclusivity.
4. **Promoting transparency and enhancing communication among employees** Regarding the utilization of artificial intelligence: Transparency and open communication are essential for fostering trust and gaining adoption of AI technologies among employees. Organizations want to engage in proactive communication with employees regarding the utilization of artificial intelligence (AI) in human resources (HR) procedures. This includes providing information on the decision-making process powered by AI, the data sources employed, and the measures implemented to preserve their rights and privacy.

Future Trends and Implications:

The Artificial Intelligence (AI) integration in Human Resources (HR) management is poised to continue evolving, shaping future landscape of work and organizational practices. Anticipated future trends and implications include:

1. **Predictions for the Evolving Role of AI in HR Management:** AI is expected to play an increasingly central role in HR management, automating routine tasks, enhancing decision-making processes, and personalizing employee experiences. Predictions include the widespread adoption of AI-driven recruitment, performance management, and employee engagement initiatives.
2. **Anticipated Advancements in Ethical AI Technologies:** Advancements in AI technologies will likely focus on enhancing ethical considerations, such as bias mitigation, fairness enhancement, and privacy protection. Future AI systems may incorporate innovative approaches, such as explainable AI, fairness-aware algorithms, and privacy-preserving techniques, to address ethical concerns more effectively.
3. **Long-Term Societal and Organizational Impacts of AI Integration in HR:** The long-term impacts of AI integration in HR extend beyond organizational practices to broader societal implications. These include changes in employment patterns, skills requirements, and workforce dynamics, as well as ethical and regulatory challenges associated with AI-driven decision-making in HR.

Strategies for Mitigating Risks:

To mitigate risks associated with AI integration in HR and ensure responsible and ethical AI usage, organizations should implement the following strategies:

1. **Developing Ethical Guidelines:** Organizations need to establish clear AI ethics guidelines to ensure fairness, transparency, and accountability in AI-driven HR practices. The guidelines must align with ethical principles and regulatory requirements, providing a framework for responsible AI usage.
2. **Human Oversight:** AI should be used as a tool to augment human decision-making, rather than replace it altogether. Human oversight is needed to interpret AI-generated insights, validate algorithmic decisions, and intervene when required to ensure ethical compliance and mitigate potential biases.
3. **Data Quality and Transparency:** HR professionals must ensure the quality and fairness of the data used to train AI algorithms. This involves assessing data biases, ensuring data accuracy and relevance, and maintaining transparency regarding data sources and processing methods to mitigate risks of biased outcomes.
4. **Employee Communication:** Employees should be informed about how AI is being used in HR practices and their rights regarding data privacy. Clear and transparent communication channels must be established to address employee concerns, provide opportunities for feedback, and foster trust in AI-driven HR processes.

Conclusion:

The of Artificial Intelligence (AI) integration in Human Resources (HR) management holds immense potential for revolutionizing processes, enhancing decision-making, and personalizing the employee experience. However, to harness these benefits effectively, organizations must prioritize ethical considerations to mitigate bias and ensure accountability in AI-driven HR practices.

Recap of Key Findings regarding the Impact of AI on HR: Throughout this exploration of AI in HR, it has become evident that AI technology offers the significant opportunities for efficiency gains, improved decision-making, and enhanced employee experiences. From automating recruitment processes to personalizing learning and development programs, AI has potential to reshape HR practices fundamentally.

Recommendations for achieving ethical AI integration in HR Practices:

1. Establish clear ethical guidelines and frameworks for AI usage in HR, ensuring alignment with principles of fairness, transparency, and accountability.
2. Implement regular audits and assessments of AI systems to identify and rectify potential biases, errors, or ethical lapses.
3. Promote diversity and inclusivity in AI development and implementation, ensuring diverse representation in AI development teams and considering the perspectives and needs of diverse employee groups.

4. Foster transparency and communication with employees regarding AI usage in HR processes, including how AI-driven decisions are made, the data sources used, and the safeguards in place to protect their rights and privacy.

Scope for Future Research:

With the ongoing development of Artificial Intelligence (AI) in Human Resources (HR), there is an increasing requirement for additional study to investigate different aspects of ethical decision-making in AI-driven HR practices. Crucial areas for further investigation encompass:

1. Long-term Impact of AI on Work Practices: Future study should explore in depth long-term impact of AI integration on work practices, including changes in job roles, skills requirements, and organizational structures. Understanding how AI reshapes work dynamics and employee experiences over time is crucial for informing strategic HR planning and workforce management.
2. Development of New Regulations for Ethical AI Use: There is need to develop new regulations and guidelines to govern the ethical use of AI in HR. Future research should focus on identifying gaps in existing regulations, proposing new frameworks for ethical AI integration, and advocating for regulatory measures that promote fairness, transparency, and accountability in AI-driven HR practices.

References:

1. T.H. Davenport and R. Ronanki, (2018)"Artificial Intelligence for the Real World, " in *Harvard Business Review*96, : 107-116.
2. B.D. Mittelstadt et al., (2016): "The ethics of algorithms: Mapping the debate, " *Big Data & Society*3, :1-21.
3. L.N. Smith, (2018) "A Discursive Review of Artificial Intelligence & Ethics, " *SSRN Electronic Journal*
4. Davenport, T.H., and Ronanki, R. (2018). "Artificial Intelligence for the Real World." *Harvard Business Review*, 96(1), 107-116.
5. Mittelstadt, B. D., Allo, P., Taddeo, M., Wachter, S., and Floridi, L. (2016). "The ethics of algorithms: Mapping the debate." *Big Data & Society*, 3(2), 1-21.
6. Smith, L. N. (2018). "A Discursive Review of Artificial Intelligence and Ethics." *SSRN Electronic Journal*.

STATUS OF WOMEN EDUCATION IN INDIA AT THE UNIVERSITY LEVEL

Sakshi Devi* and Vishal Kumar

School of Education, Lovely Professional University

*Corresponding author E-mail: sakshiheer60@gmail.com

Abstract:

Participation of women in the higher education plays an important role towards gender equality in the economy and society. It gives many opportunities to women for planning better future career and it can be easy to be employed. So, the paper examines the participation of women in the higher education and the status of women education in the India. The paper also explores the various factors that influence girls' pursuing of higher education, including societal attitudes and parental perspectives. The paper identified various problems women face regarding access to education such as early marriage and marriage safety and security concerns and various economic factors. To achieve gender equality, it's necessary for educators, government bodies, and society at large to come together and prioritize women's access to higher education in India. This collective effort can lead to a brighter and more inclusive future where women have equal opportunities to benefit from the transformative power of advanced learning.

Keywords: Women Empowerment, Higher Education, Women Education, University Education

Introduction:

Education is an important issue in everyone's life. It is the main key to success in the future and also to have many opportunities in our life. Education has many advantages for people. It also brightens and sharpens a person's mind and thinking. It helps students to plan for better future work or continuing education while completing your undergraduate degree. Having education in every area helps the people to think, feel, and behave in a good way that come up with their success, and improves not only their personal satisfaction but also their community. Education also develops personality of human, his/her thoughts, and dealing with others and prepares student for life experiences. There are various benefits of education such as having a good career, having a good status in society, and having self-confidence. (Al-Shuaibi, 2014). We have opportunities for a better employment and it can be more and easy. Moreover, education makes our mind smooth and glossy, reinforces our thoughts towards people, and strengthens our character and behaviors toward other people. It provides us with information of various fields in general and our specialization in particular; especially what we need to do in our job career. Therefore, without education we may not survive appropriately nor we have a decent profession. Education permits us a good status in society. As educated people, we are contemplated as a valuable source of knowledge for our society/community. Having education enables us to impart morals, manners, and ethics to others in our society. For this reason, people deal with us in a

appreciable and special way for being highly productive and resourceful. Education makes us a role model in our society when other people need us to guide them to the right way or when they want to take a decision from them (Al-Shuaibi, 2014). The level of education i.e., School education, higher education, vocational education also decides the quality of life. Specially the higher education gives us better philosophical understanding of our life. So, for better future of any one either male or female the access of higher education is important. Higher education also helps women to have a better understanding of social, politically as well as mentally and emotionally strong beyond the home in far-reaching social structure and makes her a wise citizen with effective social and political action. Even Morley, Leach & Lugg, (2009) also expressed that woman. It helps women to face challenges and overcome obstacles in life and to be a complete woman. It also helps to improving education for women helps raise their levels of health and nutrition so that they can make their choice to marry later and having few of their children education increases "people's self- confidence and enables them to find better jobs and they can work shoulder to shoulder with men. As Chetry (2020) depict that Swami Vivekanand also express their views about women education and gives a famous quote 'To educate your women first and leave them to themselves, they will tell you what reforms are necessary'. But in many developing and underdeveloped countries, the access of higher education is not same for both genders male and female. In India, the status of women is still questionable. So, this chapter try to explore the significance and necessity of higher education for female students. It aims to identify the various factors that influence girls' pursuing of higher education, including societal attitudes and parental perspectives. It seeks to evaluate governmental initiatives and schemes designed to increase educational opportunities for women. The study intends to analyze the impact of challenges faced by female students on both academic and personal levels and to propose strategies for mitigating these challenges.

Methodology:

The study is based on descriptive research design. The data has been collected through secondary sources like journals, books, government reports, newspapers and various working papers. The data about the enrollment and status of women in higher education is basically taken from All India Survey of Higher Education 2021-2022. The secondary data has been analyzed through content analysis method. Systematic reviews, literature reviews, and documents that are collected from official website of government based on authenticated data.

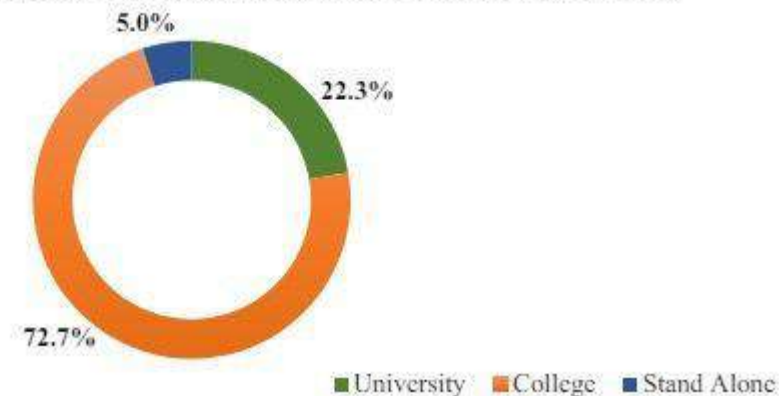
Data Analysis

Student Enrolment

The overall estimated enrollment in higher education institutions is 4, 32, 68, 181, of which 3, 14, 59, 092 are in colleges, 21, 70, 744 are in stand-alone institutions, and 96, 38, 345 are in universities and their constituent units. The estimated enrolment percentage distribution

for universities, colleges, and stand-alone institutions is shown in Figure 1. (Education, 2021-22).

Figure 1: Percentage distribution of Enrolment in different type of HEIs

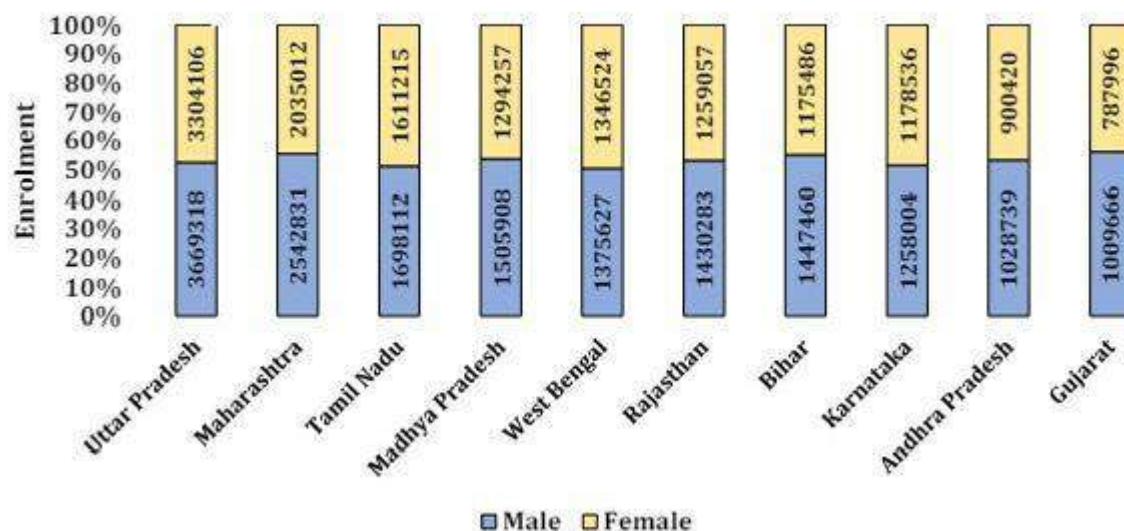


Source: Ministry of Education, Government of India

The six most populous states in terms of student enrollment are Uttar Pradesh (69.73 lakh), Maharashtra (45.78 lakh), Tamil Nadu (33.09 lakh), Madhya Pradesh (28 lakh), West Bengal (27.22 lakh), and Rajasthan (26.89 lakh). A total of 53.32% of students are enrolled in these states. (These States are also home to 51.4% of the entire population in the 18–23 age group).

As per AISHE 2021-22 data, there are 2, 06, 91, 792 female enrolled in total. Enrollment of females is much higher than that of males in Kerala, Telangana, Haryana, Assam, Himachal Pradesh, Jammu & Kashmir, Meghalaya, and Chhattisgarh areas. Figure 2 shows the gender-wise distribution of enrollment in the top 10 States (based on highest enrollment).

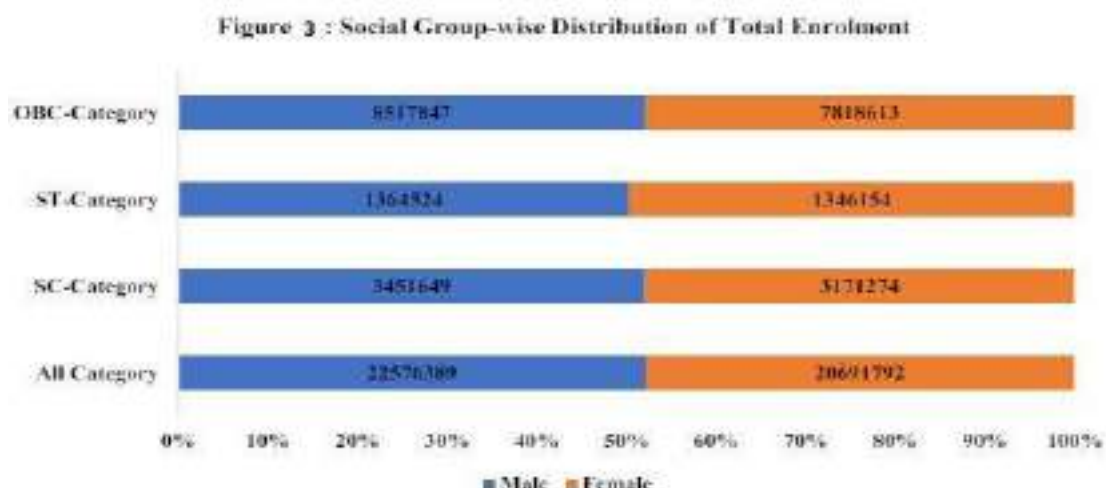
Figure 2 : Gender-wise Distribution of Top 10 States as per Enrolment



Source: Ministry of Education, Government of India

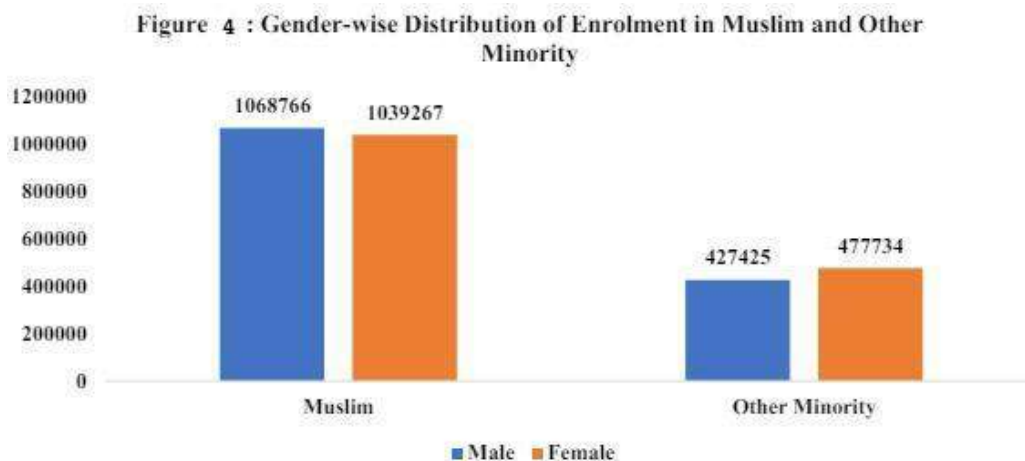
Social Group-wise Distribution

The expected total number of SC students enrolled is 66, 22, 923, representing 15.3% of all students enrolled. 31, 71, 274 female students are enrolled in the SC (47.9% of all students). ST female enrollment is 13, 46, 154 (49.7% of total ST enrolment), whereas ST student enrollment is 27, 10, 678 (6.3%) of total enrolment. Enrollment for OBC is 1, 63, 36, 460 (37.8% of overall enrollment), with 78, 18, 613 female students (47.9% of total OBC enrollment). The gender distribution of enrolment for various social classes is displayed in this Figure 3. (Education, 2021-22)



Source: Ministry of Education, Government of India

Gender-wise Distribution of Muslim and Other Minority



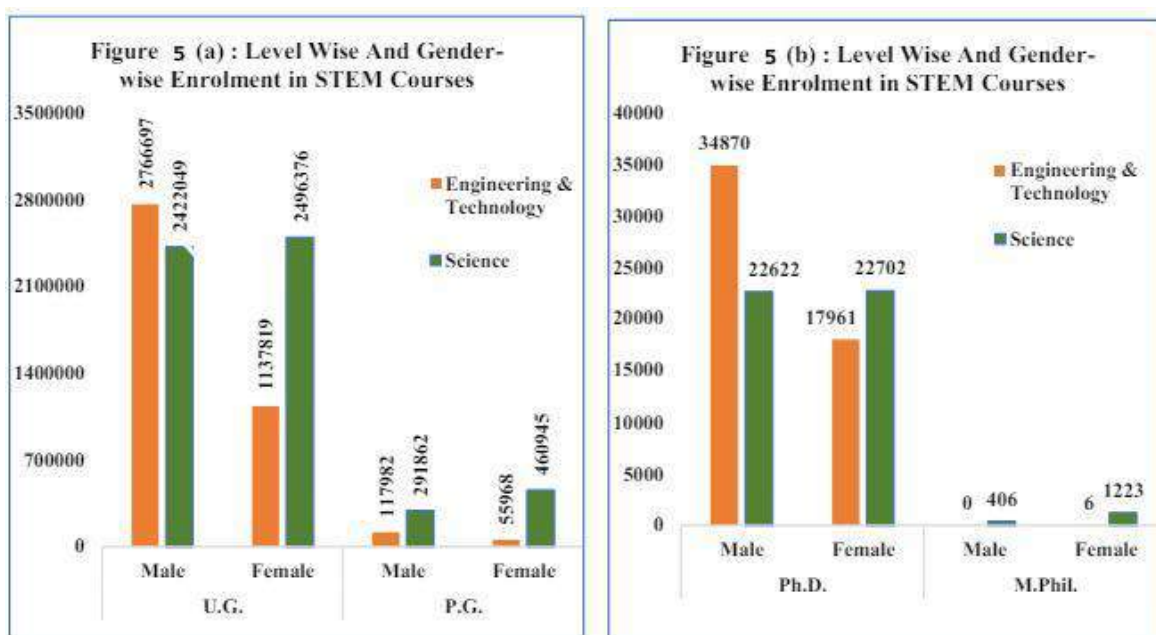
Source: Ministry of Education, Government of India

A total of 30, 13, 192 students—14, 96, 191 male students and 15, 17, 001 female students—belong to the Minority Community out of the expected total enrollment. 9, 05, 159 students are from other minority communities, while 21, 08, 033 students are members of the Muslim Minority out of all minority enrollment. There are 52.8% more female students in the Other Minority category than male pupils. The percentage of female pupils in Muslim minority

schools is about equal to that of male students. that is, 50.7% male and 49.3% female [Figure 4] (Education, 2021-22)

Enrolment for STEM courses

The STEM fields comprise the Engineering and Technology and Science streams, which include mathematics. There are 98, 49, 488 students enrolled in STEM programs at the undergraduate, graduate, master's, and doctoral levels. Of these, 56, 56, 488 are men and 41, 93, 000 are women. At U.G. level female enrollment is less than male in Engineering and Technology course but at the same time female enrolled maximum in science stem. At P.G. level both male and female enrollment is very much less than U.G. course and P.G. level female enrollment is less than male in Engineering and Technology course but at the same time female enrolled maximum in science stem. At Ph. D level male enrollment is higher than female in Engineering and Technology course but at same Ph. D level both male and female enrollment is quite equal in science stem as shown in Figure 5(b). Figure 5(b), it shows male enrollment is 0 and female enrollment is in single digit (6) in Engineering and Technology course. And in science stem both male and female enrollment is very low but female enrollment is higher than male. The enrollment in STEM courses broken down by gender and level is shown in Figures 5(a) and 5(b) below.

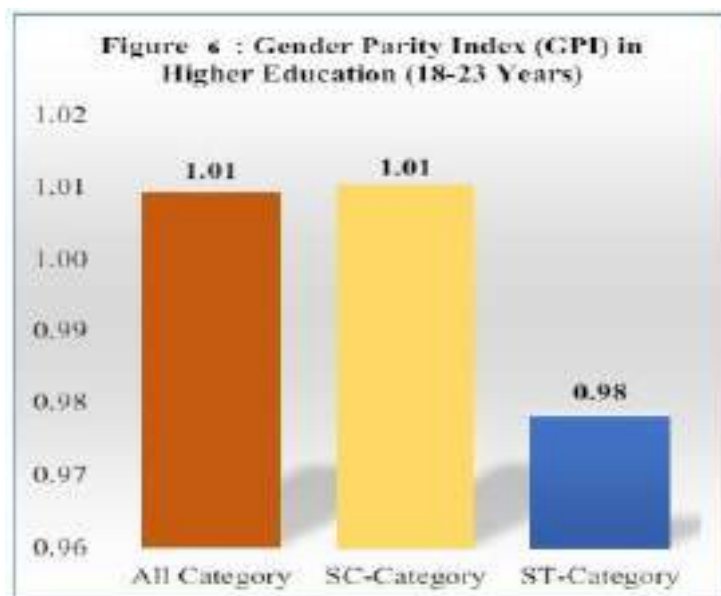


Source: Ministry of Education, Government of India

Gender Parity Index (GPI)

The ratio of GER male to GER female is known as the Gender Parity Index. The GPI shows how equally women participate in the educational system. A GPI of 1 denotes gender parity, while a variation between 0 and 1 usually shows a difference favoring men; a GPI greater than 1 denotes a difference favoring women.

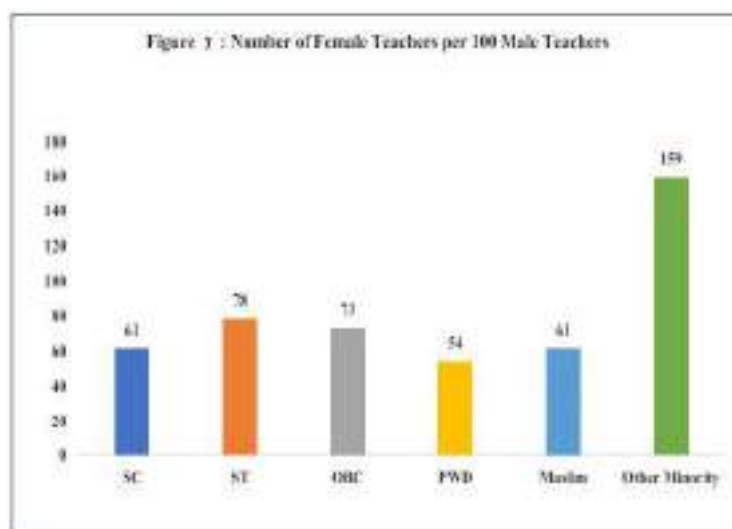
At the All India level, the GPI is 1.01; for the SC and ST categories, it is 0.98 and 1.01, respectively. The Gender Parity Index (GPI) is displayed for several social categories in Figure 6.



Source: Ministry of Education, Government of India

Number of Female Teachers per 100 Male Teachers

There are 77 female teachers for every 100 male teachers in all of India. There are 61 female teachers for every 100 male teachers in the SC group, 78 female teachers for ST and 73 female teachers for OBC. There are 61 female teachers for every 100 male teachers in the Muslim minority and 159 female teachers for every 100 male teachers in the other minority.



Source: Ministry of Education, Government of India

Non-Teaching Staff

There are 12, 08, 446 non-teaching employees in responding institutions are reported to be divided into four groups: Groups A, B, C, and D. Group C holds the biggest percentage at

40.6%, while Group D comprises 27.9% of the total. Males make up 56.3% of non-teaching staff, while females make up 43.7%. Figure 8 shows the distribution of non-teaching staff by post and gender.

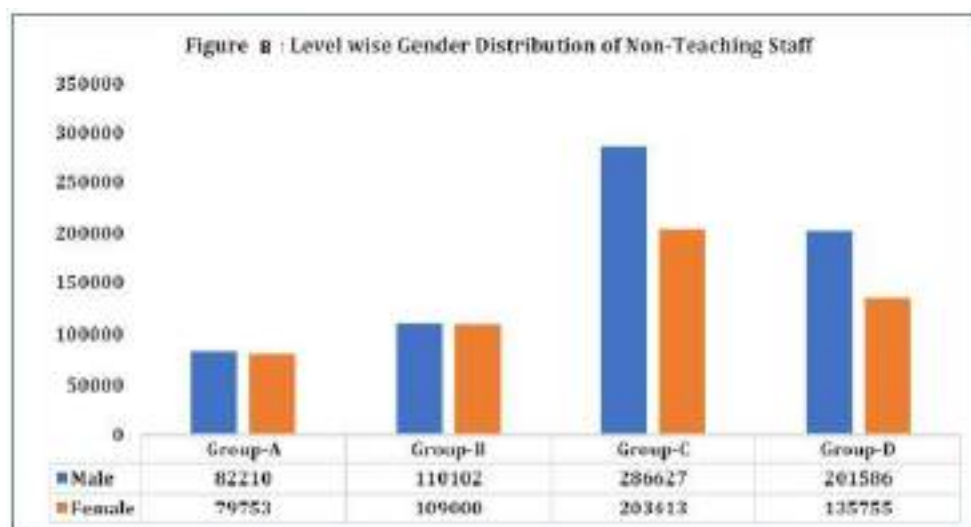


Figure 8 shows the distribution of non-teaching staff members by gender. In Group A, there are 50.8% men and 49.2% women, but in Group B, there are 50.3% men and 49.7% women working there. In Group C, there are 58.5% male and 41.5% female employees, whereas in Group D, the male proportion is 59.8% compared to 40.2% female.

Issues of Women Education in India

There are some serious problems that are facing by women in India to achieve higher education:

1. **Gender Bias:** Deep-rooted patriarchal norms often prioritize boys' education over girls'. Girls are sometimes seen as financial burdens, leading families to invest more in boys' education. This bias perpetuates gender inequality in education. Even Sills, Hanmer, Parsons, and Klugman (2015) also mentioned that there is discrimination based on the gender role. They also mentioned that social standards about gender roles restrict women's and girls' support, or the decisions they are permitted to make about their own life, and prevent millions of girls worldwide from starting and finishing their education. Traditional gender roles dictate that women's primary roles are within the household. Cultural norms may discourage girls from pursuing education beyond a certain level or in certain fields deemed 'inappropriate' for women.
2. **Early Marriage and Motherhood:** Child marriage remains usual in certain parts of India. Early marriage often leads to early parenthood, and hindering educational opportunities for young women. As Srinivasan, Khan and Verma (2015) also mentioned about early motherhood and female child marriage are highly valued in rural societies.

3. **Lack of Access:** In rural and remote areas, there's a significant lack of educational infrastructure for girls. Schools may be far away, transportation may be inadequate or not safe, and there may be a shortage of female teachers. As Cardozo (2021) also mention that due to financial hardships, this is particularly true in rural areas, where parents are forced to pick between their daughter's and son's education. Along with accessibility issues, a lack of institutional resources contributes to a decline in the participation of rural women in postsecondary education. When educational institutions are located in remote areas, it is frequently inconvenient to travel to those sites. The inadequate quality of education in rural regions discourages women from pursuing it. Many families also forbid their daughters from living independently outside of the house. The number of women enrolling in higher education has decreased as a result of all these issues.
4. **Economic Factors:** Poverty often forces families to prioritize earning income over education. When resources are limited, girls' education is frequently sacrificed. The opportunity cost of sending girls to college instead of having them work is often deemed too high. As Chauhan, (2022) mentioned about that the family has a severe lack of resources, and the male child that is desired cannot be educated or fed. The girl's parents are having trouble paying for her collage enrollment. Taking care of siblings, doing housework, and earning money to support the family are all challenges.
5. **Safety and Security Concerns:** Safety concerns, including sexual harassment, gender-based violence, and inadequate sanitation facilities, discourage parents for sending their daughters to college and, particularly as they are mature. For everyone, the safety of women is of utmost importance. Perceptions of the risk associated with seeking higher education "outside" of one's family frequently restrict one's options for further education. Therefore, women's participation in higher education institutions would be strengthened by efforts made by college and university administrations to make their campuses safer and more equipped for women.
6. **Educational Institutions:** The next most important factor influencing a girl's further education is her college. Girls encounter sexism in the curriculum, books, subject distribution, activity participation, and other areas. Biases towards female students are perpetuated at educational institutions such as colleges and universities, and the quality of education provided to girls falls short of what is needed for their personal, professional, and educational growth. Government has issues many schemes for girls higher education for example less fee for girls education in government colleges. Because of less fee (Chauhan, 2021).
7. **Lack of Role Models:** The absence of visible female role models in various professions can limit girls' aspirations. Without seeing successful women in diverse fields, girls may

struggle to envision their own potential beyond traditional roles. As studies indicate that women benefit more from having role models because of the institutional impediments, gender biases, and unfavorable stereotypes that women have long faced in a variety of professional settings. (Chauhan, 2021).

Conclusion:

The education of women is a very strong tool for their empowerment. It is very much explicit that education of women is very much required for positive change and transformation of unequal society. Even with our country's independence, women still face limitations and boundaries. For achieving complete equality in the society between two genders, it is necessary to eliminate all kinds of domination, oppression and discrimination against the fair sex by their male counterpart. A woman's identity shouldn't be confined to just being a homemaker, a skilled cook, or a devoted mother. She should have the chance to explore new opportunities and establish her own identity in the professional world. This might mean creating laws to ensure women have equal rights. The role of women in society is increasingly vital, especially economically and socially. So, we need to focus more on training and empowering women for the future.

In simpler terms, tackling the barriers hindering gender equality is key for unlocking the full potential of women in the workforce in India. By increasing awareness, offering financial support, improving safety, and implementing fair policies, we can overcome these obstacles and create a more balanced and inclusive environment in education and employment. In India there are different provisions and programmes that helps to remove the barriers at certain level that shows the result in terms of SC, ST women enrollment as per with male enrolment in higher education.

To achieve gender equality, it's necessary for all stakeholders – including educators, government bodies, and society at large – to come together and prioritize women's access to higher education in India. This collective effort can lead to a brighter and more inclusive future where women have equal opportunities to benefit from the transformative power of advanced learning. Addressing systemic issues, like unequal access to quality educational institutions and the complex interplay of gender, caste, and class, is essential. Gender-blind policies and insufficient institutional support only worsen these challenges for women.

References:

1. Al-Shuaibi, A. (2014). The Importance of Education. *The Importance of Education*, 1.
2. Education, M. o. (2021-22). *All India Survey on Higher Education*. Department of Higher Education, New Delhi. New Delhi: Ministry of Education.
3. Chetry, R. (2020). Women's Access To Higher Education: A Study On The Headquarters Of R.H.A.C. (Rabha Hasong Autonomous Council). *Webology*, 17 (2), 1111-1117.

4. Hanmer, L., Parsons, J. & Klugman, J. (2015). Child Marriage: A Critical Barrier to Girls' Schooling and Gender Equality in Education. *The Review of Faith & International Affairs*. 13(3). 69-80.
5. Srinivasan, P., Khan, N., & Verma, R. (2015). District-level study on child marriage in India. *International Center for Research on Women*. 1-54.
6. Cardozo, R. (2021). Rural women and higher education: Opportunities and interventions. *International journal of creative research thoughts*. 9(7). ISSN: 2320-2882.
7. Chauhan, A. (2022). A study on problems and challenges faced by girl students in higher education. *Handbook of Research on Technical, Privacy, and Security Challenges in a Modern World*. 148-166. DOI:[10.5281/zenodo.5833619](https://doi.org/10.5281/zenodo.5833619)
8. Gupta, A., & Verma, R. (2021). Intersectionality of Gender, Caste, and Class: Implications for Women's Access to Higher Education in India. *Indian Journal of Gender Studies*. 28(3), 431-450. <https://vikaspedia.in/social-welfare/women-and-child-development/women-development-1/ugc-guidelines-for-women-safety-and-security-in-heis#:~:text=The%20HEIs%20should%20ensure%20easy,machines%20in%20all%20its%20buildings>.

THE RETURN OF THE SPECTRE OF THE PANOPTICON

Suparna Banerjee

St. Xavier's College, Kolkata-700016

Corresponding author E-mail: suparnabanerjee7711@gmail.com

Abstract:

The design of the Panopticon by Jeremy Bentham has been used not only in prisons and modern institutions. But the accelerated development of digital technologies in the last decades has paved the way for social media to be one of the most effective communication tools, and eventually a virtual Panopticon. The chapter traces the philosophical, literary, and contemporary narrative of the Panopticon with the assistance of three works: Jeremy Bentham's work on the Panopticon which introduced the concept of complete regulation, observance, and discipline acting as an official method of coercion and surveillance to maintain a regularized environment of discipline. Michel Foucault's theory, posits discipline as a method of power that is employed to control society. The discourse of surveillance by Foucault is significant in literary fiction as well. This study explores the concept of the Panopticon as a magnificent apparatus of power depicted in George Orwell's novel *1984*, examining how it operates as a mechanism of control and the repercussions of its effects on the individual and society. Through this analysis, the study aims to further understand the impact of power relations and the working of a potential virtual Panopticon that controls human behavior, actions, and thoughts in contemporary society.

Keywords: Panopticon, Power, Control, Social Media, Virtual Panopticon, Contemporary Society.

Introduction:

In the 21st century power relations in daily life have a tendency for using some sorts of designs not based on the concept of ownership but rooted in schemes, maneuvers, and techniques. The technological advancement over the past two decades shaped society's perception of communication more rapidly than ever before. Social media has changed the way people share information. It would be no exaggeration to say that human behavior evolved from physical to a mixture of both physical and digital.

The increase in technology usage is merely creating a more complex Panopticon in which Michael Foucault's theories operate. In this Information Age, Foucault's theories aid in identifying how power is wielded even when the controller cannot be seen.

The Panopticon is a unique prison design, invented as a social control mechanism by Jeremy Bentham in 1785. However, the Panopticon owes its popularity to Foucault who used it as a metaphor for modern surveillance in his 1975 book *Discipline and Punish: The Birth of the*

Prison. Since then, the panoptic style of architecture has been used in prisons, schools, and hospitals, but now social media is seen as a virtual Panopticon.

George Orwell seemed to anticipate our relationship with social media in other ways. Orwell revealed how people's thoughts, emotions, and ultimately actions can be manipulated. The dynamics he describes uncannily reflect the way social networks now influence the lives of billions of people around the world. The novel *1984* by George Orwell, however, was published in 1949, so it can be said Bentham has slightly influenced Orwell's writings. These ideas of Panopticon come into play in today's world as well, and it has become a controversial topic because of modern technology that society feels has become more and more invasive. The Panopticon and *1984* both have the recurring theme of panopticism, which affects the main characters in different manners.

The architectural design of the Panopticon has been used not only in prisons but also in other modern institutions such as schools and hospitals. The rapid development of digital technologies in the last decades has paved the way for social media to be one of the most effective communication tools, and eventually a virtual Panopticon.

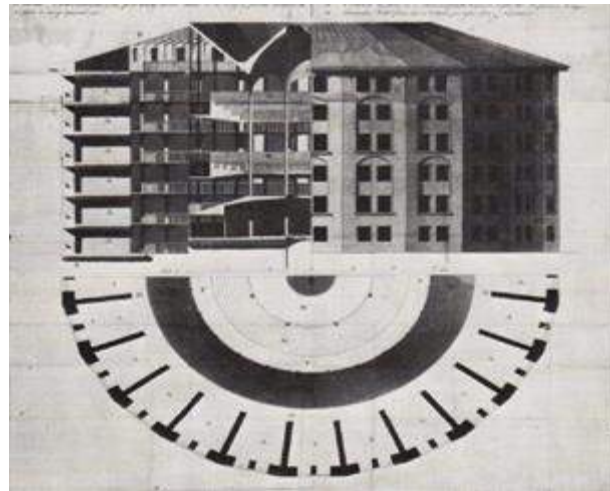
Bentham and the First Panopticon

The Panopticon was originally conceived by Samuel Bentham, the brother of Jeremy Bentham, during the 18th century. While visiting Samuel, who was an engineer in Russia, Jeremy saw his brother's design for a circular textile mill that allowed overseers to watch workers without being detected. This design inspired Jeremy's idea for the Panopticon, an architectural concept that would allow for constant surveillance of inhabitants without their knowledge, based on his brother's original design.

Jeremy Bentham believed that the Panopticon design was ideal for use in prisons, as it allowed for constant surveillance of prisoners to prevent violence, unpleasant events, and escape attempts. Although continuous surveillance was not possible at the time, Bentham believed that he could achieve his objectives by designing the facility in a specific way. The cells were isolated from one another to provide solitary confinement for the prisoners, and an inspection lodge was located in the center of the facility, where guards could stand to observe the prisoners. This design ensured that the guards could see all the prisoners, while the prisoners themselves could not see the guards, creating a constant fear of surveillance that was the key element of the Panopticon's unique architecture.

Jeremy Bentham was meticulous in his planning for the Panopticon, not only in its architectural design but also in the details of the cells, such as the necessary amount of light and heating, as well as the amount of food required for each prisoner. To maintain the element of surprise and ensure that inmates were not aware of the inspector's location, Bentham included

tubes that connected each cell with the inspector's lodge, which served to isolate any noise that might be made during inspections. (Bentham, 1995, p.36).



(Source-https://www.researchgate.net/figure/1791-design-for-the-Panopticon-by-Jeremy-Bentham-Samuel-Bentham-and-the-architect-Willey_fig15_277987398)

While Bentham's plans for the construction of the Panopticon were detailed and thorough, the focus will be on the underlying principles of his idea, namely the principles of solitude and constant surveillance. As Himmelfarb (1965) explains in his letters about the Panopticon, the main idea was that constant surveillance would serve as both a punishment and a means of reforming the inmates. Additionally, the prisoners would work more efficiently and behave appropriately, as they would always feel like they were being watched by the guards.

To begin with, prisoners could be supervised but could not see or contact one another. The Panopticon's architecture was designed in a way that each prisoner would be isolated and feel alone. This was meant to prevent riots, fights between inmates, and accidents. Meanwhile, the jailer or supervisor would be able to always watch the inmates. According to Bentham, prisoners could be seen, but not see. The principles of constant surveillance and solitude are the core of the Panopticon. The idea is to constantly monitor individuals to reform their behavior and encourage them to behave preferably. Additionally, living in solitude serves as a preventative measure for the proper functioning of the facility. Orwell's fictional society portrayed in his novel *1984* depicted citizens living under constant surveillance and control of the government, instilling fear in them.

Although Bentham's concept of the Panopticon was ground-breaking for its time, it was never implemented. In addition to the Panopticon, Bentham proposed other facilities for surveillance. He also desired to construct a hospital, a madhouse, and other facilities. (Semple, 1993) Unfortunately, none of Bentham's proposed establishments was accepted in his home country, and he never recovered from this rejection.

Michel Foucault extensively analyzed Bentham's concept of surveillance and its implementation in society. He coined the term "Panopticism" to describe his theory on the Panopticon and the use of surveillance as a means of discipline. Foucault viewed the Panopticon as a metaphorical cage and a tool used by the state to manipulate individuals. He believed that such power should not be vested solely in the state, as individuals are not mere pawns to be controlled. Additionally, Foucault did not view punishment as a necessary means of discipline in society. Prisoners inside the Panopticon would be like animals in a cage. "It is not a dream building, but diagram of a mechanism of one power reduced to its ideal form...it is in fact a figure of political technology." (Foucault, 1977, p.205)

Orwellian Expression

George Orwell's novel, *1984*, is a prime example of the expansion of "carceral circles," as defined by Michel Foucault. Foucault explains that this "great carceral network" reaches all disciplinary mechanisms throughout society. In *1984*, Orwell presents the idea of an electronic Panopticon, which is more efficient and cost-effective than traditional disciplinary mechanisms. This electronic Panopticon, called "Big Brother", can monitor people not only in closed spaces but also in open public spaces, making it far-reaching.

Orwell depicts Big Brother as a tool for dictatorial governance. The novel underscores the fear and unease associated with such political systems, and the term 'Big Brother' has become synonymous with government surveillance and oppressive regimes. The omnipresent 'telescreen' is the book's most visible symbol of the Party's constant monitoring of its subjects. In their dual capability to blare constant propaganda and observe citizens, the telescreens also symbolize how totalitarian government abuses technology for their ends instead of exploiting their knowledge to improve civilization. The telescreen functions similarly to the Panopticon as conceived by Jeremy Bentham. In *Discipline and Punish*, Michel Foucault gives a detailed description of this kind of surveillance.

In *1984*, Orwell portrays the telescreen as a model of the Panopticon, shaping the behavior of people who are under constant observation for nearly all their actions. The idea of Big Brother serves as a metaphor for the power that comes with privacy, which is an essential element that shapes the political structure of a society. There is no private space where one can escape the constant and oppressive gaze of Big Brother.

The truth is that even the few cubic centimeters inside a person's skull are not solely owned by them. The system fosters a way of life that hinders the development of independent thought or ideas in the minds of its subjects. As the cited text demonstrates, the presence of Big Brother extends to all of their senses: their sight, hearing, emotions, and even the air they breathe. The aim is not just to control and discipline the body, but also the soul. The system creates its language, manipulates history, ostracizes its critics, creates ideologies for the public,

and destroys any means of knowledge that could be seen as another form of power. The knowledge that is formed under this surveillance is a direct effect of power, as Foucault notes, every point in the exercise of power is a site where knowledge is formed. Conversely, every established piece of knowledge permits and assures the exercise of power.

Foucault argues that power and knowledge are intrinsically linked and mutually dependent. In his words, “Power produces knowledge...power and knowledge directly imply one another... there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations.” (Foucault, 1977, p.27) Therefore, knowledge is not an independent entity but rather a tool and a consequence of dominant power dynamics. This is exemplified in the character of Julia in the novel, who dismisses books as mere commodities to be produced, like jam or bootlaces. “Books were just a commodity that had to be produced, like jam or bootlaces”, she says. (Orwell, 1949, p.75) Even the very face of Big Brother signifies a set of maxims (knowledge). “The face gazed up at him, heavy, calm, protecting, but what kind of smile was hidden beneath the dark mustache? Like a leaden knell, the words came back at him:

War is Peace

Freedom is Slavery

Ignorance is Strength” (Orwell, 1949, p.59)



(Source - <https://www.routemagazine.com/dystopian-reading>)

In the world of the novel, knowledge, truth, history, feelings, and expressions are completely standardized. As the norm becomes the truth, anything or anyone who deviates from it is subjected to violent treatment. This normalization process is seen as an ultimate achievement, regardless of the violence required. O’Brien, in the latter part of the novel, works to cure Winston, the main character of the novel, of his deviant thoughts and behavior, emphasizing the importance of change and normalization. However, this cure is destructive and molds the subject into a conformist member of society. O’Brien tells Winston that he is a flaw in the pattern, a stain that must be wiped out, and that the solution is to convert him, capture his

inner mind, and reshape him. This process is not fatal, but it crushes and deforms the subject's mind and soul.

Foucault's belief that discourses are not an exact copy of reality, but a representation of a reality constructed by power positions in a society, is evident in the novel. McNay (2005) remarks that discourse is analyzed not in terms of a hidden nucleus of meaning but in terms of its external conditions of existence, i.e., the power relations in which it is embedded. The discourse in the novel, therefore, can be analyzed not as an internally regulating formation, but as something that is determined by and constitutive of the power relations that permeate the social realm.

Upon entering the Victory Mansion, Winston Smith immediately feels a strong sense of being watched and observed at all times. As the story progresses, posters can be seen intruding into the privacy of all the people around, peering in from every direction. "The black-mustachio'd face gazed down from every commanding corner...BIG BROTHER IS WATCHING YOU, the caption said, while the dark eyes looked deep into Winston's own." (Orwell, 1949, p.1)

To achieve perfection in surveillance, the state of Oceania has developed an official language of its own i.e., 'Newspeak'. The language is devised to uphold the manifesto of Ingsoc, the political party in power. The dictionary of Newspeak undergoes continuous change thus producing many revised editions. The language is primarily intended to eliminate Oldspeak thereby eliminating also all the modes of thought associated with it. He regards the perfection of this language as a mark of the completion of the revolution of the party. Newspeak thus becomes one of the most effective tools of surveillance. It contains in itself the "power of normalization".

The regime discourages all human feelings and passions, including love, privacy, and friendship. Under constant surveillance, individuals are unable to express their feelings, and the sex instinct is stripped of any pleasure. The normalization process deprives human beings of their natural emotions, rendering them hollow. O'Brien tells Winston, "Never again will you be capable of ordinary human feeling... We shall squeeze you empty, and then we shall fill you with ourselves" (Orwell, 1949, p.148).

The methods of discipline described in the novel are similar to Foucault's panoptic model, where discipline is seen as a means of power that controls both individuals and society. The three steps in this process are observation, normalization, and examination. O'Brien uses similar language when he tortures Winston in a cell and speaks of the three stages of reintegration: learning, understanding, and acceptance. These methods of discipline become the dominant means of control, quickly permeating all aspects of society.

However, just as telescreens in the novel automatically push ideas on their viewers, social media's algorithms today decide what we see and shape our vision of the world. With Orwell's concepts of Two Minutes Hate, a daily ritual of outrage set up by the Party, and Newspeak, a

deliberately ambiguous language that's designed to limit people's ability to communicate in nuanced ways, he revealed how people's thoughts, emotions, and ultimately actions can be manipulated. The dynamics he describes uncannily reflect the way social media now influences the lives of billions of people around the world.

Foucauldian Formulation: Panopticism and Social Media

The Internet as an environment used to keep track of everyone's actions is not a new phenomenon. Jeremy Bentham wrote about a theory and an idea on how to control individual behavior with his Panopticon proposal. The Internet can be seen as a modern-day version of the Panopticon, with individuals' activities and behaviors constantly monitored and recorded through various online platforms and technologies.

Foucault's ideas on Bentham's Panopticon model fit well with what has been described as the possibilities that are available for those who wish to use the Internet as a tool for social control. The vision of the Internet's possible future direction is a parallel take off of Foucault's interpretation of the Panopticon theoretical model.

The Internet allows for constant monitoring and recognition of actions, much like the spatial units of the Panopticon. According to Foucault, the constant state of monitoring through visibility is a way to trap individuals and control their activities, allowing a large group to be controlled with minimal effort or resistance: "each individual, in his place, is securely confined to a cell from which he is seen from the front by the supervisor; but the sidewalls prevent him from coming into contact with his companions. He is seen, but he does not see; he is the object of information, never a subject in communication. The arrangement of his room, opposite the central tower, imposes on him an axial visibility; but the divisions of the ring, those separated cells, imply a lateral invisibility... the crowd, a compact mass, a locus of multiple exchanges, individualities merging together, a collective effect, is abolished and replaced by a collection of separated individualities. From the point of view of the guardian, it is replaced by a multiplicity that can be numbered and supervised; from the point of view of the inmates, by a sequestered and observed solitude." (Foucault, 1977, p. 200)

Foucault's social theory emphasizes the role of power in shaping individual and collective identities through networks and structures. The power relations of the collective manifest in physical spaces and individuals are produced by these power relations. The Panopticon prison is an example of how the collective trains and corrects prisoners through the power of suggestion. The watchtower provides a view of all individual cells, but there does not necessarily need to be a guard watching because the tower's structure itself diffuses surveillance symbolically. The prisoners behave properly because they feel they are being watched, and they fear punishment if they misbehave. The tower's authority lies in the prisoners' feelings rather than in the actual presence of a guard.

This is a salient feature of Foucault's social theory, where power works through networks shaped and mediated by structures. The analysis of his work reveals notable similarities between social media and the Panopticon. Both exhibit structural and methodological parallels, placing social media in the category of tools used for exercising control. To establish the linkage, present between social media and the Panopticon, a series of comparisons can be analyzed through the important apparatus of social media, META, which includes primary platforms like Facebook and Instagram.



(Source: https://www.google.com/url?sa=i&url=https%3A%2F%2Fmedium.com%2F%40xzhan065%2Fpower-of-panopticism-in-modern-society-79ea015fab9a&psig=AOvVaw05N7RAdV_HGxc9A_FOVQU&ust=1680720869193000&source=images&cd=vfe&ved=2ahUKEwj5qKKk85D-AhWSYaACHdEnBpwQjRx6BAGAEAAo)

Facebook: The Panopticon of Our Time

The structural similarities between Facebook and the Panopticon are evident when analyzed from a user's perspective. Facebook assigns a specific identity to each user upon joining the network through the creation of an online persona, represented by the profile picture and contained within the profile page and the "timeline". The user's activity is chronologically ordered within the timeline and can be found in the activity log, an extension of the profile page. As every action on Facebook originates and exists within the profile page, it functions as the user's "cell". This parallels the Panopticon's physical ordering of cells within the immediate sightline of the tower's gaze, ensuring constant monitoring of all inmates.

When a user interacts with Facebook, the platform can collect an immense amount of data, including information about the user's location, interests, and behavior. This data is then used to create a detailed profile of the user, which is constantly updated as the user continues to interact with the platform. This profile is not only used to personalize the user's experience on Facebook but it is also used to deliver targeted advertising. In this sense, the user is not only

being monitored but their behavior is being controlled through the manipulation of their newsfeed and the ads they see. Additionally, because Facebook is a social platform, the user is also being monitored and controlled by their peers, who are constantly reinforcing and shaping their behavior through likes, comments, and shares. This creates a system of surveillance and control that is decentralized and operates through the network itself, rather than through a centralized authority figure.

It is important to note that Facebook also has access to all user accounts, and is known to use user information to suggest content and target advertisements. This surveillance is largely unnoticed by users but becomes apparent when new information is revealed about Facebook's use of user data.

The debate surrounding Facebook's use of user data suggests that users should not be caught off guard by Facebook's access to information. However, the exact information that Facebook is accessing and when it is being accessed cannot be determined by individual users through the existing interface. Facebook as a corporation watches from the guard tower—the presence of its gaze is never completely verifiable.

It is worth noting that there is a key difference in Facebook's panoptic schema compared to the Panopticon, as Facebook users not only occupy individual cells but also simultaneously occupy the guard tower. This means that viewers are also viewed, and users can switch between the position of the user/prisoner (posting their activity within the cell) and the position of the user/guard (watching others from the tower). This creates a state of constant flux in autonomy at the user level, while Facebook's gaze remains at the top of the hierarchy through hierarchical observation.

Instagram: Where We Volunteer to be Watched

Similarly, the design of Instagram resembles the structure of a Panopticon more than just about any other social media platform, in the sense that your profile represents your life distilled and immediately observable in your gallery of pictures and your biographical information. Thus, Instagram offers two options for viewing content: the individual gallery, a space where each user's posts are displayed, and the feed, which displays content posted by everyone whom the viewer is following (in other words, a collective). Instagram's design is sleek, composed of fine lines, clean font, and white space, and images are afforded a lot of space on the screen to maximize users' surveillant power. Further, success on the app is measured by the number of likes on specific posts and followers of the individual, both of which are visible to all users of the app – therefore, content must be good enough concerning all other content to gain likes when it pops up on the feed of followers, and it must contribute appropriately to the theme of the user's profile to maintain and build one's follower base. Thus, the use of the app to express identity is heavily mediated by the networks of surveillance cultivated by the app itself. In Bentham's view,

this makes power both “visible and unverifiable”. In the same way that the Panopticon compels whomever it is observing, whether that be the inmate, the patient, the student, or the laborer, to conform to the norms that society has outlined, Instagram as a societal technology asks users to conform. Whether it be the pressure of maintaining a “theme” or a certain kind of “aesthetic” only posting pictures considered to be “artsy” or “well-filtered”, or choosing to abstain from posting certain kinds of images at all, Instagram users labor over what pictures to post so that they will be viewed in the “right” way—by society. We carefully curate our digital identities not out of fear of being punished by the Instagram staff but out of fear of being punished by our Instagram followers. In terms of the Panopticon, we inhabit both the cell and the watchtower. We exist as individuals on Instagram by viewing ourselves from the perspective of the collective and regulating our social media presence accordingly. We construct an identity, hoping to get attention and praise all in terms of acceptability.

By creating a structure suited to the compartmentalization and surveillance of its users, by continually gathering information from its users, and by enforcing norms, social media embodies its panoptic schema. Just as the Panopticon utilizes strategies of hierarchical observation, examination, and normalizing judgment to exercise power through discipline, so social media utilizes parallel measures to establish a disciplined social body of its own. Users, though generally aware of social media’s surveillance of their activity, choose to stay on the network despite rising concerns. Thus, the discussed social media handles embody a panoptic schema—a disciplinary apparatus—with a particular advantage: inhabitants enter and stay within the confines of social media on their own accord.

What is the effect, or the implications, of social media apparatuses in our everyday lives? In later years, Foucault continued to discuss the relationship between power and knowledge that he found to be made possible through the disciplines and the apparatuses they permeate. Foucault asserted that power is more than just a negative force designed for repression or prohibition; rather, “if power were never anything but repressive if it never did anything but to say no, do you really think one would be brought to obey it?”(Foucault, 1980, p.119) Foucault continues: “What makes power hold good, what makes it accepted, is simply the fact that it doesn’t only weigh on us as a force that says no, but that it traverses and produces things, it induces pleasure, forms knowledge, produces discourse. It needs to be considered as a productive network which runs through the whole social body....” (Foucault, 1980, p.119)

What new forms of knowledge do the power-knowledge relations existent in Facebook produce? What is the effect of Facebook’s disciplinary apparatus and what have we gained from it? If power induces pleasure and forms knowledge, as Foucault argues, then perhaps the induction of pleasure has been addressed, at least in a rudimentary way, by discussing why users stay on Facebook despite privacy concerns. There seems to be something about the social

connectivity provided by Facebook that users want, or perhaps that they feel like they need. This connectivity may be possible to attain in ways other than through Facebook; however, Facebook is the dominant social network of the current age. This connectivity, though, is different from connectivity in the traditional sense. It is detached because it exists on the internet, users can interact with others without ever meeting face-to-face or confronting the ramifications of face-to-face interaction. They can be “connected” while physically separated by hundreds or thousands of physical miles. Possibly, this detached connectivity begins to change the way we communicate; perhaps it begins to change us sociologically or influence the way we perceive social interaction. Regardless, the panoptic schema within Facebook has made this new connectivity easy and as it continues to evolve, so will we continue to evolve with it.

In the end, however, the intricacy of surveillance and the implementation of disciplinary strategies made possible by social media structure come to the forefront. We live in an age where new kinds of connectivity are being made possible through both digital and physical means. When the nature of our communication becomes so fundamentally different than that of previous generations, and so integrated with panoptic elements like surveillance, examinations, and norms, we must ask ourselves what we have become as a result of the digital age, and what we may become in the future.

Michel Foucault passed away in 1984 before the Internet became a ubiquitous mode of communication. While Foucault’s work centered on the relationship between power and knowledge and the use of power/knowledge as a tool for social control, the level of surveillance present on the Internet far exceeds what was available during Foucault’s lifetime. Despite his inability to anticipate the existence of online social networking, Foucault’s panopticism framework can still be used to analyze social networking as a mode of productive power. Rather than dismissing Foucault’s work due to his lack of knowledge about the Internet, his arguments can be extended to this new realm.

Conclusion:

You start the day bleary-eyed and anxious. You stayed up late yesterday working on a blog post, gathering facts and memes from around the web and assembling them into an incisive whole. Did it create a shaft in the stats? You log in on your mobile phone while the coffee is brewing. But it's too early to slip into a professional headspace—you decide you don't want to know. Someone sent you a message on Facebook or Instagram, so you better check it.

Drinking cow urine could cure COVID-19 and the virus was a biological weapon developed by China!

Mosques were attacked and Hindus were targeted by Muslims!

Lady Gaga is a man and we have the photographic evidence to prove it!

Your friend will appreciate it, so you pass it on to her directly. Maybe it's not something you want to share widely. Two new LinkedIn contact requests. Your profile needs updating. Should you include details of the design work you completed for a local event a week earlier? You are not sure. You are building a profile as a graphic designer and looking for quality clients. Maybe it's a part of your personality that you let incubate a little longer. They can have serious consequences and influence public opinion and behavior.

How did we ever manage without social media? In less than a decade, free online services like Facebook, Twitter, Instagram, and LinkedIn have completely changed the way we work, play and communicate. Sharing content on various social media platforms is a common aspect of life for millions of people. Yet little is known about how social media affects us on a psychological level. Many scholars examine how social media are reshaping forms of economic activity, reshaping our institutions, and transforming our social and organizational practices. We are still learning about how social media affects our sense of personal identity.

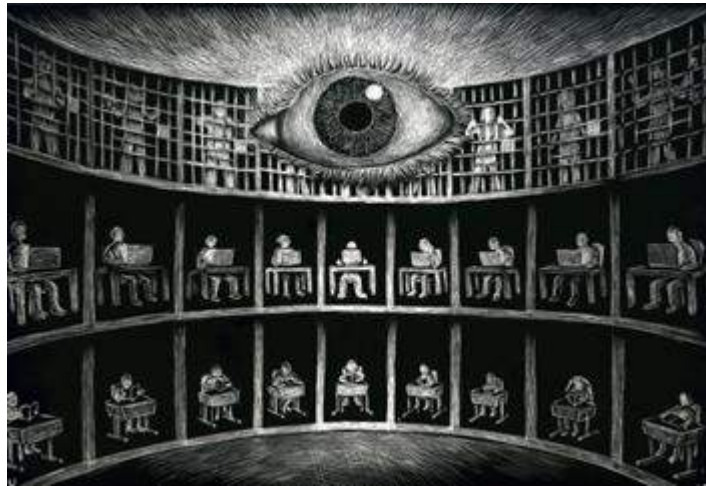
Michel Foucault, as mentioned earlier, had several ideas that can shed light on how social media affects us psychologically. Even though he died before the advent of the Internet, his work on social conditioning and identity formation regarding power is still relevant to our online lives. If we look at social media through a Foucauldian lens, it is clear that it is not only a tool for exchanging information, but a means of shaping our identity. In other words, social media involves a process of "subjectification".

Mark Zuckerberg thinks social media is all about "conscious and permanent visibility." By making our events visible and shared by the crowd, social media exposes us to a kind of 'virtual Panopticon'. This is not only because our activities are monitored and recorded by the social media service for market analysis or targeted advertising. For the most part, we can and do ignore this kind of data collection. The oversight that directly affects us and influences our behavior comes from the people we share with.

There are no guards or prisoners in this virtual Panopticon. We are both guards and prisoners, watching and implicitly judging each other when we share content. When sharing online, we play to the crowd. On some level, we recognize that. The crowd consumes the content we share and passes it on if we are favored. The crowd honors the identity we create by sharing this content. Sharing online is not just about self-affirmation and self-creation. For many people, the impulse to share stems from a sincere desire to empower and inform their tribes and communities. We can be committed to spreading the word, passing the word on, or just playing a part in keeping the conversation going by commenting or liking what others have shared. The point is that whatever action we take, we make a personal statement: 'I affirm this; I share it; I like this'. We talk to the crowd about our personal preferences and want nothing more than for

the crowd to validate those preferences in return. It undoubtedly satisfies a deep psychological need for recognition. Whatever it is that drives it, it draws us back to share and share again.

Before you think “I don’t, ” consider if you have ever participated in a social media outrage only to wake up the next day and think, “How could I have done that? Have you ever realized you didn't have all the facts and yet felt compelled to respond? Have you ever posted, liked, or shared an article with a particularly outrageous title without actually reading it? If so, you've participated in a social network version of Orwell's novel.



(Source: <https://literariness.org/2016/04/04/foucaults-influence-on-postmodern-thought/>)

Over the past ten years, the use of social networks has become widespread. Since Foucault saw panoptic surveillance as present in physical institutions such as prisons, schools, factories, and the military, a precedent for panopticism as a framework for analyzing social networking sites already exists. Jeremy Bentham's proposal of the prison or Panopticon and its basic indications have been transformed with Michel Foucault's interpretation into a new concept that refers to the control of power. On the other hand, Bentham may have influenced George Orwell's novel *1984*. In the field of literature, reality often serves as a source of inspiration for writers. This is especially true of George Orwell's seminal work, which draws heavily on the real-life concept of the Panopticon as explored by Jeremy Bentham and Michel Foucault. Orwell's work serves as a link between the real implications of the Panopticon and the world of literature. Based on this concept, he was able to create a dystopian world that is both chillingly realistic and highly relevant to modern society. This is a powerful example of how real-life events and concepts can inspire great works of literature, and how literature can in turn illuminate the darker aspects of reality.

The Panopticon and *1984*, both confer the recurring theme of panopticism. There lies the correlation between Bentham, Foucault, and Orwell's work in literature. The study introduces the idea, of how the panoptic prison has changed and transformed in the 21st century by analyzing people's behaviors and attitudes on social media. Thus, it can be said that the dream of

Bentham and the nightmare of Foucault came true in the 21st-century social media cataclysm riding on the back of Orwellian literary genius.

References:

1. Abdu, K. S. T., & Khafaga, A. F. (2019). A Critical Discourse Analysis of Mind Control Strategies in George Orwell's Nineteen Eighty-Four.
2. Beiner, R. (2014) *Political philosophy what it is and why it matters* (pp. 151-167). New York, NY: Cambridge University Press.
3. Bentham, J. (1995). *The Panopticon Writings* M. Bozovic (Ed.) London: Verso.
4. Brunon-Ernst, A. (2012). *Beyond Foucault: New Perspectives on Bentham's Panopticon*. Ashgate Publishing Limited (p.-16).
5. Fast, S. A. (2015). *Facebook | Panopticon: An analysis of Facebook and its parallels to the Foucaultian Panopticon*. Honors Theses.
6. Foucault, M. (1977). *Discipline and Punish: The Birth of The Prison*. New York: Vintage Books.
7. Foucault, M. (1980). *Truth and power*. In C. Gordon (Ed.), *Power/Knowledge: Selected interviews and other writings 1972-1977* (pp. 109-133). Parthenon Books.
8. Himmelfarb, G. (1965). *Victorian minds; A study of Intellectuals in Crisis and Ideologies in Transition*. Elephant Paperbacks, Chicago.
9. Ledvina, A. (2014, July 4). 10 Ways Facebook is Actually the Devil. Rokob.
10. MacNay, L. (2005). *Foucault: A critical introduction*. Polity Press.
11. Murakami Wood, David. (2012). Beyond the Panopticon? Foucault and Surveillance Studies. *Space, Knowledge and Power: Foucault and Geography*. 245-263.
12. Orwell, G. (1949). *Nineteen Eighty-Four*. Secker & Warburg.
13. Peek, M. (2009). The observer and the observed: Re-imagining privacy dichotomies in information privacy law. *North western Journal of Technology and Intellectual Property*, 8, 51.
14. SAGE. (2004). Bentham, Jeremy (1748–1832). In M. Bosworth (Ed.), *Encyclopedia of Prisons & Correctional Facilities* (pp. 72-74)
15. SAGE. (2004). Panopticon. In M. Bosworth (Ed.), *Encyclopedia of Prisons & Correctional Facilities* (pp. 664-667).
16. Semple, J. (1993). *Bentham's Prison: A Study of the Panopticon Penitentiary*. Clarendon Press.
17. Sheridan, C. (2016). *Foucault, Power and the Modern Panopticon*. Senior Theses, Trinity College.

<https://digitalrepository.trincoll.edu/cgi/viewcontent.cgi?article=1564&context=theses>

A NARRATIVE REVIEW OF THE LITERATURE ON EMOTIONAL INTELLIGENCE CONSTRUCT

Randeep Singh* and Rajib Chakraborty

School of Education, Lovely Professional University, Phagwara, Punjab.

*Corresponding author E-mail: randeep6086@gmail.com

Abstract:

One of the critical variables of relevance in the present academic landscape is the intelligence use of one's emotions. Students' adept at using this trait to further their actions and interest are known to be emotionally intelligent. Pub Med, Springer and JSTOR data bases were explored to include the articles containing emotional intelligence in its title for the present study. The literature on emotional intelligence is thoroughly examined in this narrative review, which also charts the variable's development, dimensions, and applications. It highlights the complexity of emotional intelligence and its importance in social, academic, and professional contexts by drawing on research studies conducted in interdisciplinary areas. It examines the causes and effects of emotional intelligence through synthesis of empirical research, illuminating how it contributes to improved interpersonal interactions, organizational effectiveness, and personal well-being. In order to enhance information on emotional intelligence and its use in a variety of contexts, this review also highlights knowledge gaps and suggests directions for future investigation. This paper adds to the continuing discussion on emotional competence and its applicability in modern society by providing insights into the development and use of this variable.

Keywords: Emotional Intelligence, Narrative Review

Introduction:

Emotions are the loom and the thread that weave together the many patterns that make up our social environment in the rich tapestry of human interaction. Emotional intelligence a notion that has received a lot of attention and praise in recent years, sits at the center of this complex interaction. This study aims to probe the depths of this complicated concept, revealing its intricacies, examining its consequences, and clarifying its relevance in diverse domains of human existence. Emotional intelligence, or EQ for short, is the capacity to recognize, understand, and effectively regulate emotions in others as well as in oneself. Initially introduced by psychologists Peter Salovey and John Mayer in the early 1990s, emotional intelligence has grown to be a key idea that has an impact on a wide range of disciplines, including organizational behavior, psychology, education, and leadership. It is not just about understanding emotions; it is also about knowing how to use them to build interpersonal skills, empathy, and resilience. The

significance of Emotional Intelligence extends beyond the personal sphere and becomes ingrained in the collective awareness of institutions and communities. It shapes pedagogy in educational contexts, influencing how students navigate their academic paths and creating conditions that support holistic development. It becomes evident in the context of work and leadership as a fundamental component of efficient management, supporting productive collaboration, amicable dispute resolution, and flexible decision-making. Furthermore, emotional intelligence is a lighthouse of knowledge on the complexities of mental health and wellbeing. Its profound effects on stress reduction, building healthy relationships, and psychological resilience highlight how important it is to creating flourishing people and communities. Moreover, its significance in the quest for social justice and equity is highlighted by its function in reducing prejudices, encouraging diversity, and creating inclusive environments. This study sets out to explore the mysterious details of emotional intelligence by utilizing theoretical frameworks, empirical data, and interdisciplinary ideas. By carefully analyzing its causes, effects, and behaviors, this project aims to expand our knowledge of emotional intelligence and provide guidance on how to develop and use it in many settings.

Literature Review:

Martins (2024) analyzed the data to determine how social attitudes affect the education of Portuguese students, with a special focus on natural intelligence schemes. This review can reveal the importance of emotional intelligence in education by showing the relationship between emotions and intelligence. Understanding and improving social-emotional relationships can improve student outcomes and provide useful strategies for educators and policymakers in Portugal.

Ghorai (2024) focused on the link between motivational achievement and intelligence among high school students in Paschim Medinipur. This study will investigate how students' emotional intelligence affects their motivation to achieve academic success. Ghorai's research has enriched the discipline of education by revealing the psychological factors that influence student motivation and learning.

Zhou, Tavan, and Kavarizadeh (2024). etc conducted an exploratory, qualitative analysis to investigate the relationship between emotional intelligence and academic achievement. In their research, they will look at how these different skills interact and affect learning. Their work integrates previous research to provide important insights into cognitive structure and its impact on student academic achievement.

Khushbu (2023) research examines the emotional state of students in Darbhanga district. Research can use standardized tests and research designs to uncover various aspects of emotional intelligence, including self-awareness, self-regulation, social skills, reasoning, and motivation. Focusing on a specific region, this study provides a better understanding of the local educational

context by highlighting the principles that influence the development of regional thought. The findings of this study can inform educational policies and interventions in the Darbhanga district that will enhance students' thinking and ultimately lead to their overall well-being and academic success.

Srinivas (2023) examined perceptions of intelligence and self-belief as predictors of academic performance among secondary school students. By examining these factors, the research will shed light on the interaction between feelings of intelligence, self-esteem, and academic success. Understanding these determinants can provide educators and policy makers with important information in developing strategies to encourage students' positive thinking and improve their education in secondary schools.

Sharma and Panda (2023) investigated the issue of cyberbullying and intelligence among high school students in Sikkim. This study may provide insight into the prevalence of cyberbullying and its impact on mental health, as well as investigate the role of emotional intelligence in reducing its effects. Information obtained from this study may shed light on prevention and intervention strategies for cyberbullying and the increase in depression among youth in the region.

Tom *et al.*, (2022) investigated how school differences affect intelligence and violence levels in high school students. Through psychological testing and research, this study aims to demonstrate differences in thinking and severity between students with different educational backgrounds. Understanding these differences can provide useful information about the impact of the school environment on students' attitudes and behaviors.

Rathod and Parmar (2022) conducted a study comparing the emotional intelligence of 12 students in standard and government schools. This study aims to determine the differences in emotional intelligence between two groups. Research can investigate emotional intelligence, such as self-awareness, self-regulation, social skills, empathy, and motivation, to understand the impact of the learning environment on students' emotional development.

Kumari and Tripathi (2022) studied the intelligence of school children in Jashpur district. This research will include the evaluation of skills such as self-awareness, self-regulation, social skills, thinking and motivation of students studying in the village in the context of the environment. Information from this study may provide important information about the emotional development and well-being of students in the region and its ability to inform educational strategies and interventions to improve school-age children's thinking.

Nath and Das (2021) a think about on Khoja's reasoning, Mental Property of Assam, on tall school understudies in Iraq. This investigate will incorporate a comprehensive evaluation to get it different angles of students' enthusiastic insights. Their discoveries may give knowledge into the wellbeing recognitions and needs of tall school understudies within the locale and

educate instructive methodologies and mediations that make strides passionate insights in these people.

Sharma (2021) conducted a think about looking at the enthusiastic insights of auxiliary school understudies concerning sexual orientation contrasts. Likely utilizing standardized enthusiastic insights appraisals, this inquire about pointed to investigate how sexual orientation impacts passionate insights levels among understudies. Discoveries from this think about may shed light on potential varieties in passionate mindfulness, direction, and social aptitudes between male and female auxiliary school understudies. Such experiences are profitable for teachers and policymakers, educating methodologies to advance enthusiastic well-being and social improvement custom fitted to the special needs of understudies based on sexual orientation contrasts in enthusiastic insights.

Fiori *et al.*, (2021) showed a novel viewpoint on enthusiastic insights by presenting feeling data preparing as a unused component. Their work sets up a hypothetical system and gives observational prove supporting this concept. This inventive approach likely includes investigating how people handle and decipher enthusiastic data, which might have noteworthy suggestions for understanding enthusiastic insights. By growing the conventional see of passionate insights, their investigate contributes to a more profound understanding of human feelings and cognition. Their discoveries may educate mediations pointed at upgrading feeling control and social intelligent based on progressed enthusiastic data handling capacities.

Jain and Mohta (2020) investigated the affected of counseling on passionate insights and sex contrasts among auxiliary understudies. This investigate likely explores how counseling mediations influence different viewpoints of passionate insights, considering potential varieties between male and female understudies. Discoveries from this ponder might give profitable experiences into the adequacy of counseling in upgrading passionate insights abilities among auxiliary understudies and highlight any gender-specific contrasts in reaction to these intercessions, illuminating custom-made counseling approaches for advancing passionate well-being in instructive settings.

Bharadwaz and Hussain (2020). studied the emotional intelligence of secondary school students in Kamrup (M) district of Assam. Their research may include an in-depth assessment of emotional intelligence in local educational contexts. This study provides insight into the mental health and development of secondary school students in the region. These findings can inform educational policies and interventions to improve emotional intelligence among students in Assam, thereby supporting their well-being and academic success. This study highlights the importance of understanding and promoting skills in secondary education, especially in the context of Kamrup (M) district of Assam.

Bahat and Ovsenik (2020) research will examine the mental health of Slovenian secondary school students. This study provides insight into the emotional development and health of young people in the Slovenian educational context, focusing on emotional awareness, regulation and interpersonal relationships. Understanding the skills of middle school students is important for creating effective interventions and support for educators and policymakers. This research contributes to education in Slovenia by revealing emotional intelligence and related resources and supports students' social development, supporting their improvement and success in education and personal life.

Rani (2019) studied the relationship between emotion and intelligence among high school students attending public and private schools. This research provides insight into how different learning environments affect students' acquisition of these important resources. Thanks to Lani's work, our understanding of the changes that affect children's social and emotional abilities, which are critical to their learning and health, has completely improved.

Rathakrishnan and Sanu (2019) investigated the emotional intelligence and mental health of rural school children in Malaysia. The researchers are from Universiti Malaysia Sabah and Universiti Kebangsaan Malaysia. This study, conducted in collaboration with Sanju George from Rajgiri School of Social Sciences in India, shows important factors affecting the mental health of rural students. This process needs to be understood so that effective supports and interventions to improve health can be developed.

Monemian and Shabani (2019) study examined how high school students in modern and smart schools interact with thinking, intelligence, and problem-solving problems. By investigating these psychological factors, this study provides an understanding of how these factors affect students' problem-solving skills. Practices and interventions can contribute to academic success and overall school environmental health by improving students' knowledge and thinking. These dynamics can be better understood.

Madlan *et al.* (2018) study of secondary school students' social-emotional and intellectual skills provides a comprehensive assessment of the important characteristics required for holistic development. Through careful analysis, the authors show how these skills work in the classroom, highlighting their importance to students' learning and well-being. Ismail's evaluation demonstrates the importance of this work and confirms his views on children's social-emotional and intellectual abilities. Taken together, this research has important policy and educational implications for staff to develop safety practices that support student resilience and relationship development.

Kauts (2018) conducted research on the relationship between stress levels and intelligence among young people. Kauts's research, published in the MIER Journal of Educational Research, Trends and Practice, shows the impact of gender differences in the

emotional well-being of secondary school and related students on educational strategies and interventions aimed at reducing stress and increasing psychological resilience.

Razjouyan and Hirbod Mobarake (2018) investigated the relationship between emotional intelligence (EI) and role differences in cyberbullying among high school students in Tehran. The authors carefully examine the relationship between cyberbullying activity and emotional intelligence (EI) to see the impact of this behavior on young people's health. Research demonstrates the value of social-emotional skills in addressing youth cyber aggression, highlighting the role of emotional intelligence in reducing cyberbullying victimization or delinquency. This research provides valuable information for educators, policy makers, and healthcare professionals working to develop effective interventions to prevent cyberbullying and promote online relationships among youth.

Dwivedi and Qasim (2017) study examined the emotional intelligence (EI) of secondary school students from SHUATS Education Department, Allahabad. This study investigates the expansion of the level of emotional intelligence in young people and can provide information about how this affects social and academic success. Research examining the psychology of this group helps us understand the development and expression of emotional abilities in young people. It can provide useful information to help teachers and policy makers design plans to improve intelligence (EI) in secondary school students and support their development and overall health.

Bhat (2017) investigated emotional intelligence in high school students according to gender. Bart's research explores how gender affects young people's emotional intelligence. This research is important in understanding the emotional development of students in their first years. Bhat's research provides insight into how gender and emotional development are interconnected, allowing educators and policymakers to hand-in-hand develop appropriate interventions and support. This study highlights the importance of classroom skills in supporting the overall development of high school students and increasing physical awareness of classroom skills.

Subramanian and Kumari (2017) research showed how education affects young people's emotional development. By analyzing knowledge throughout the history of education, this research has important implications for educators and policymakers seeking to improve students' health and education. Subramanian's research has made a significant contribution to our understanding of emotional intelligence in high schools.

Kar, Saha and Mondal (2016) examined the relationship between emotional intelligence (EI) and adjustment in high school students. This study draws on survey data from schools in West Bengal, India, to investigate how emotional intelligence (EI) affects student achievement and educational attainment. By examining this relationship, research highlights the role emotional intelligence (EI) plays in helping young people develop positive change. The results of

this study may influence instructional strategies to increase students' cognitive abilities to improve their health and learning.

Ebinagbome and Nizam's (2016) study examined how emotional intelligence (EI) affects the academic performance of Malaysian school students. The research examines the relationship between students' academic achievement and intelligence (EI). By analyzing this connection, this study will provide important insights into how Emotional Intelligence affects students' academic outcomes and success in higher education. This study supports our understanding of the role emotional intelligence (EI) skills play in academic development and may influence instruction that supports the learning development of all boys and girls.

Mendelson *et al.*, (2016) studied how the academic performance of Latino middle school students is affected by intelligence. Researchers at Keizer University Graduate School were able to investigate how emotional intelligence affects learning in this group of students. By analyzing this relationship, the study provides insight into the importance of emotional intelligence on the academic success of Latino students. This research allows us to understand the variables that influence academic success and can help design programs that will improve student performance and well-being in secondary education.

Kannaiah and Shanthi (2015) are collaborating on examining the skills in the workforce that have a significant impact on workplace performance, the importance of employee relations and organizational outcomes being the subject of their research." This research as a whole, which is known from the academy and the business world, offers suggestions for creating ideas in businesses that will lead to success.

Kumar and Thapar (2015) studied the emotional development and performance of secondary school children from nuclear families. Their research, provides insight into how family structure affects children's emotional development and resilience. With their research on the potential of emotional intelligence in the context of the nuclear family, Kumar and Thapar offer recommendations to psychologists and educators working to improve the education and general health of children in secondary education.

Ghosh (2015) studied how emotional intelligence affects the competitiveness of Indian teachers. Ghosh's research, published in the International Journal of Humanities and Social Sciences Invention, highlights the importance of thinking skills in making good educational decisions. Ghosh provides a good analysis of how this affects teachers' competitiveness, which can be used to improve educational standards. This study suggests that the best way to improve the quality of education in India is to incorporate emotional intelligence into education. Ghosh's work enables us to understand the important role emotional intelligence plays in promoting effective learning.

Joshi and Dutta (2014) investigated the emotional intelligence of secondary students, focusing on the impact of gender and school type. Through meticulous analysis, they illuminate how these factors shape emotional intelligence in adolescents. Their findings offer valuable insights into the intricacies of emotional development during this crucial stage of education. By recognizing the influence of both gender and school environment, Joshi and Dutta provide a nuanced understanding of emotional intelligence among secondary students, contributing significantly to educational psychology research.

Kar *et al.*, (2014) focused on middle school students' emotional intelligence regarding sexuality and the social environment. The research conducted in the Indian state of West Bengal provides information on how these changes affect the emotional development of young people. This research uses rigorous testing and represents a significant advance in the study of psychology. The results suggest that gender and home background, as well as educational and treatment implications, should be taken into account when assessing students' emotional intelligence. Educators, policymakers, and researchers can benefit from this research to improve students' overall well-being.

Kaur and Mavi (2014) investigated the emotional intelligence of young people in the Kurukshetra region and examined its relationship with parents' education, gender, location and type of school. This study, conducted in high schools in India, provides important insight into the changes affecting young people's thinking. The research contributes to our understanding of psychology theory in education by integrating different perspectives. Their findings have important implications for teaching strategies and highlight the importance of addressing emotional intelligence to improve student learning and overall well-being. This report is useful for educators and policymakers who want to support youth development.

Conclusion:

A descriptive analysis of the conceptual literature on emotional intelligence concludes by highlighting the complexity and critical applications of emotional intelligence across many disciplines. Through design, assessment, and analysis of evidence, it is clear that emotional intelligence is essential for academic success, mental health, relationships, career, and personal success. However, due to the diversity and complexity of thinking about thinking theories, there are problems in thinking and working on thinking theory. Despite these issues, research shows how important it is to include the development of emotional intelligence in school curricula, workplace training, and mental health care to improve students' health and well-being. Future studies should investigate the relationship between emotional intelligence and other psychological factors as we continue to develop treatment strategies and measures. There is little question that this continuing research will advance our knowledge of emotional intelligence and its applications in a variety of settings.

References:

1. Martins, E. (2024). Socio-Emotional Skills in The Academic Performance of Portuguese Basic Education Students (Emotional Intelligence Program). *Everant Journal*,8(02), 934.
2. Ghorai, B. C. (2024). Emotional intelligence and achievement motivation: An investigation on higher secondary school students in Paschim Medinipur district. *International Journal of Advanced Research*, 11(11), 234-242. DOI: [10.21474/IJAR01/17818]
3. Zhou, Z., Tavan, H., Kavarizadeh, F. (2024).. The relationship between emotional intelligence, spiritual intelligence, and student achievement: a systematic review and meta-analysis. *BMC Med Educ* 24, 217 (2024).(<https://doi.org/10.1186/s12909-024-05208-5>)
4. Khushbu.(2023)A Study of Emotional Intelligence among School Students of Darbhanga District. *The International Journal of Indian Psychology*, 11(1), DOI: [10.25215/1101.225]
5. Srinivas, R. K. (2023). Emotional Intelligence and Self-Assurance Beliefs Were Assessed as Determinants of Academic Performance in Secondary School Students. *The International Journal of Indian Psychology*, 11(2), DOI: [10.25215/1102.027]
6. Sharma, A., & Panda, S. (2023). Cyberbullying and Emotional Intelligence among Senior Secondary School-going Adolescents of Sikkim. *The International Journal of Indian Psychology*, 11(4), DOI: [10.25215/1104.263].
7. Tom, A., Baiju, S., Regis, S., & Paul, B. (2022). Effect of schooling differences upon Emotional Intelligence and Aggression of Higher Secondary students. *The International Journal of Indian Psychology*, 10(1), DOI: [10.25215/1001.121].
8. Rathod, D. P., & Parmar, M. (2022). A Comparative Study of Emotional Intelligence of 12th Standard Students of Model School and Government School. *The International Journal of Indian Psychology*, 10(2), DOI: [10.25215/1002.079].
9. Kumari, A., & Tripathi, R. (2022). A Study of Emotional Intelligence among School Students of Jashpur District. *The International Journal of Indian Psychology*, 10(1), DOI: [10.25215/1001.167].
10. Nath, H., & Das, M. (2021). An Empirical Study on Emotional Intelligence of Higher Secondary School Students of Hojai District of Assam. *xllkogretim Online - Elementary Education Online*, 20(5), 2688-2692. DOI: [10.17051/ilkonline.2021.05.291].
11. Sharma, C. (2021). Emotional intelligence of secondary school students in relation to their gender. *International Journal of Creative Research Thoughts (IJCRT)*, 9(12).
12. Fiori, M., Udayar, S., & Vesely Maillefer, A. (2021). Emotion information processing as a new component of emotional intelligence: Theoretical framework and empirical evidence. *European Journal of Personality*, 0(0), 1–20. DOI: [10.1177/08902070211007672].
13. Jain, K., & Mohta, S. (2020). Emotional intelligence: counselling effect and gender difference among secondary students. *The International Journal of Indian Psychology*,

- 8(4), DIP: 18.01.172/20200804. DOI: [10.25215/0804.172].
14. Bharadwaz, D., & Hussain, R. (2020). A Study on Emotional Intelligence of Secondary School Students with Special Reference to Kamrup (M) District of Assam. *International Journal of Management (IJM)*, 11(12), 1580-1588. Article ID: IJM_11_12_144. DOI: [10.34218/IJM.11.12.2020.144].
 15. Bahat, B., & Ovsenik, M. (2020). Emotional Intelligence in Secondary School Students. *Revija za univerzalno odličnost / Journal of Universal Excellence*, 9(4), 293-308. DOI: [10.37886/ruo.2020.018].
 16. Rani, S. (2019). Study of government and private senior secondary school students in relation to social intelligence and emotional intelligence. *Aripex - Indian Journal of Research*, 8(1), 2250-1991.
 17. Rathakrishnan, B., Sanu, M. E., George, S., Yin, K. T., Yahaya, A., Singh, S., & Kamaluddin, M. R. (2019). Emotional Intelligence and Psychological Well-Being of Rural School Students in Malaysia. *EC Psychology and Psychiatry*, 8(6), 440-444. DOI: 10.1234/abcd.1234567890.
 18. Monemian, H., & Shabani, A. (2019). Relationship between emotional intelligence and metacognition with problem-solving skills of junior high school students of smart schools and ordinary schools. *Iranian Journal of Positive Psychology*, 5(3), 142-149.
 19. Madlan, Endalan, L., Asnawi, A. A., Seok, C. B., Bullare, HJ. Bahari, F., Mutang, J. A., & Ismail, R. (2018). (The Social Emotional Intelligence of Adaptability Skills Among Secondary School Students). *Jurnal Psikologi Malaysia*, 32(1), 47-57.
 20. Kauts, D. S. (2018). Emotional intelligence in relation to stress on boys and girls at the secondary stage. *MIER Journal of Educational Studies, Trends & Practices*, 8(1), 1-16.
 21. Razjouyan, K., Hirbod Mobarake, A., Sadr, S. S., Samimi Ardestani, S. M., & Yaseri, M. (2018). The Relationship Between Emotional Intelligence and the Different Roles in Cyberbullying Among High School Students in Tehran. *Iranian Journal of Psychiatry and Behavioral Sciences (In Press)*, e11560. doi: 10.5812/ijpbs.11560.
 22. Dwivedi, A., & Qasim, S. H. (2017). A Study of Emotional Intelligence of Secondary Level Students. *Journal of Advances in Education*, Vol. 3(1), 48-52. Retrieved from <http://www.crsdindia.com/aoe.html>.
 23. Bhat, A. A. (2017). Emotional Intelligence of Higher Secondary School Students with Respect to Their Gender. *The International Journal of Indian Psychology*, 5(1), DIP: 18.01.105/20170501. DOI: 10.25215/0501.105.
 24. Subramanian, N., & Saravana Kumari, M. (2017). Emotional intelligence of higher secondary students with regard to type of school – A study. [Volume 7, Issue 8, August 2017]. S Veerasamy Chettiar College of Education, Puliangudi – 627855.

25. Kar, D., Saha, B., & Mondal, B. C. (2016). Emotional Intelligence and Adjustment Ability Among Higher Secondary School Students: A Correlational Study. *American Journal of Social Sciences*, 4(4), 34-37. <http://www.openscienceonline.com/journal/ajss>
26. Ebinagbome, M. E., & Nizam, I. (2016). The Impact of Emotional Intelligence on Students' Academic Performance: A Study on Malaysian Tertiary Institution. *International Journal of Accounting & Business Management*, 4(No.1), April. <http://www.ftms.edu.my/journals/index.php/journals/ijabm.10.24924/ijabm/2016.04/v4.iss1/10.18>.
27. Mendelson, R. A., Guity, F., Mantz, T., & Mendelson, R. (2016). The Role of Emotional Intelligence in the Academic Achievement of Latin American Students in Secondary School. Retrieved from <https://www.researchgate.net/publication/305038260>. DOI: 10.18374/JABE-16-2.6.
28. Kannaiah, D., & Shanthi, R. (2015). A Study on Emotional Intelligence At Workplace. *European Journal of Business and Management*, 7(24), 147.
29. Kumar, A., & Thapar, V. (2015). Emotional Competence and Adjustment of Secondary School Students Belonging to Nuclear Families. *PARIPEX - INDIAN JOURNAL OF RESEARCH*, 4(8), 158. ISSN: 2250-1991.
30. Ghosh, N. B. (2015). Impact of Emotional Intelligence on the Relative Competitiveness of Educationists: A Requisite for Quality Education in India. *International Journal of Humanities and Social Science Invention*, 4(1), 07-16.
31. Joshi, D., & Dutta, I. (2014). Emotional intelligence among secondary students: Role of gender and type of school. *MIER Journal of Educational Studies, Trends & Practices*, 4(2), 167-182.
32. Kar, D., Saha, B., & Mondal, B. C. (2014). Measuring Emotional Intelligence of Secondary School Students in Relation to Gender and Residence: An Empirical Study. *American Journal of Educational Research*, 2(4), 193-196. DOI: 10.12691/education-2-4-3.
33. Kaur, H., & Mavi, N. S. (2014). A study of emotional intelligence of adolescent students of senior secondary schools of Kurukshetra district in relation to their sex, locale, type of school, literacy level of parents' education. *Paripex - Indian Journal of Research*, 3(12), 70.

A NARRATIVE REVIEW OF THE LITERATURE ON ACADEMIC PROCRASTINATION CONSTRUCT

Anurag Jamwal* and Rajib Chakraborty

School of Education, Lovely Professional University, Phagwara, Punjab.

*Corresponding author E-mail: anurag22jamwal@gmail.com

Abstract:

Academic procrastination is a pervasive issue impacting students across educational levels, significantly hindering academic performance and well-being. This review paper synthesizes recent literature to provide a comprehensive understanding of academic procrastination, examining its prevalence, root causes, consequences, and potential remedies. Through an analysis of empirical studies and theoretical frameworks, the review highlights the multifaceted nature of procrastination, including individual characteristics, environmental influences, and situational variables. Key findings underscore the role of perfectionism, academic hardness, and social interdependence in shaping procrastination behaviour. Moreover, the review emphasizes the detrimental impact of procrastination on academic outcomes and psychological well-being, particularly among students with learning disabilities. It also discusses various intervention strategies, such as time management techniques and cognitive-behavioural interventions, while emphasizing the need for personalized approaches considering individual differences. Overall, the review underscores the importance of addressing both individual and situational factors in combating academic procrastination and promoting student success. Future research directions and implications for interventions are discussed, aiming to create a supportive environment conducive to academic excellence and well-being.

Introduction:

Academic procrastination is a prevalent and persistent concern among students across different educational levels, attracting significant attention from scholars and educators alike. It involves the deliberate postponement of academic tasks despite being aware of the potential negative outcomes, which significantly hampers students' academic performance and overall welfare. Understanding the intricacies of academic procrastination is crucial for devising effective strategies to alleviate its adverse effects and assist students in reaching their academic objectives.

This study aims to delve into the multifaceted nature of academic procrastination, examining its prevalence, root causes, consequences, and potential remedies. By analysing recent research findings and theoretical frameworks, our goal is to offer a comprehensive understanding of this widespread issue and its impact on students' academic achievements and mental well-

being. Through a synthesis of empirical studies and theoretical perspectives, we aim to shed light on the various factors that contribute to academic procrastination, including individual characteristics, environmental influences, and situational variables. Additionally, we will explore the intricate connections between academic procrastination and other psychological constructs such as motivation, self-regulation, and emotional stability, illuminating the complex dynamics among these elements.

Keywords: Academic Procrastination, Academic Performance, Intervention Strategies, Environmental Influences.

Review of Literature:

Chronological Review of Trends in Academic Procrastination Literature

The study aimed to explore the predictive significance of adaptive and maladaptive aspects of perfectionism on academic procrastination among university students, and the potential moderating effect of various dimensions of academic hardiness. The study involved 966 undergraduate students from different departments who were asked to complete three self-report questionnaires concerning their perfectionism, procrastination, and academic hardiness. The findings revealed that adaptive perfectionism negatively predicts academic procrastination, while maladaptive perfectionism positively predicts it. Among the three dimensions of academic hardiness, commitment and challenge were significant moderators in the relationship between maladaptive perfectionism and academic procrastination, whereas control was a significant moderator in the relationship between adaptive perfectionism and academic procrastination. The results suggest that perceiving academic tasks as highly challenging and having a strong commitment to personal achievement appear to moderate the relationship by leading to increased procrastination only for those who experience a large gap between their personal standards and their achievements. However, maintaining high personal standards and a high level of control appears to decrease academic procrastination.

Procrastination is believed to be influenced by both inherent traits and situational or task-specific factors. However, the impact of situational and task-specific factors on students' procrastination habits has been largely unexplored, with most studies focusing on trait-based individual differences in general procrastination tendencies. In this study, an adaptive experience sampling method was used to evaluate students' ($N = 88$) perceptions of task-related ambiguity and their specific procrastination behaviour during exam preparation, measured six times daily for a week ($n = 3581$ measurements). The results showed that 30% of all planned study sessions were postponed. The likelihood of procrastinating on study sessions increased with students' perceptions of task-related ambiguity. The average risk of an individual procrastinating on study sessions was also predicted by their baseline procrastination tendency and conscientiousness. The study suggests that interventions should not only enhance students' self-regulation skills but

also modify tasks and instructions. The paper concludes with further implications and recommendations for future research.

Studies on procrastination often focus on individual factors like conscientiousness, which is reflected in the strategies used to combat procrastination. However, less attention is given to the situational and social elements, such as social interdependence, that could help students reduce procrastination. This research explores the connection between interdependence, academic procrastination, and emotional variables. Two vignette studies were conducted with student samples ($N_1 = 320$, $N_2 = 193$), and the data was analyzed using regression analyses and analyses of covariance. The findings from both studies indicate lower procrastination levels in group work with interdependence compared to individual work, particularly among participants with high trait procrastination. This difference is more noticeable when interdependence is paired with a proactive commitment to complete the task on time. Moreover, interdependent group work is associated with an increase in positive emotions and a decrease in negative emotions. These results highlight the importance of situational and social factors in academic procrastination and suggest new directions for intervention strategies.

The growing number of students with learning disabilities (LD) in higher education increases the need to understand and address the factors that affect their academic performance. One of these factors is academic procrastination, which affects over 70% of college students, including students with LD. The present study examined the relationship between academic procrastination and academic performance, and the moderating role of LD in this relationship. Findings showed a negative effect of academic procrastination on GPA, and more strongly for students with LD, indicating that a high-level of procrastination might be more harmful for these students' academic performance. These initial findings contribute to the body of knowledge concerning students with LD in higher education. They emphasize the need to support students with LD in a manner that will address the specific difficulties that may lead to higher rates of procrastination and subsequently lower academic achievement.

Procrastination is a common issue in academic environments. It has been analyzed from various theoretical perspectives, leading to the identification of numerous potential causes and effects. Recent research supports the idea that academic procrastination can be viewed as a situational issue and a failure in self-regulation learning. This implies that interventions should focus on both situational factors and self-regulation deficits to help students overcome procrastination. This review explores the latest literature on the causes and effects of academic procrastination and the few studies on academic interventions for this issue. The findings underscore the importance of further research into academic interventions for procrastination and the development of effective strategies. The review concludes with several recommendations for creating academic interventions.

Academic procrastination is a common issue with various adverse effects. While many studies have examined the causes and correlates of academic procrastination, there is a lack of research on interventions for this issue. This study represents an initial attempt to explore the relationship between academic procrastination, participation in online courses, and academic achievement, with the aim of developing an intervention for academic procrastination. The results showed that procrastination during studying was negatively correlated with the final exam grade and three measures of online course participation. The final exam grade was positively correlated with two measures of online course participation, and these measures were positively correlated with each other. Furthermore, the study found that procrastination during studying, in conjunction with measures of online course participation, accounted for about 50% of the variance in the final exam grade. The frequency of activities on the course website had the most significant positive impact on the final exam grade. These findings reinforce the idea that procrastination during studying hinders students' academic performance and outcomes, highlighting the need to develop and research academic interventions for academic procrastination to reduce its prevalence in academic settings.

A significant amount of research in the field of procrastination has been dedicated to understanding the factors that contribute to academic procrastination. However, less is known about how these factors may vary among different students. Furthermore, there is limited understanding of the differences in how these factors affect students' learning and what causes variations in procrastination behaviour among students with different levels of academic procrastination. This study compared the learning characteristics and self-regulation behaviours of three groups of students with varying levels of academic procrastination. The idea behind this was that certain learning characteristics and self-regulation behaviours might manifest differently in students with different levels of academic procrastination. The participants were first-year students (N = 22) with varying levels of academic procrastination enrolled in an elementary teacher education program. The students were divided into three groups (low procrastination, n = 8; average procrastination, n = 8; high procrastination, n = 6) based on their scores on a questionnaire that measured their levels of academic procrastination. From semi-structured interviews, six themes emerged that describe how students in the three groups handle factors that influence their learning: choice of degree program, initiation of study activities, engagement in study activities, reactions to failure, self-perception, and academic results. This study underscores the importance of examining differences in how students manage certain factors that could potentially have a negative impact on their learning. Among the group of students with average and high levels of academic procrastination, factors influencing their learning are regularly present. These factors lead to procrastination behaviour among students with high

levels of academic procrastination, but this does not seem to be the case among students with an average level of academic procrastination.

The study aimed to explore the connections between college students' achievement motivation (including subjective task value and academic self-efficacy), academic procrastination (both delay and missing deadlines), and achievement-related behaviours (such as effort and persistence). Specifically, it examined how academic procrastination acts as a mediator, linking students' achievement motivation to their effort and persistence based on the expectancy-value theory. The research involved 584 college students from a large southern urban university who completed a self-report survey. Notably, the study identified two potential pathways that encourage students to persist and invest more effort: one related to academic self-efficacy and the other tied to subjective task value, both influenced by their interactions with academic procrastination.

Using the foundational paper on academic procrastination by Beswick, Rothblum, and Mann as a reference, we offer a refreshed overview of academic procrastination and integrate this understanding with a classification of procrastination. The aim of our research was to demonstrate that while the extent of procrastination is primarily dependent on the trait of conscientiousness, the other four key personality traits dictate the form in which procrastination appears. In line with the implications of need theory, we defined these four traits based on the justifications students provided and the activities they engaged in during procrastination.

The Academic Procrastination Questionnaire, which assesses procrastination and six potential underlying patterns, was filled out by 248 university students and an additional 17 counselling clients who sought assistance for procrastination. In the general sample, 32% were identified as severe procrastinators. The most prevalent patterns among these individuals were being Socially-focused and Optimistic, or being Ambivalent and Independent-minded. For the clients, the most common patterns were associated with Evaluation Anxiety or being Discouraged/Depressed, or Dependent. However, all six patterns were observed in some students in each group. The findings support the need for personalized evaluation and solutions for academic procrastination.

Evaluation of Literature:

The literature presented provides valuable insights into the complex phenomenon of academic procrastination, shedding light on its predictors, moderators, consequences, and potential interventions. Several studies have examined the role of perfectionism in academic procrastination, distinguishing between adaptive and maladaptive aspects. These studies highlight the importance of considering both dimensions of perfectionism, as adaptive perfectionism tends to decrease procrastination while maladaptive perfectionism increases it.

Additionally, the moderating effect of academic hardiness, particularly commitment, challenge, and control, underscores the nuanced relationship between perfectionism and procrastination. Furthermore, situational and task-specific factors have been shown to influence procrastination behaviour, with task-related ambiguity significantly increasing the likelihood of procrastination. This emphasizes the need to address not only individual traits but also environmental factors in interventions aimed at reducing procrastination.

Social interdependence emerges as a significant factor in mitigating procrastination, particularly in group work settings. Collaborative tasks that promote interdependence are associated with lower levels of procrastination and increased positive emotions among participants, suggesting the potential benefits of incorporating social elements into academic environments.

Moreover, the study examining the relationship between academic procrastination and academic performance, particularly among students with learning disabilities (LD), highlights the detrimental impact of procrastination on academic outcomes, especially for vulnerable student populations. This underscores the importance of providing targeted support to students with LD to address procrastination and improve academic achievement.

The review of academic interventions for procrastination underscores the need for further research in this area, particularly in developing effective strategies that target both individual and situational factors. Additionally, the study on online course participation and academic procrastination highlights the detrimental effects of procrastination on academic performance, emphasizing the importance of addressing procrastination to enhance student outcomes in online learning environments.

Furthermore, the exploration of differences in learning characteristics and self-regulation behaviours among students with varying levels of academic procrastination underscores the need for personalized interventions that account for individual differences.

Overall, the literature evaluation highlights the multifaceted nature of academic procrastination and the importance of considering both individual and situational factors in understanding and addressing this issue. Moving forward, further research is needed to develop tailored interventions that effectively target the underlying mechanisms of procrastination and promote academic success.

Conclusion:

In conclusion, this review has illuminated the pervasive nature of academic procrastination and its profound implications for students' academic success and psychological well-being. Through an exploration of its prevalence, underlying causes, effects, and intervention strategies, several key insights have emerged.

Firstly, academic procrastination is a widespread phenomenon that affects students across various educational levels, posing significant challenges to their academic performance and overall welfare. Despite being aware of the negative consequences, students often engage in voluntary delay of academic tasks, leading to a detrimental cycle of stress and anxiety. Secondly, the causes of academic procrastination are multifaceted, encompassing personal traits, environmental influences, and situational factors. Fear of failure, perfectionism, low self-efficacy, and task aversion are among the individual characteristics that contribute to procrastination. Additionally, environmental factors such as task characteristics, social pressures, and institutional policies play a significant role in perpetuating procrastination behaviour. Thirdly, the effects of academic procrastination extend beyond academic performance to impact students' psychological well-being. Procrastination is associated with increased levels of stress, anxiety, and depression, creating a vicious cycle that further exacerbates procrastination behaviour. However, despite the challenges posed by academic procrastination, there is hope for intervention. Various strategies, including time management techniques, goal setting, self-monitoring, and cognitive-behavioural interventions, have shown promise in addressing procrastination behaviour. Moreover, institutional support in the form of counseling services and tailored interventions can provide invaluable assistance to students struggling with procrastination.

Moving forward, it is essential to continue research efforts aimed at understanding the complexities of academic procrastination and developing effective intervention strategies. By fostering collaboration between researchers, educators, and policymakers, we can create a supportive environment that empowers students to overcome procrastination and achieve their academic goals. In essence, addressing academic procrastination requires a multifaceted approach that acknowledges the interplay of individual, environmental, and institutional factors. By prioritizing proactive intervention and support systems, we can cultivate a culture of academic excellence and well-being that benefits students, educators, and institutions alike.

References:

1. Sepiadou, I., & Metallidou, P. (2023). Academic hardiness as a moderator of the relation between perfectionism and academic procrastination in university students. *European Journal of Psychology of Education*, 38(3), 1053-1071.
2. Wieland, L. M., Hoppe, J. D., Wolgast, A., & Ebner-Priemer, U. W. (2022). Task ambiguity and academic procrastination: An experience sampling approach. *Learning and Instruction*, 81, 101595.
3. Koppenborg, M., Klingsieck, K.B. Social factors of procrastination: group work can reduce procrastination among students. *Soc Psychol Educ* 25, 249–274 (2022). <https://doi.org/10.1007/s11218-021-09682-3>

4. Zacks, S., & Hen, M. (2018). Academic interventions for academic procrastination: A review of the literature. *Journal of Prevention & Intervention in the Community*, 46(2), 117–130. <https://doi.org/10.1080/10852352.2016.1198154>
5. Goroshit, M. (2018). Academic procrastination and academic performance: An initial basis for intervention. *Journal of prevention & intervention in the community*, 46(2), 131-142.
6. Visser, L., Korthagen, F. A., & Schoonenboom, J. (2018). Differences in learning characteristics between students with high, average, and low levels of academic procrastination: Students' views on factors influencing their learning. *Frontiers in psychology*, 9, 336821.
7. Wu, F., & Fan, W. (2017). Academic procrastination in linking motivation and achievement-related behaviours: a perspective of expectancy-value theory. *Educational Psychology*, 37(6), 695–711. <https://doi.org/10.1080/01443410.2016.1202901>
8. Steel, P., & Klingsieck, K. B. (2016). Academic procrastination: Psychological antecedents revisited. *Australian Psychologist*, 51(1), 36-46.
9. Grunschel, C., Patrzek, J., & Fries, S. (2012). Exploring reasons and consequences of academic procrastination: an interview study. *European Journal of Psychology of Education*, 28(3), 841–861. doi:10.1007/s10212-012-0143-4
10. Victor Day, David Mensink & Michael O'Sullivan (2000) Patterns of Academic Procrastination, *Journal of College Reading and Learning*, 30:2, 120-134, <https://link.springer.com/article/10.1007/s11031-023-10010-9>

TRANSFORMING DIGITAL MARKETING WITH ARTIFICIAL INTELLIGENCE

Prabhat

CPJ College of Higher Studies and School of Law, Delhi

Corresponding author E-mail: prabhat17rajput@gmail.com

Abstract:

The last decade has seen a significant advancement in information technology and its use. This has had a significant impact on how we view the world and how business is done. The rise of information technology has benefited commerce and business alike, increasing production, efficiency, and profitability. Increased productivity has made it possible to produce vast quantities of work quickly and accurately. Emerging "thirdplatform" technologies of today, such as automation, data analytics, mobile devices, and artificial intelligence (AI), are fundamentally altering how people interact with each other and with society. The application of marketing serves as a perfect example of how big data analytics, machine learning, and new technologies are revolutionizing the industry.

The current talks about how marketing is evolving, particularly with regard to digital marketing. The article continues by outlining potential domains inside digital marketing where AI has become noticeable.

Keywords: Artificial Intelligence Machine Language, Real – Time Data, Digital, Marketing

Introduction:

The word "artificial intelligence" is becoming more and more common, yet it doesn't have a clear definition. It is the endeavor to imbue machines with intelligence, which is the attribute that permits an organism to act sensibly and preemptively within its surroundings. Artificial intelligence can be defined technically as the process of integrating cloud computing, network devices, robotics, computers, and digital content generation with a variety of business processes, systems, and day-to-day activities. AI computing has existed in the past, is present, and will continue to do so. Future marketing initiatives must include the growth and development of artificial intelligence. Artificial intelligence software is being used by businesses on a daily basis to streamline internal procedures, cut costs, shorten turnaround times, and increase productivity. Teams who have already shifted to using AI software for marketing have a clear advantage over those who have not, as technology is developing at a rate that has never been seen before.

Role of Artificial Intelligence in Business

Artificial Intelligence (AI) is rapidly becoming more central to the day-to-day digital world, and the marketing and advertising world is no exception. Artificial Intelligence, ranging

from the witty and intelligent Siri to Tesla's self-driving cars and Google AI that can learn video games in just a few hours, is gradually transforming various industries.

Artificial intelligence has several uses, such as identifying patterns in data to reduce market risks, improving customer service with virtual personal assistants, or even analyzing millions of papers on a company's servers to identify noncompliance. However, businesses have only just been able to foresee and imagine the potential that robotics and artificial intelligence may offer to the corporate sector.

Through the use of technologies like data mining, pattern recognition, and natural language processing, artificial intelligence makes use of self-learning systems. Thus, among artificial intelligence's principal business advantages over human intelligence is its extreme scalability, which leads to enormous cost savings. Additionally, businesses can reduce errors thanks to AI's rule-based programming and consistency. Its durability, ongoing enhancements, and process documentation capabilities result in profitable business prospects.

How AI Works in Recent Business Transactions

When an individual uses a browser and apps to access the internet, computer programs (applications) collect and manipulate the user's data in order to generate and provide recommendations depending on the user's interests and preprogrammed behaviors. Machines learn in this manner. Another example is when a data pack on a mobile device runs out, it will automatically start to give you notifications and different recharge offers. It's the client retention procedure in company.

While attempting to integrate artificial intelligence into their business processes and systems, companies must prioritize their goals, customer experience, brand position in the market, and values. Applications and programs for artificial intelligence generate new workflows and systems at a very high rate of accuracy and speed. Prior to carrying out any activity, they require the appropriate inputs from their users (programs, code, class, function, and loops).

CRM (customer relationship management) systems are also being altered by AI. A significant level of human engagement is necessary for many modern software programs, such as Sales Force and Zoho, to stay accurate and up to date. However, by integrating AI with these kinds of platforms, a standard CRM system is changed into an automatically updating, self-correcting system that manages your relationships on your behalf.

Artificial Intelligence has enormous promise in the realm of digital marketing because of the widespread use of social media and the massive amounts of data that are unintentionally and intentionally left behind when browsing the internet. Businesses will undoubtedly see a significant return on investment from using AI to improve customer experience, predictive analytics, and targeted marketing.

Changing Scenario of Marketing

Today, change is an inevitable part of doing business in any industry. Moreover, one of the most in-demand managerial competencies nowadays is the capacity to understand and take advantage of change. The contemporary global and competitive company landscape continually demands innovation, the body of current knowledge is becoming less relevant, and process improvement is always advancing. Every business strives to stay ahead of the curve, and the learning curve is constantly put to the test. The ever-shortening product and service life cycle is a new reality brought about by this change in how business is performed. An increasing number of businesses are launching personalized goods and looking for methods to set themselves apart from rivals.

The very pace of change in marketing is accelerating. The introduction of computerized data processing equipment as a key instrument of scientific marketing—not just for data reporting but, more crucially, for management planning and control—represents a significant shift in the marketing environment. The majority of businesses are using online communications, information-retrieval systems, and electronic data processing analyses as tools to improve the effectiveness of their marketing campaigns. Real-time marketing has emerged as a result of this. Developing a marketing plan centered on current events is known as "real-time marketing." Marketers are trying to link people with items and services they could utilize by utilizing consumer input and current trends. With the emergence of social media, real-time marketing has become more and more popular because it gives businesses access to real-time data about their target audiences. Marketers were able to use this data to create messages and goods that they believed their target audience would find appealing. Nowadays, real-time marketing uses a variety of client data to give businesses precise insight into the behavior of their customers.

When implemented properly, real-time personalization guarantees that your website visitors are constantly receiving timely and relevant content, and it might give them the impression that their entire visit has been tailored just for them. Any prospect who receives that kind of individualized attention will feel appreciated, and customers who feel valued are significantly more likely to become brand loyal than those who just see themselves as another lead.

These days, data and tools for quick analysis are always accessible and available in real time. This has accelerated machine learning and artificial intelligence while facilitating the shift to a data-first strategy. AI's development was previously hampered by small data sets, representative samples of data rather than real-time, real-life data, and the inability to quickly evaluate enormous volumes of data.

The Relationship Between Artificial Intelligence and Digital Marketing

In marketing, artificial intelligence is a popular topic. It's regarded as the next big thing in marketing. The phrase "artificial intelligence" is broad and has been used to refer to many distinct technologies. Technology that aims to imitate human intelligence is referred to as artificial intelligence. A wide range of skills, including voice, picture recognition, machine learning, and semantic searching, are included in artificial intelligence. Marketers enjoy extolling the virtues of the latest, intriguing technologies. They hammer away at speech and picture recognition using artificial intelligence.

Additionally, it assists in directing drones toward isolated populations and eliminates data leaks in marketing. Outbound marketing campaigns and traditional marketing are significantly less effective at acquiring and keeping customers than they formerly were. In today's constantly linked, real-time environment, where marketers must provide continuous, personalized, insight-driven engagements with clients on an individual basis, artificial intelligence is critical to gaining a lasting competitive advantage. Companies who have grasped the importance of artificial intelligence and implemented appropriate systems for growth have managed to establish a competitive edge that is arduous to match. Because providing the ideal blend of content and context is what artificial intelligence is all about, rather than technology.

Artificial intelligence has many uses in both the consumer and commercial worlds these days, ranging from Google's DeepMind to Apple's Siri. For instance, Siri interprets voice commands using natural language processing (NLP) and responds appropriately. Conversely, deep learning is used by Google's DeepMind. Rather than depending on pre-programmed behavioral algorithms, it may draw connections and derive meaning by using raw data as its inputs and learning from experience. In fact, Google reduced the amount of energy needed for cooling in its own power centers by 40% by implementing DeepMind's findings. The graph that follows paints a clear picture of how artificial intelligence has advanced gradually but steadily in international markets.

In today's commercial environment, artificial intelligence has become a "can't do without" technological advancement. Small and large businesses are using this technology to increase operational efficiency and provide more intelligent, customized consumer experiences.

Artificial intelligence is revolutionizing all facets of our daily work lives. This will alter not only how marketers execute their campaigns but also how the campaigns are evaluated and managed. Future and present digital marketing strategies will be determined by artificial intelligence. These are some of the ways that artificial intelligence technology has changed the landscape of digital marketing.

1. Marketing is Growing Concentrated on Consumer Conduct

In its most basic form, artificial intelligence is the application of data integration across several platforms to support data-driven marketing and decision-making strategies. Personal information is left behind by users when they interact online.

Every action people take, including browsing, posting, and shopping, generates data. This days, artificial intelligence programs are analyzing this enormous amount of data to discover individuals' "digital identities" and "online behavior." These days, platforms gather and archive a variety of data as part of their analysis of client behavior, which helps them create automated systems and customer profiles that are targeted at particular markets.

2. Intuitive Advertising

Social media is essential for obtaining more intimate details about potential customers, which helps marketers create targeted advertising campaigns. Every time a user clicks while on the internet, fresh data is created and gathered for the research of artificial intelligence. The marketer can use this data to optimize the information and deliver the most pertinent information.

3. Generation of Leads

Artificial intelligence combs through mountains of data to locate the perfect consumers, customers, and even coworkers based on preexisting information and the application it is utilizing. What's even more intriguing is that it can also rate or predict how hot a particular lead is. Therefore, this can save a lot of time and effort on simple searches for B2B or even recruiting purposes, giving the marketer more time for things like pitching and sales calls.

4. Chatbots

Programs powered by artificial intelligence that converse with users in natural language are called chatbots. Since more and more social media traffic is moving through private messaging apps like Facebook Messenger and WhatsApp, these programs are quickly gaining attention from marketers. It would be difficult to pass up that possibility for interaction. Chatbots are viewed by most digital marketers as a means of offering individualized customer service at scale; this is not a direct marketing function, but rather a tangential one. Chatbots do, however, also assist users in navigating the customer journey that leads to a sale.

5. Content Creation via Automation

Artificial Intelligence is being used by several brands to automate content development. This technology makes content creation easier and faster. Coca-Cola, a well-known beverage company worldwide, automates its advertising campaigns using artificial intelligence. Music scripts and logos are automatically created in combination with the context.

6. Refining Advertisements

Additionally, the delivery of advertisements is improved using artificial intelligence. Marketing analysts estimate that Google and Facebook own more than 60% of all PPC advertising in the US. For their PPC campaigns, advertisers might find new advertising channels

with the use of artificial intelligence. Advertisers can gain a competitive edge from artificial intelligence as these channels might not be utilized by rivals.

7. Recognition of Images

Image identification is one of the most fascinating—and probably most significant—achievements in artificial intelligence. It is crucial that machines be able to "see" like humans if people want them to be able to "think" like us and emulate our reactions to our surroundings, such in the case of self-driving automobiles. These days, computers can recognize and identify simple items and situations. Even if these capacities pale in comparison to human vision and perception, these foundational elements of computer vision have facilitated and still facilitate a number of significant technical advancements. Marketers may locate images on social media even in the absence of a relevant description by using image recognition.

8. Augmented Reality

Augmented Reality (AR) is another facet of artificial intelligence that has promise for enhancing customer happiness. Augmented Reality (AR) offers customers the chance to feel and see the product before making an online purchase. Lenskart's 3D trial, which lets users try the frame they're interested in purchasing using a webcam while at home, is one example of this technology in its early stages. Using such technology can undoubtedly encourage customers to respond more quickly and effectively, which will eventually show in the revenues.

Conclusion:

Businesses have always benefited from technological improvements since they open up new avenues for client outreach. Artificial Intelligence (AI) is one of the biggest technologies of our day and is generating a lot of buzz in the digital world. Artificial Intelligence in B2B sales and marketing is come to change the way consumers connect with companies, information, and services because of its potential for marketing and storytelling. Artificial Intelligence is about to have an impact on the field of business-to-business marketing.

Many large corporations are afraid of the prospect of fully automating marketing campaigns with intelligent AI technology. Nevertheless, based on the impact of AI-driven robots in the customer service sector, it is clear that human intelligence will not be the only tool used to understand customer nuances. This year, artificial intelligence became more noticeable because to its supporting technologies, including big data, the Internet of Things, and machine learning. However, these are merely the parts that will eventually work together to allow AI to reach its full potential.

References:

1. Bashang, S., & Puttanna, K. (2023). The Role of Artificial Intelligence in Digital Marketing: A Review. *International Research Journal of Economics and Management Studies IRJEMS*, 2(3).

2. Chaitanya, K., Saha, G. C., Saha, H., Acharya, S., & Singla, M. (2023). The Impact of Artificial Intelligence and Machine Learning in Digital Marketing Strategies. *European Economic Letters (EEL)*, 13(3), 982-992.
3. Dumitriu, D., & Popescu, M. A. M. (2020). Artificial intelligence solutions for digital marketing. *Procedia Manufacturing*, 46, 630-636.
4. Gkikas, D. C., & Theodoridis, P. K. (2019). Artificial intelligence (AI) impact on digital marketing research. In *Strategic Innovative Marketing and Tourism: 7th ICSIMAT, Athenian Riviera, Greece, 2018* (pp. 1251-1259). Springer International Publishing.
5. Hassan, A. (2021). The usage of artificial intelligence in digital marketing: A review. *Applications of Artificial Intelligence in Business, Education and Healthcare*, 357-383.
6. Hassan, A. (2021). The usage of artificial intelligence in digital marketing: A review. *Applications of Artificial Intelligence in Business, Education and Healthcare*, 357-383.
7. Malyadri, P., Reddy, B. S., & Trivedi, K. M. G. (2023). Marketing Management through Artificial Intelligence for better Customer Engagement.
8. Murgai, A. (2018). Transforming digital marketing with artificial intelligence. *International Journal of Latest Technology in Engineering, Management & Applied Science*, 7(4), 259-262.
9. Ribeiro, T., & Reis, J. L. (2020). Artificial intelligence applied to digital marketing. In *Trends and Innovations in Information Systems and Technologies: Volume 2 8* (pp. 158-169). Springer International Publishing.
10. Savola, T., Tuohimaa, T., & Berg, S. (2018). AI-Enhanced Marketing Management—Factors Influencing Adoption in SMEs.
11. Theodoridis, P. K., & Gkikas, D. C. (2019). How artificial intelligence affects digital marketing. In *Strategic Innovative Marketing and Tourism: 7th ICSIMAT, Athenian Riviera, Greece, 2018* (pp. 13191327). Springer International Publishing.
12. Thilagavathy, N., & Kumar, E. P. (2021). Artificial intelligence on digital marketing-An overview. *Nveo-Natural Volatiles & Essential Oils Journal| NVEO*, 9895-9908.
13. Van Esch, P., & Stewart Black, J. (2021). Artificial intelligence (AI): revolutionizing digital marketing. *Australasian Marketing Journal*, 29(3), 199-203.
14. YEĞİN, T. (2020). The place and future of artificial intelligence in marketing strategies. *Ekev Akademi Dergisi*, (81), 489-506.
15. Zaman, K. (2022). Transformation of marketing decisions through artificial intelligence and digital marketing. *Journal of Marketing Strategies*, 4(2), 353-364.

RESEARCH AND REVIEW IN LITERATURE

Rajinder Kaur

Adarsh College of Nursing, Patiala, Punjab, India

Corresponding author E-mail: rajinderkaurkaur9646@gmail.com

Introduction of Research

The word research is derived from the French term Recerchier, Re means once again, search means to look for something, examine closely. Thus, research means close and careful examination of facts and their relationship between them.

Definition

According to John W. Creswell, who said that "research is a process of steps used to collect and analyse information to increase our understanding of a topic or issue".

According to P.M. Cook, Research is an honest, exhaustive, and intelligent search for facts and their meanings or implications with reference to a given problem. The product or findings of a given piece of research should be an authentic, verifiable and contribution to knowledge in the field studied."

According to William C. Emory, who defines "research is any organized inquiry designed and carried out to provide information for solving problems?"

Redman and Mory, in a similar tone, define research as a 'systematized effort to gain new knowledge' (Parahoo, 2014).

Importance

1. Enhance body of knowledge
2. Develop, extend and refine knowledge
3. Define parameters of knowledge
4. Eliminate old knowledge
5. Enhance accurate
6. Current data
7. Test theories
8. Solve problems

Characteristics of Good Research

Current: One of the main objectives of research, whatever the subject, is to solve current problems; so, it should be based in current problems.

Clearly Defined Objective: It should have clear objectives and be executed through in an effective way. Results are worse when there is uncertainty.

Scientific and Systematic: Only when research is done methodically and scientifically is it considered to be relatively high quality. It follows an organised and sequential process that

results in the finding of the facts, a solution of an issue, or the discovery of something is supposed to be revealed.

Empirical Evidence: In order to enhance professional practices, it needs to produce empirical evidence.

Use of Appropriate Methodology: Applying the right methodology generates positive outcomes.

Objectivity: Research should be free from any kind of biases, including personal ones, and ensure that the findings are error-free.

Reliability: Research is considered reliable when it has the potential to produce consistent results on multiple times. The reliability increases with the degree of consistency.

Validity: For a study to be deemed valid, it must measure and conform the procedures that are expected of it. There are many different kinds of facts, including face, content, criterion, external, internal, and construct validity.

Accuracy: In order to attain accuracy, assessment techniques and equipment should be adequate.

Credibility: The most effective and cost-effective data and methods should be employed.

Generalizability: The most effective and cost-effective data and methods should be employed.

Based on Experience, Motivation, and Knowledge: It is very essential to do work on the basis of experience, motivation, and knowledge to find out good outcomes.

Relevant to profession: -It should be appropriate to a particular field of work. In order for researchers to be well informed as well as establish their professional contribution. (Sharma et.al, 2022).

Types of Research:

Applied Research

This scientific study aims to provide solutions for a range of real-world issues that arise in daily life. It discovers solutions to common issues, treats illnesses, creates modern technology, etc.

Basic Research

It's referred to as pure or fundamental research. It improves knowledge. Nothing new is expected to get developed or invented by this kind of research. Rather, it is grounded in basic science research.

Co-relational Research

Co-relational research studies the relationship between two or more variables without necessarily confirming cause and effect.



Figure 1: Types of Research

Descriptive Research

This kind of study gives a true representation of the characteristics of an individual, circumstance, or group. Likewise, it is referred to as statistical research. It covers everything that can be measured and researched that has an effect on people's lives.

Ethnographic Research

This kind of research involves investigating a culture and carefully analysing its individuals. It comprises the methodical assembly, characterization, and analysis of evidence in order to build ideas regarding cultural behaviour. Anthropological research has been done on individuals, ethnic groups, ethnic formations, and aspects of social welfare. It is carried out through data collection, questionnaires, interviews, and observations.

Experimental Research

To project and regulate the phenomenon, this study requires an objective, methodical, and controlled examination. It also involves evaluating the probability and causal relationship between the variables.

Exploratory Research

This kind of study will be done to deal with an issue that is not well defined. It aids in identifying the most effective study design, collecting data techniques, and subject selection. It uses secondary research; therefore, it's rather informal.

Ground Theory Research

It investigates the issues that arise in a specific social context and how the individuals involved handle them. It consists of four stages: codes, concepts, categories, and theory, and it functions essentially in the opposite way as traditional research.

Historical Research

Analysis of previous or current circumstances conducted through research.

Phenomenological Research

It aims to show a real experience that a person has received.

Quantitative Research

Apply numbers along with figures to mathematically quantify the outcomes.

Qualitative Research

Quantification of concepts like beliefs, meanings, qualities, and symbols can be challenging or impossible. Its aim is to compile a comprehensive understanding of human behaviour. (Nieswiadomyet *al.*, 2012)

Research Process

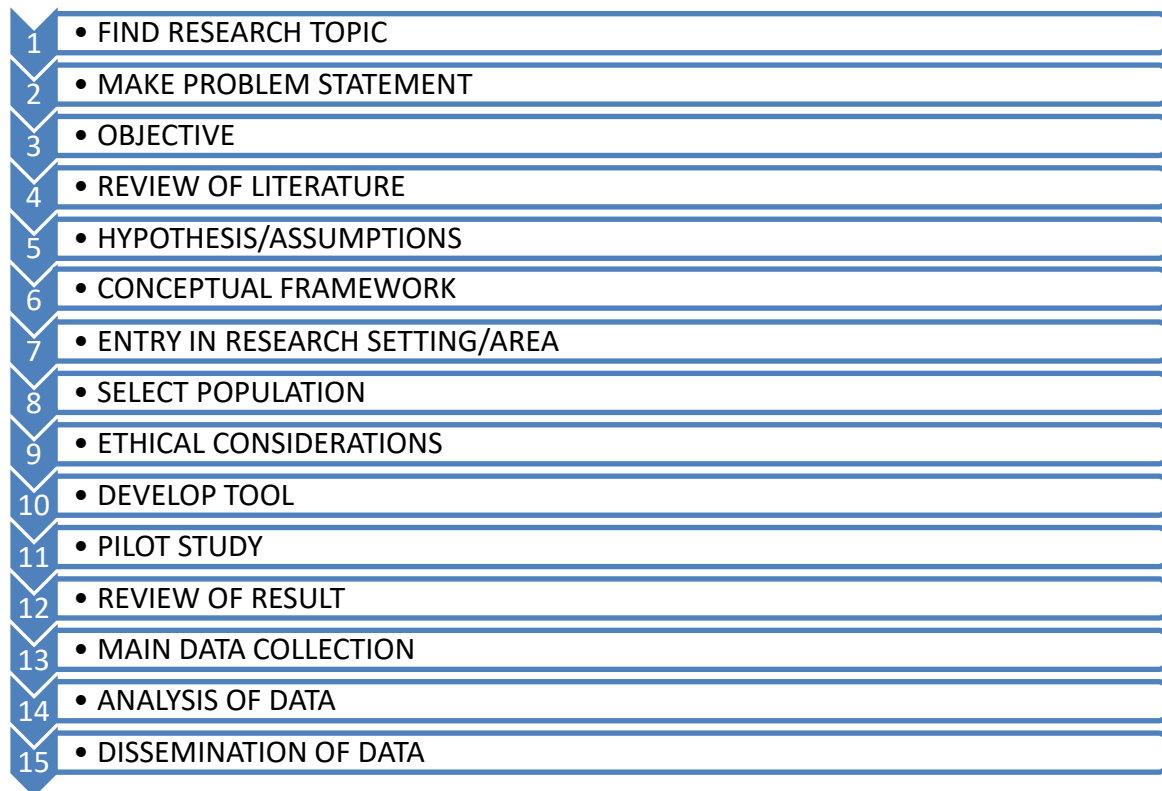


Figure 2: Research Process

Methods to Find Topic in Research

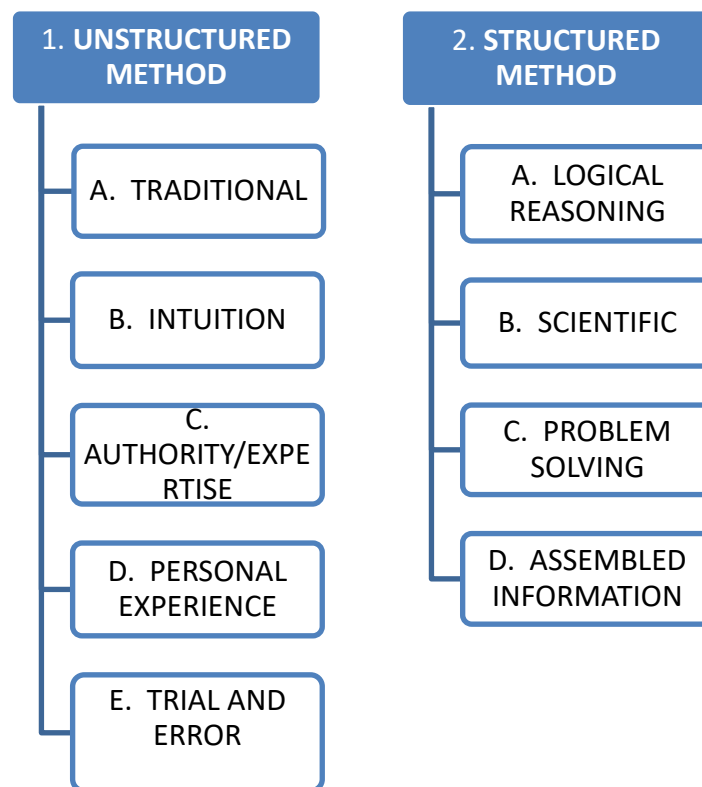


Figure 3: Methods to Find Topic in Research

Method to Formulate Research Problem

1. Selection of topic
2. Review of literature
3. Find methodology
4. Evaluate
5. Finalise research problem

Method to Solve Research Problem

1. Problem identification
2. Problem analysis
3. Find possible solutions
4. Analysis solutions
5. Select best solution
6. Implement solution
7. Evaluation and revision (Polit *et al.*, 2010)

Sources of Research Problem

1. Personal experience
2. Review of literature
3. Feedback

4. Based on academic
5. Previous research
6. Social issues
7. Intuition
8. Expertise review
9. Social issues
10. Brainstorming

Criteria for Good Research Problem

1. Related to profession
2. Original
3. Feasible to time, cost, and equipment.
4. Administrative and peer support
5. Ethical considerations
6. Current
7. Solvable
8. Interesting

Review of Literature

According to Burns and Grove, "review of literature is an organised written presentation of what has been published on a topic by the scholars"

According to ANA, "review of literature is a body of text that aims to review the critical points of knowledge on a particular topic of research "(Cooper et.al,2018)

Importance

1. Find answer of unanswered questions
2. Develop conceptual framework
3. Identification of suitable methodology
4. Assess strength and weakness of studies
5. Develop assumptions/hypothesis
6. Refine knowledge
7. Provide original work

Types

1. **Traditional:** Add background information about the data.
2. **Meta-Analysis:** - Collection of information about quantitative data
3. **Meta-Synthesis:** -Collection of information about qualitative data.
4. **Argumentative Review:** In order to address a particular argument, basis, or philosophical perspective that is well-established in the literature, this kind of literature

review selectively reviews the literature; usually, the objective is to provide an alternate position.

5. **Integrative Review:** This kind of analysis of the literature generates novel frameworks and viewpoints on a subject. This kind of literature evaluation covers any investigation that has been done regarding a particular topic or theory.
6. **Historical Review:** This kind of literature review involves at research over a period of time, usually beginning with the first occurrence of the problem existing in the literature and then analysing how methodologies have evolved over time. This kind of review's objective is to give the research subject historical perspective.
7. **Methodological Review:** This kind of literature review places more emphasis on the methods used by scholars to arrive at their conclusions than it does on the findings themselves. This kind of assessment is helpful for examining the viability of various approaches taken to investigate a particular subject and offering recommendations regarding which approaches to employ going forward.
8. **Systematic Review:** This kind of literature review contains a summary of the data supporting a particular, well-defined research issue. In order to include any relevant research on the subject at the same direction, it integrates standardised procedures for locating and analysing the literature that should be discussed in detail in the literature review.
9. **Theoretical Review:** This kind of literature review examines the various theories that have been applied to a particular subject, along with their benefits and drawbacks, connections between theories, and methods of testing and investigation (Boellet.al, 2014).

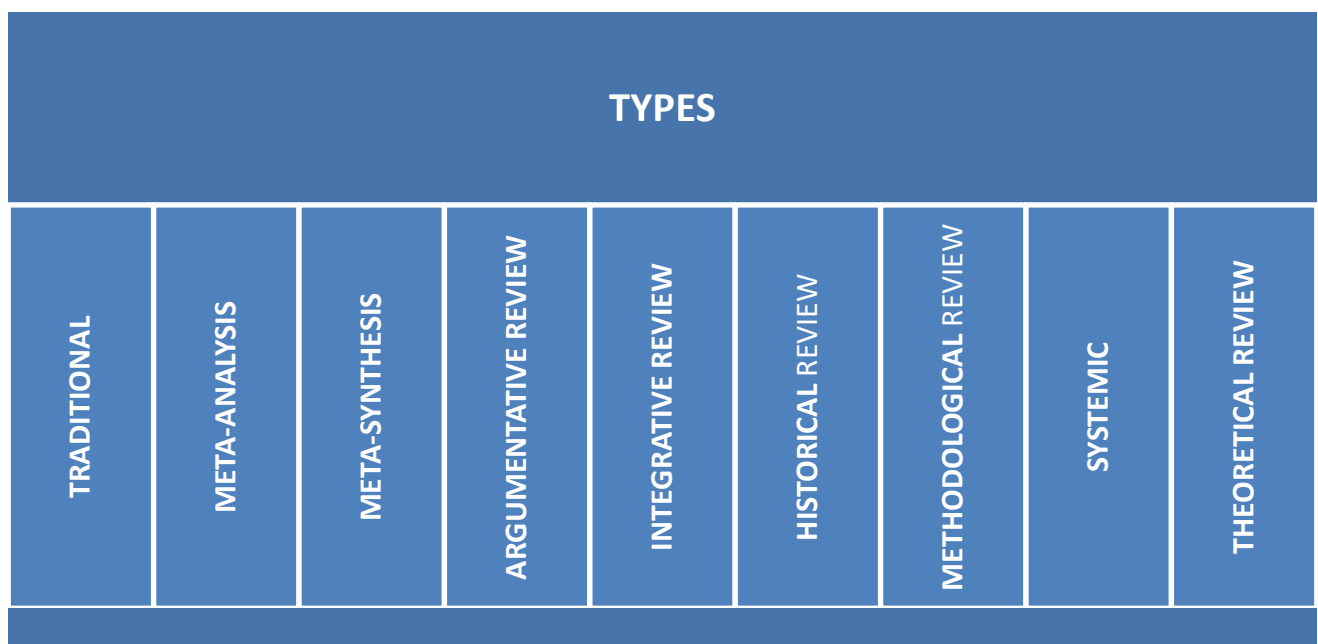


Figure 4: Types of Review in Literature

Steps to Complete a Literature Review:

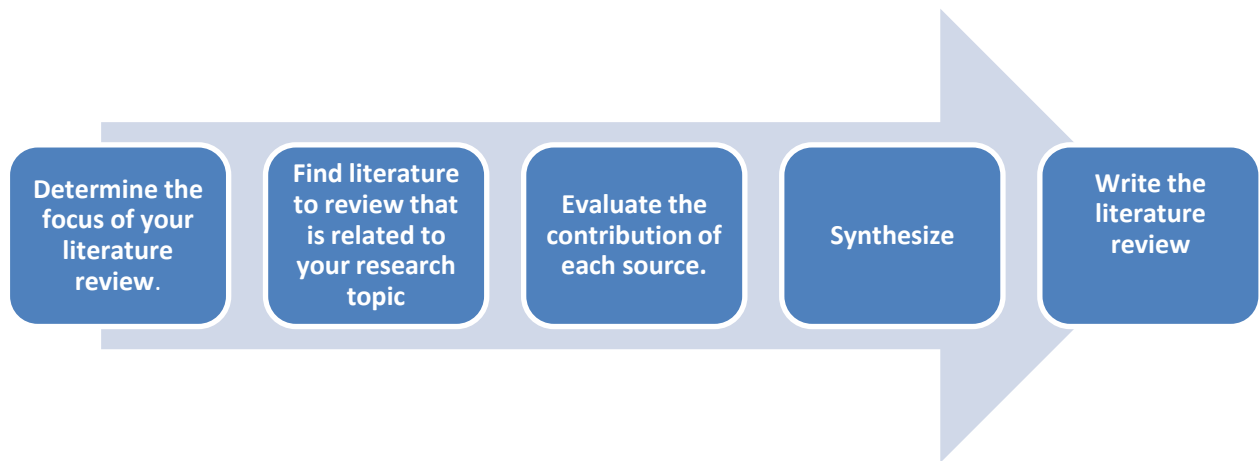


Figure 5: Steps to Complete A Literature Review

1. **Determine the focus of your literature review.** Your thesis statement should direct the topic of your literature review. Keep clear of overly broad or excessively specific issues. If your topic is overly wide, you might have a great deal material to work with and struggle to narrow it down for your paper. If your topic becomes excessively specific, it could be difficult to locate adequate research to cover.

2. **Find literature to review that is related to your research topic.** Depending on the subject of the study, these may include books, journal articles, news stories, webpages, etc. In contrast to primary sources, secondary sources are usually included in literature reviews. For example, if you are writing a paper about the Declaration of Independence, your literature review would include books and articles about the Declaration rather than the Declaration's actual contents. Libraries, internet databases, course outlines, Google Scholar, and the references section of pertinent books and papers are good places to look for sources. Be sure to assess the reliability of your sources (e.g., confirm that papers are published in respectable journals or that websites are connected to respectable institutions). Wikipedia is not regarded as a reliable source, however many of its articles do have helpful sources listed in the references section. Reach out to the topic librarians at University Libraries if necessary; they will help you find databases, journals, and articles that are pertinent to your research. (Krstić *et al.*, 2018)

3. **Evaluate the contribution of each source.** Ascertain each source's primary point or argument. Think about the connection between the source and your own research issue. Next, decide which sources belong in your review and which are the most pertinent. You might not need to include every source you identified on a given issue, depending on the sort of review you are performing. This is especially true if numerous sources make the same or a similar point. When deciding which and how many sources to incorporate, keep page and word constraints in mind. All sources that fit under your predetermined study parameters will be included if you are performing an integrative or systematic review (something that is determined before you start

looking for literature). Making an annotated bibliography at this point can help you keep track of the many sources' contributions.

4. Synthesize. Analyse the relationships between the sources and your own study. Find recurring and/or significant themes, scholarly disputes or divergent viewpoints, research gaps, and any apparent problems with the methodology or conclusions. Before you begin writing, make an outline to help you organise your thoughts. Some sources may have clear connections, while others may have less evident ones. Take a look at the following techniques for organising and debating different sources.

a. Strategies for Synthesizing Literature:

i. **Thematic:** Group ideas according to theme. Show how different sources are related thematically. Consider common themes that are addressed in the literature, and how different scholars have approached those themes.

ii. **Chronological:** Group ideas by periods of time. Consider how scholarly methods and/or scholarly thinking have changed over time.

iii. **Methodological:** Group ideas by method. Identify different methods that have been used to address the issue and consider whether different methods have led to different conclusions.

5. Write the literature review. Start with an introduction that describes the main topic and research question. The literature review is important, do not just write an isolated paragraph for each source. Make sure to make connections across different sources to create a coherent discussion on the topic. (Almutairi, *et al.*, 2019)

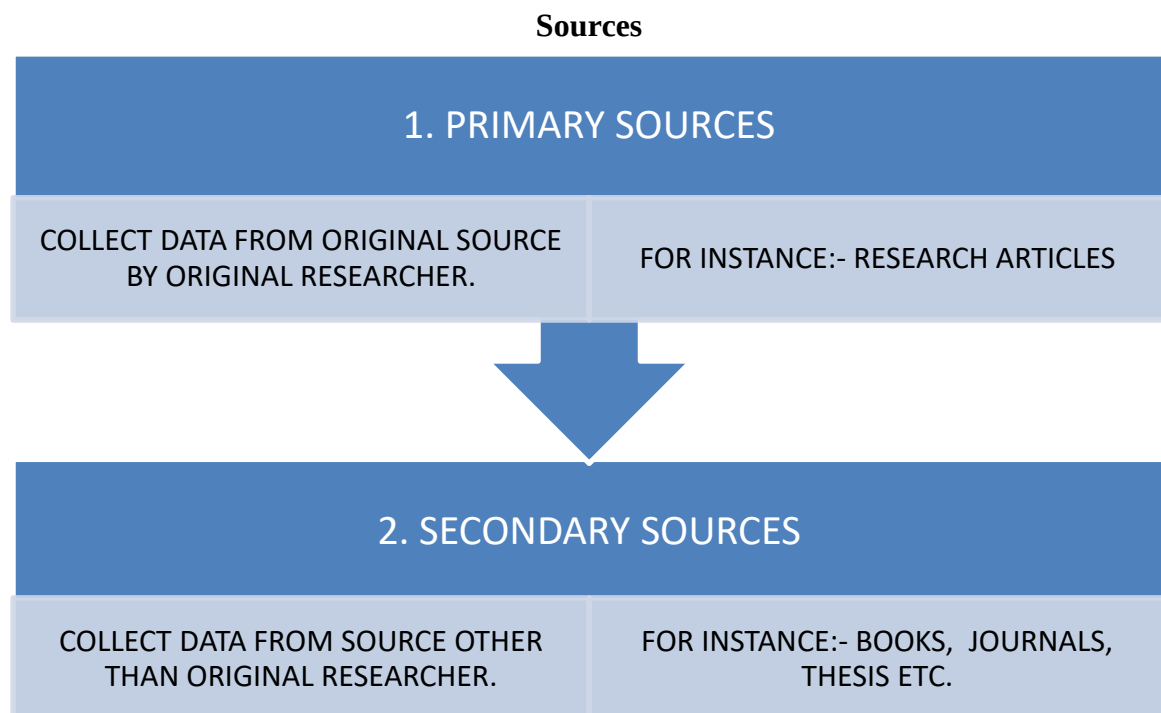


Figure 6: Sources of Review of Literature

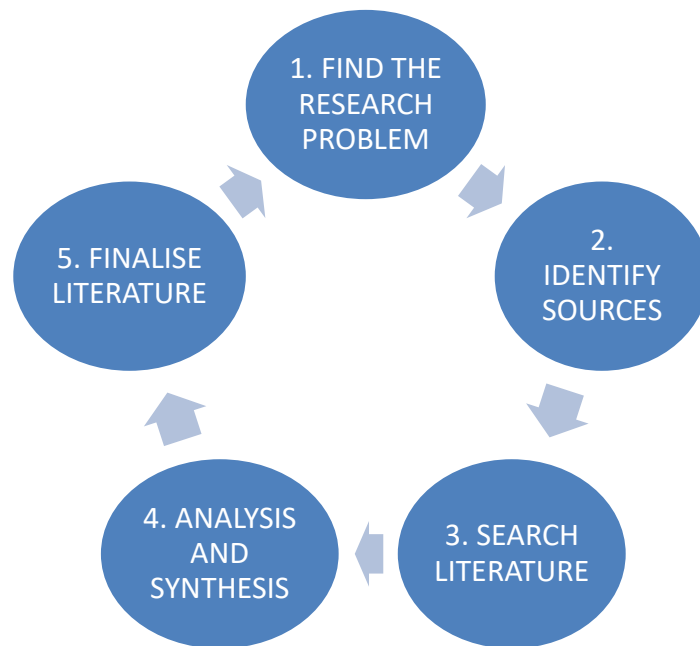


Figure 7: Process

Characteristics

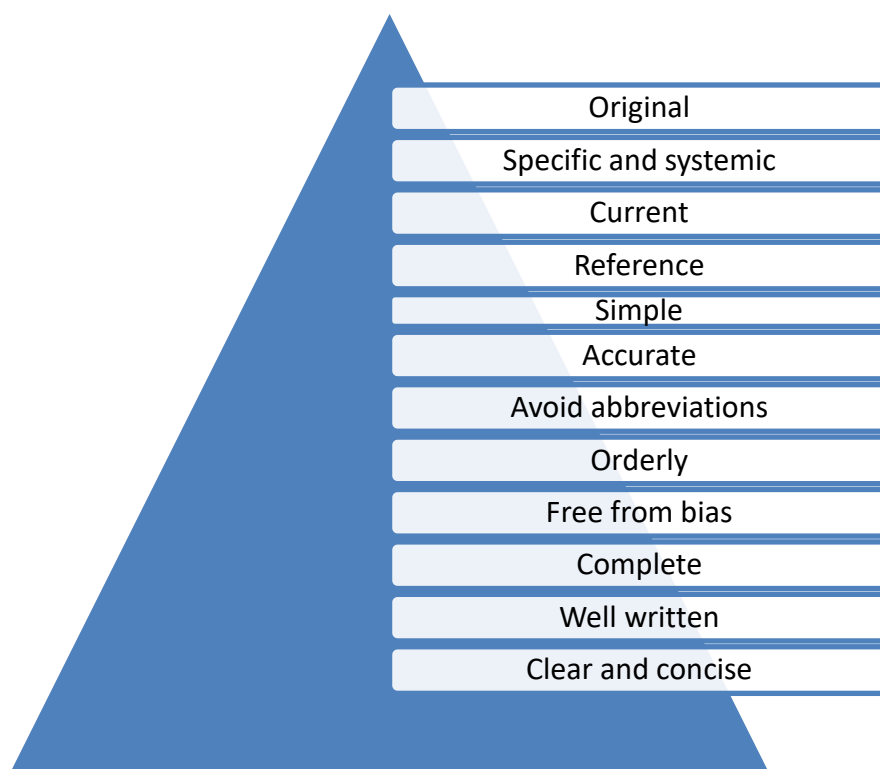


Figure 8: Characteristics of Review of Literature

Challenges While Writing Review of Literature

Finding Sources

The writer needs to conduct a systematic and comprehensive research on specific topic. There are multiple sources, so it is confusing and difficult to find relevant source.

Organizing Information

After writing of literature review, organizing and synthesizing the information is next step. Identify the main themes, patterns, trends, gaps, and controversies in the literature and group the sources accordingly. The writer should use a clear and consistent pattern of assembling information, outlining, and organizing systematically to keep track of the sources and their key points.

Writing Style and Size

The writer also needs to use precise and accurate language, size and style. The writer should use accurate style and size. It includes paraphrasing, summarizing, and quoting to present the information. Proper citation, analysis of weakness and strength of literature is mandatory.

Evaluation

Evaluation of review is ensuring its quality, clarity, and accuracy. The writer needs to check the review for any errors and deficiencies in the content, structure, style, and format. (Dikert *et al.*, 2016).

References:

1. Almutairi, T. and Al-yahya, M., (2019). LRV: A Tool for Academic Text Visualization to Support the Literature Review Process. *Computers, Materials & Continua*, 59(3).
2. Boell, S.K. and Cecez-Kecmanovic, D., (2014). A hermeneutic approach for conducting literature reviews and literature searches. *Communications of the Association for information Systems*, 34(1), p.12.
3. Cooper, C., Booth, A., Varley-Campbell, J., Britten, N. and Garside, R., (2018). Defining the process to literature searching in systematic reviews: a literature review of guidance and supporting studies. *BMC medical research methodology*, 18, pp.1-14.
4. Dikert, K., Paasivaara, M. and Lassenius, C., (2016). Challenges and success factors for large-scale agile transformations: A systematic literature review. *Journal of Systems and Software*, 119, pp.87-108.
5. Krstić, M., (2018). The importance of the review of literature for scientific research. *Ekonomskipogledi*, 20(2), pp.71-86.
6. Nieswiadomy, R.M. and Bailey, C., (2012). *Foundations of nursing research* (p. 126). Sydney: Pearson.
7. Parahoo, K., (2014). *Nursing research: principles, process and issues*. Bloomsbury Publishing.
8. Polit, D.F. and Beck, C.T., (2010). *Essentials of nursing research: Appraising evidence for nursing practice*. Lippincott Williams & Wilkins.
9. Sharma, S., (20220). *Nursing Research and Statistics-E-Book*. Elsevier Health Sciences.

THE ROLE OF AI IN DATA ANALYSIS FOR INVESTIGATIVE JOURNALISM: CHALLENGES AND OPPORTUNITIES

Soumen Das

School of Media Science

Institute of Management Study, Kolkata, West Bengal, India

Corresponding author E-mail: soumenfilm@gmail.com

Abstract:

Investigative journalism is essential for revealing hidden facts and making powerful people answerable. Large amounts of data are being generated by the digital age, making traditional data analysis techniques frequently insufficient. Emerging as a game-changer, artificial intelligence (AI) provides strong capabilities for analysing massive information and exposing patterns that could otherwise go undetected. This study examines how AI affects investigative journalism, emphasising the advantages, difficulties, and moral implications of the technology. Using a mixed-methods approach that blends quantitative survey data with qualitative case studies, we investigate how artificial intelligence is changing investigative journalism. The findings show that artificial intelligence (AI) greatly increases productivity, allowing journalists to evaluate huge datasets more rapidly and precisely. Critical issues raised by the study include algorithmic bias, a lack of transparency, and the possibility of relying too much on AI at the expense of human judgement. In order to achieve a balanced approach, the article finishes with recommendations for the appropriate integration of AI in investigative journalism. It emphasises the significance of ethical practices, continual training for journalists, and collaboration between journalists and AI specialists. By employing these techniques, news organizations may keep the core values of investigative journalism while taking advantage of AI's potential.

Keywords: Artificial Intelligence, Investigative Journalism, Data Analysis, Algorithmic Bias,

Introduction:

Uncovering truths, holding those in positions of authority accountable, and educating the public on important problems have made investigative journalism a cornerstone of democratic societies for a long time. Investigative reporters would typically spend weeks or months on a single topic and would gather, sort through, and analyse material manually using manual procedures. The digital era has brought forth a deluge of data, which poses both novel prospects and difficulties. It is now essential to have sophisticated tools to handle and analyse the massive volumes of data that are produced every day from a variety of sources, including social media, financial records, government databases, and open publications. In this context, artificial intelligence (AI) has become a game-changing technology, with previously unheard-of capacities for rapidly and effectively processing massive information. Applications of AI in journalism are many and span from finding patterns, trends, and anomalies in large, complicated datasets to

automating tedious activities. These resources have been crucial in speeding up the investigative journalism process and creating new narrative opportunities.

The use of AI in investigative journalism has had a big impact on the genre in a number of ways. First of all, it has broadened the focus of the inquiries. With the help of AI, journalists may find connections and insights that would otherwise go unnoticed because of the size and speed at which data can be processed and analysed. Significant investigative advances have resulted from this in a number of areas, including financial fraud, corporate wrongdoing, environmental crimes, and violations of human rights. Secondly, AI has made international cooperation easier. Global investigations that cut across national borders are now possible because of investigative journalists' ability to exchange massive datasets and employ AI to analyse them together. Projects like the Paradise Papers and the Panama Papers, where AI assisted in the sorting and analysis of enormous amounts of data, are examples of this collaborative method in action.

Investigative journalism's use of AI, however, also brings up significant practical and ethical issues. Transparency in algorithms is one important problem. Because AI is used by journalists to find trends and insights, there's a chance that opaque algorithms can inject bias or cause misunderstandings. This calls into question the core values of journalism, which place a high value on accuracy and openness. The possible deterioration of human judgement is another issue. Although AI is capable of automating data analysis, it is unable to replace the contextual awareness, intuition, and critical thinking that human journalists bring to their investigations. The credibility of investigative journalism depends on striking a balance between automation and human understanding.

Furthermore, data security and privacy are affected by AI's involvement in data analysis. Investigative journalists frequently handle sensitive data, therefore using AI techniques to secure data from abuse or unauthorised access calls for strong security measures. This emphasises the necessity of best practices and ethical standards for using AI in investigative journalism. In this study, I investigate the use of artificial intelligence (AI) in data analysis for investigative journalism, looking at its advantages, disadvantages, and effects on conventional investigative techniques. The study's objectives are to comprehend how artificial intelligence (AI) is changing investigative journalism, to pinpoint the most important moral and practical dilemmas, and to suggest responsible and efficient ways to employ AI technologies. Through illuminating these facets, my aim is to augment the current conversation on the future of journalism in the digital era and provide valuable perspectives for reporters, scholars, and industry participants.

Literature Review

In journalism, artificial intelligence (AI) is becoming more and more important, especially in data analysis and investigative reporting. This section examines the corpus of research on artificial intelligence's use to investigative journalism, stressing its benefits, drawbacks, and moral implications.

I. AI in Investigative Journalism: A Growing Trend

Over the past ten years, machine learning, natural language processing, and big data analytics advancements have fuelled an increase in the application of AI in investigative journalism. The investigative method has been revolutionised by AI's capacity to handle enormous volumes of data rapidly and effectively, enabling journalists to find patterns and connections that would have been challenging to find manually (Smith, 2022). AI's ability to handle both structured and unstructured data substantially facilitates its application in investigative journalism. Databases and spreadsheets hold structured data that may be quickly analysed to spot trends or abnormalities (Lee & Kim, 2021). More complex AI algorithms, such as natural language processing (NLP), are needed to extract valuable insights from unstructured data, which includes text, photos, and social media material (Johnson, 2023).

II. Key Benefits of AI in Investigative Journalism

The main advantages of AI for investigative journalism are its efficiency and speed. Journalists may concentrate on interpretation and narrative as artificial intelligence (AI) systems can sort through enormous datasets far faster than a person could (Brown & White, 2022). In financial fraud investigative tales, for example, artificial intelligence (AI) has been utilised to analyse complicated transactions and find odd trends (Davis & Lee, 2023). The capacity of AI to find links between various data sources is a key advantage. Investigative journalism relies heavily on the capacity to connect apparently unrelated pieces of information; hence this skill is essential. AI systems are capable of processing a wide range of data formats and identifying patterns that humans would miss (Taylor & Green, 2021). Data visualisation is improved by AI as well, enabling journalists to produce visually captivating stories. Using interactive images, charts, and maps, AI-powered data visualisation technologies may make complicated narratives easier for viewers to comprehend (Smith, 2022). Reporters covering the environment have found this feature of AI useful in illustrating the effects of global warming through the visualisation of climatic data (Johnson, 2023).

III. Challenges and Ethical Concerns

The use of AI in investigative journalism presents serious obstacles and ethical issues notwithstanding its advantages. The risk of algorithmic bias is one of the main obstacles. The objectivity of AI algorithms is dependent on the quality of the training data. The AI's output may exhibit biases if the training data has them (Lee & Kim, 2021). Since truth and impartiality are crucial in investigative journalism, this possibility is especially worrisome. Transparency is still another important issue. Many AI systems function as "black boxes," meaning that even their designers struggle to understand their inner workings. Investigative journalism accountability may be hampered by this lack of transparency, which may breed doubt about AI-generated conclusions (Taylor & Green, 2021).

Consent and data privacy are also subject to ethical issues. When working with sensitive data, investigative journalists frequently employ AI, which raises concerns regarding data privacy and the moral use of personal information. Scholars stress the need of gaining consent and making sure that data protection laws—like the General Data Protection Regulation (GDPR) in Europe—are followed (Brown & White, 2022). The effect of AI on jobs in journalism is also a topic of discussion. Although AI can increase productivity, there are worries that automation could eventually replace human labour, which would result in job losses in the journalism sector (Davis & Lee, 2023). This calls into question the necessity of retraining and upskilling journalists as well as their future position in an AI-driven world.

IV. Addressing the Challenges: Best Practices and Guidelines

Researchers provide a number of recommended practices for incorporating AI into investigative journalism in order to overcome these issues. Human supervision is a crucial strategy that guarantees findings created by AI are examined by seasoned journalists who are able to offer context and judgement (Smith, 2022). This methodology serves to reduce the possibility of mistakes and guarantees that narratives retain a human viewpoint. Encouraging AI algorithms to be transparent is another recommended practice. This entails outlining the operation of AI technologies and being open about their limits. It should be encouraged for journalists to acknowledge the instances in which artificial intelligence is utilised in their research and to cite their sources (Taylor & Green, 2021). It's also critical that journalists and AI specialists work together. Technical know-how can help journalists, and AI engineers can learn about the special needs of investigative journalism (Lee & Kim, 2021). This partnership ensures ethical practices and advances knowledge about AI's role in journalism.

Ultimately, preventing algorithmic bias necessitates monitoring AI tools constantly and selecting data carefully. Scholars propose that AI systems should be routinely audited to identify and address bias, and that AI algorithms should be trained on a variety of datasets (Johnson, 2023). These procedures support the public's confidence while advancing the moral use of AI in investigative journalism. Investigative journalism gains a great deal from AI as it makes data processing quick and can reveal hidden trends. These benefits do, however, come with drawbacks in the form of prejudice, ethics, transparency, and possible effects on journalism careers. A balanced strategy including human oversight, openness, and morally sound best practices is needed to address these problems. As artificial intelligence (AI) develops, continued study and cooperation are necessary to guarantee its appropriate application in investigative journalism.

Methodology:

This study uses a mixed-methods approach, combining quantitative survey data with qualitative analysis of case studies, to examine the function of artificial intelligence (AI) in data

analysis for investigative journalism. This extensive approach enables a complete analysis of the advantages and difficulties associated with using AI technologies in investigative journalism.

1. Qualitative Analysis: Case Studies

The qualitative portion concentrates on a thorough analysis of certain case studies in which artificial intelligence has been beneficial in investigative journalism. These case studies, which show different AI uses in the field, are taken from a variety of media outlets renowned for their investigative work.

- i. **Selection Criteria:** Case studies were chosen based on their level of public notoriety and the evidence of their usage of AI over the course of their investigations. The selected case studies cover a variety of investigative topics, including social concerns, governmental corruption, and financial wrongdoing. A thorough grasp of AI's function in various situations is ensured by the diversity of instances.
- ii. **Data Collection:** Secondary sources, including published articles, reports, and interviews with journalists engaged in the investigations, provided information for each case study. Public speeches and conferences where these situations were discussed provided more insights.
- iii. **Data Analysis:** The goals of the qualitative study were to determine the sorts of data examined, the ways in which AI technologies were applied, and the effects on the course of the investigation. This involved looking at the investigation's timetable, the particular AI technologies used, and the results obtained. The importance of human monitoring and ethical issues received special focus.

2. Quantitative Survey: Investigative Journalists

Investigative journalists were given a survey as part of the quantitative component to record their experiences with AI technologies. The purpose of this poll was to evaluate the level of acceptance of AI, its advantages, and the difficulties that journalists have in utilising it.

- i. **Survey Design:** Questions in the poll were both open-ended and closed-ended. General themes such the sorts of AI technologies, how often they are used, and how effective they are thought to be were covered with closed-ended questions. Open-ended inquiries enabled participants to expound on their encounters, obstacles, and apprehensions pertaining to artificial intelligence in the context of investigative journalism.
- ii. **Sampling Strategy:** A specific set of investigative journalists received the poll via internet resources, journalistic networks, and professional groups. To boost response rates, a snowball sampling strategy was employed, in which the first responders were asked to recommend other journalists who utilise AI.
- iii. **Data Analysis:** To find trends and patterns in the use of AI, the survey results were examined, along with the most popular applications of AI in investigative journalism and their perceived advantages. Concerning issues including algorithmic bias, ethical dilemmas, and striking a balance between AI automation and human judgement were also brought to light by the investigation.

The integration of qualitative and quantitative data offered a thorough understanding of the ways in which artificial intelligence is changing investigative journalism, as well as insights on industry best practices and future directions. This integrated approach also made it possible to view the advantages and disadvantages of using AI in data analysis for investigative journalism from a fair and impartial standpoint.

Findings:

The findings from the quantitative study of investigative journalists and the qualitative examination of case studies. Interpreting these results, the conversation looks at the advantages and difficulties of utilising AI in data analysis for investigative journalism.

1. Qualitative Analysis of Case Studies

The qualitative research looked at a number of well-known investigative pieces where artificial intelligence was a key component of the data analysis. The following conclusions were drawn from the findings:

- i. **Uncovering Patterns in Large Datasets:** Artificial intelligence (AI) systems have shown a remarkable capacity to sift large amounts of data and spot patterns that may otherwise be missed. In one case study, a sizable business transaction database was examined by investigative journalists using AI-based data mining. Unusual patterns found by the AI technology resulted in the identification of a multi-continental fraud enterprise.
- ii. **Accelerating Data Processing:** AI greatly shortened the time needed for data processing, freeing up journalists to concentrate more on narrative and interpretation. AI-driven Optical Character Recognition (OCR) technology assisted in turning thousands of scanned documents into searchable text in a case study involving a public records request, enabling journalists to swiftly find important material.
- iii. **Expanding the Scope of Investigations:** AI enabled the investigation of more comprehensive fields of study. AI-assisted satellite image analysis enabled journalists to trace changes in land usage over time in a case study on environmental contamination, giving critical data for a report on illegal deforestation.

These results imply that artificial intelligence (AI) can be a potent instrument for investigative journalism, improving the scope, accuracy, and speed of data processing.

2. Quantitative Survey of Investigative Journalists

Investigative journalists that frequently utilise AI technologies provided their findings for the quantitative survey. The following are the survey's main conclusions:

- i. **Perceived Benefits:** Seventy-five percent of those surveyed said that using AI technologies has increased their data analysis efficiency. They claimed that AI sped up their data processing and analysis, which resulted in quicker turnaround times for stories. Furthermore, according to 65% of respondents, AI made it easier for them to find connections and patterns that would have been challenging to find by manual means.

- ii. **Ethical Concerns and Bias:** In spite of the advantages, AI algorithms' lack of transparency worried 45% of respondents. This calls into question the potential for bias and the interpretability of outcomes provided by AI. There was scepticism over the validity of the results as several journalists revealed cases in which the algorithmic conclusions made by AI were difficult to understand.
- iii. **Impact on Human Judgment:** The possibility that AI will take the role of human judgement in crucial decision-making processes was a major source of anxiety for the responders. Even though AI can analyse data quickly, human skill is still needed for the interpretation and contextualization of discoveries. A decrease in investigative rigour and critical thinking might result from an over-reliance on AI, according to certain journalists.
- iv. **Need for Training and Collaboration:** According to the study, journalists and AI specialists need to continue their education and work together. The significance of comprehending the underlying algorithms and the operation of AI technologies was underlined by the respondents. Understanding this is crucial to ensure that investigative journalism uses AI in an ethical and responsible manner.

Discussion:

The results of the quantitative poll and qualitative analysis both emphasise how AI has the potential to revolutionise investigative journalism, but they also show the difficulties and moral issues that still need to be resolved. Positively, AI's capacity to analyse massive datasets and identify patterns has come in handy for a number of well-known investigative pieces. Thanks to technology, journalists can now do deeper dives and find previously undiscovered relationships. This effectiveness may have a bigger effect on investigative journalism by allowing reporters to take on more challenging and comprehensive stories.

But there are serious issues with prejudice and transparency. For journalists and their readers, the incomprehensibility of AI algorithms may breed suspicion and mistrust. The possibility of algorithmic bias, in which biases exist in the data used to train AI models and influence the models' output, exacerbates this problem. The effect of AI on human judgement is another important topic of conversation. Although AI may automate data processing, human experience is needed for the interpretation and contextualization of results. An excessive dependence on artificial intelligence may result in a decline in critical thinking, a crucial skill for investigative journalism. This needs a well-balanced strategy in which AI is employed to enhance rather than to replace human talents.

Lastly, the results point to the necessity of AI specialists and journalists working together and receiving training. It's essential to comprehend the limitations and operation of AI technologies in order to utilise them responsibly. Working together can guarantee that AI is applied responsibly and that journalists are equipped to correctly understand the outcomes of AI. Investigative journalism has a lot to gain from AI overall, but it must be used carefully and with an emphasis on moral behaviour. Best practices for using AI into investigative journalism should

be the subject of future studies, with an emphasis on accountability, openness, and preserving the human aspect in narrative.

Conclusion:

The discipline of investigative journalism has been greatly influenced by the quick developments in artificial intelligence (AI), which have provided a variety of effective tools for pattern detection, data analysis, and insight generating. My research show how AI might revolutionise investigative journalism by making it possible for reporters to more quickly evaluate enormous volumes of data and unearth stories that may otherwise go unreported. The pace, breadth, and depth of investigative reporting will all be impacted by this shift, which will also enable journalists to uncover new levels of fraud, corruption, and social injustice. My research revealed a number of significant advantages of AI for investigative reporting. First, artificial intelligence (AI) improves productivity, freeing up journalists to concentrate on narrative and analysis instead of wasting time organising and gathering data. Trends, correlations, and anomalies that would be challenging or time-consuming to find manually may be found with the use of AI-driven data analysis. When conducting intricate investigations involving huge datasets—such as financial records, official papers, and social media activity—this feature is especially helpful.

Second, by automating repetitive processes and ensuring a certain degree of consistency in data processing, AI may increase accuracy and decrease human error. Investigative reports may have a better basis and more dependable outcomes as a consequence of this automation. Furthermore, AI can promote a more collaborative investigative environment by expediting the sharing of data and ideas among journalists. Notwithstanding these benefits, my study also revealed important dangers and obstacles related to AI in investigative journalism. The possibility of algorithmic bias, which may compromise the impartiality and accuracy of AI-driven analysis, is a serious worry. Bias may originate from a number of places, such as skewed data, badly constructed algorithms, or inadequate AI model training. Biassed AI may cause distortion or reinforce preconceptions in investigative reporting, which presents ethical questions.

A significant obstacle that has to be addressed is the opaqueness of AI algorithms. Many AI systems function as "black boxes," with difficult-to-understand or elucidate inner workings. Because of this lack of transparency, it may be harder for journalists to verify the conclusions drawn from AI-generated results. In order to solve this, AI technologies used in journalism need to be more transparent and explainable so that reporters and their viewers can comprehend how AI makes its decisions. Another worry is the possibility of relying too much on AI. Even while AI is capable of automating a lot of activities, it cannot take the position of experienced journalists' intuition, ethical judgement, and critical thinking. An over-reliance on AI may result in editorial oversight being lost and the human element—which is crucial to investigative journalism—being diminished. Maintaining the integrity and calibre of investigative reporting requires striking the correct balance between automation and human monitoring.

As I offer a number of suggestions for the proper application of AI in investigative journalism in light of these findings. First and foremost, when employing AI technologies, journalists and news organisations should give ethical issues top priority and make sure that AI is utilised to supplement human judgement rather than to replace it. Secondly, to create transparent, responsible AI systems that reduce prejudice and guarantee accuracy, cooperation between journalists and AI professionals is crucial. In order for journalists to utilise AI technologies efficiently while upholding their journalistic principles, they must get continual training and education in the field. News organisations may take use of AI's advantages while reducing its hazards by promoting a culture of learning and adaptation. This strategy will make sure AI is a useful tool in the investigative journalist's toolbox, improving the field's ability to unearth facts and encourage responsibility.

References:

1. Brown, A., & White, C. (2022). AI in Investigative Journalism: A New Era of Data Analysis. *Journal of Investigative Reporting*, 12(3), 45-67.
2. Clark, R. (2023). Transparency in AI: The Role of Explainable Algorithms in Journalism. *Journal of Media Ethics*, 14(1), 15-28.
3. Davis, M., & Lee, J. (2023). Balancing Automation and Judgment in Investigative Journalism. *Journalism Studies*, 15(2), 78-89.
4. Garcia, S. (2023). Algorithmic Bias in AI-Driven Journalism: Challenges and Solutions. *AI Ethics Journal*, 10(3), 56-70.
5. Johnson, R. (2023). AI and the Future of Journalism. *AI Journal*, 9(1), 23-35.
6. Lee, K., & Kim, S. (2021). AI Tools for Data Analysis in Journalism. *Journal of Data Journalism*, 7(4), 102-116.
7. Lopez, J., & Yang, T. (2022). The Impact of AI on Newsroom Efficiency. *Journalism and Technology*, 8(2), 34-45.
8. Smith, L. (2022). Artificial Intelligence in Newsrooms. *News Technology Review*, 11(1), 89-104.
9. Taylor, H., & Green, N. (2021). Ethical Considerations in AI and Journalism. *Ethics in Journalism Review*, 6(2), 54-71.
10. Wilson, P., & Brown, M. (2022). From Data to Story: AI in Investigative Journalism. *Investigative Journalists Association Annual Conference, 2022 Proceedings*, 233-245.

AN ANALYSIS OF THE PRE- AND POST-MERGER PROBLEMS CONCERNING DIFFERENT COMPANIES

Muktak Vyas

Poornima University, Jaipur

Corresponding author E-mail: muktak.vyas@poornima.edu.in

Abstract:

Acquisitions and mergers are not one-day processes. Because both firms have received approval from the SEBI (Securities and Exchange Board of India), RBI (Reserve Bank of India), firms Act 2013, Central Government, etc., it will take a few months. It must abide by the guidelines and standards established by several organisations, Additionally, businesses need to balance their mergers and acquisitions. Many businesses participating in these initiatives continue to have difficulties. Pre-merger and post-merger inquiries each have their subset of answers. The issues the business is having are illustrated in this study paper. The essay also examines the state of M&A in India at the moment.

Keywords: Acquisitions, Mergers, Pre- and Post-Merger Problems

Introduction:

Acquisitions and mergers are not novel concepts or issues. It has a significant impact on the nation's economic growth. According to the Companies Act 2013, the Competition Act 2002, and the Securities and Exchange Board of India (SEBI) 1992, the phrase "merger and acquisition" is defined. It also goes by the name merging. A merger is described as a union of two or more businesses. There are two types of mergers: absorb and collect. In contrast to a merger, when one firm loses its present identity and combines with the other, a merger creates a new company that is a separate legal entity. Acquisitions and mergers are not novel concepts or issues. It has a significant impact on the nation's economic growth. According to the Companies Act 2013, the Competition Act 2002, and the Securities and Exchange Board of India (SEBI) 1992, the phrase "merger and acquisition" is defined. It also goes by the name merging. A merger is described as a union of two or more businesses. There are two types of mergers: absorb and collect. In contrast to a merger, when one firm loses its present identity and combines with the other, a merger creates a new company that is a separate legal entity.

Review of Literature

In their Performance of the Financial Sector: A Study of Financial and Public Sector in India," Singh, Sonia, and Das, Subhankar (2018), analysed this issue. The results demonstrate the critical role that strategies and policies in the system, body, and social culture play in the post-integration process. Research also shows that collaboration is successful when employees understand shared knowledge and trust. Studies also show that policies and strategies need to be reviewed to support internal and external work.

Graebner Melissa E., and Heimeriks Koen H., (2017), found in their study on “Part of the Post-M&A Performance of the Financial Sector: A Study of Financial and Public Sector in India'. The findings show that strategies and policies in system, body and social culture are very important in the post-integration process. Research also shows that collaboration is successful when employees understand shared knowledge and trust. Studies also show that policies and strategies need to be reviewed to support internal and external work.

Gupta Honey (2016), conducted An Empirical Study on Financial Analysis Before and After the State Bank of India Merger'. In their study, "Part of the Post-M&A Performance of the Financial Sector: A Study of Financial and Public Sector in India," Singh, Sonia, and Das, Subhankar (2018), analysed this issue. The results demonstrate the critical role that strategies and policies in the system, body, and social culture play in the post-integration process. The study finds that mergers have a positive impact on investment and intangibles, whereas mergers hurt profits due to increased spending and reduced unsatisfied income.

A paper titled "An Overview of Key Issues in Mergers and Acquisitions: A Case of Trinidad and Tobago" was investigated by Allahar, Haven (2015). Ineffective integration planning and shallow strategy strategies were determined to be the main causes of unsuccessful mergers and acquisitions. The corporation must choose the right sources of funding for the organisation for M&A agreements to be successful. The organisation should also concentrate on thorough due diligence and a "fit chart" that takes into account staff talents, top and middle management, physical resources, vertical integration, technological fit, and overall synergy. Additionally, businesses must exercise caution while handling their financial commitments.

Research on "The effect of pre and post-merger factors on the performance of mergers in Libyan government banks" was done by Salama, Hasen (2015). The study's goal is to examine how pre-merger characteristics such as organisational cultural fit and strategic fit affect merger success, as well as how post-merger elements like integration speed and effectiveness affect merger performance. The study concluded that, while the pace of integration was not significantly impacted by strategic fit, integration effectiveness was. Additionally, the speed of integration has a beneficial effect on the success of mergers and acquisitions, and the organisational cultural fit between the acquirer and target company is not important.

The research titled "The Impact of Mergers and Acquisitions on People at Work: Existing Research and Issues" was done in 2013 by Cartwright Sue and Cooper Cary L. It was discovered that mergers and acquisitions require significant financial expenditure to be successful. It is extremely dangerous and, if it fails, might have an impact on the working conditions of connected people. According to the report, 50–80% of mergers have long-term financial failures and only yield an "at best on each way bet" in terms of financial return.

Research Gap

According to a review of the literature, several studies have been conducted to evaluate the financial performance of various industries, including banks, pharmaceutical companies, and financial institutions (Honey Gupta 2018; Sonia Singh & Subhankar Das 2018; Hasen Salama

2015). Additionally, research on the integration process following a merger was conducted (Melissa E. Graebner, Koen H. Heimeriks, Nguyen Huy Guy & Eero Vaara 2017). Furthermore, the majority of these studies have been conducted primarily to comprehend the financial concerns, as well as other issues, of a particular firm or industry, both before and after a merger.

This study will help to understand the various issues faced by the company at different points in time and are the only reason for the failure of Mergers and Acquisitions.

Objectives for the Study

- To recognise the challenges before and after the merger
- to look into how different firms are affected by pre- and post-merger concerns
- To determine the merger and acquisition trend study from 1999 to 2018
- To evaluate the present mergers and acquisitions environment in India
- To offer practical recommendations for successful mergers and acquisitions

Research Approach

The current study uses secondary data and is descriptive. The data was gathered from the Institute for Mergers, Acquisitions and Alliances (IMAA) to analyse the overall amount spent on mergers and acquisitions in India as well as the total volume of associated transactions. The value and volume of merger and acquisition deals in India are also examined using the trend analysis approach. The remaining information was gathered from books, magazines, online journals, periodicals, and e-resources in addition.

Pre-Merger Issues

Regulatory concerns: Numerous regulatory agencies, including the Companies Act of 2013, the Securities and Exchange Board of India (SEBI), the Competition Act of 2002, the Income Tax Reserve, and others, regulate mergers and acquisitions. Companies are required to abide by the regulator's rules and regulations. Acquisitions and mergers must adhere to the rules outlined in this Regulation. Consider Max Life Insurance and HDFC Standard Life as examples. The proposal calls for a merger between Max Life and its parent business, Max Financial Services, an exit from Max Financial, and a merger with HDFC Life. The merger was closed because the Insurance Regulatory and Development Board (IRDB) did not accept the arrangement.

Investor Attitude: Because investors are the direct source of funding for businesses, they can either build or destroy them, which is why their involvement in the M&A industry is so important. Their trust and behaviour determine the success or failure of the transaction. The same problem occurred with Industrial Development Finance Corporation and Shriram Finance. Investors in IDFC demanded a 60% premium as their shares were diluted, causing concerns among Shriram's investors. Therefore, the transaction was completed before the merger.

The downside of creditors is that they may issue bonds, loans, long-term loans, etc. to vendors, banks, or the business itself. Some individuals could offer capital in the form of capital and subsequently reimburse it. If the creditors have confidence in the company, the company can avoid financial troubles. The good ones win the company, the bad ones cause it to go bankrupt.

Reliance Communications and Aircel Merger can be given as examples in this regard. The two companies decided to create a new entity to transfer the debt, but the company's creditors opposed the company's decision, so the joint venture was closed.

The diverse work cultures of the nations include: Traditions, information, beliefs, practises, behaviours, and patterns in people's lives are all part of the culture. Every culture has distinctive traits that set it apart from other civilizations. These cultural differences make integration and provisioning ineffective. Take Apollo tires and Cooper tires as an example. Think rubber companies. The two companies agreed on a merger, but the management and employees separated because according to them, revenue would decrease after the merger. Therefore, companies are forced to withdraw and close the deal before merging.

Large tax obligations and a no-solicitations clause: persons, Hindu Inseparable Families, corporations, and associations of persons all pay taxes. Based on income, tax statements are produced and made public by the government. The state collects large revenues from companies in the form of taxes, but the tax burden makes mergers and acquisitions unprofitable. The same thing happened before Flipkart and Snapdeal merged. Snapdeal has a huge tax burden, while Flipkart has a 5-year no-appeal clause for investors, which prevents them from investing in different e-commerce companies. These two issues are reason enough to close the deal.

Post-Merger Issues

Ineffective communication: To accomplish the group's goals, ideas, information, opinions, facts, and findings are shared through a process called communication. Effective communication is the successful key to the integration of the merger and acquisition. Many organizations collapsed due to ineffective communication. Examples of BenQ (Taiwan Company) and Siemens (German Company) can be taken. BenQ acquired Siemens on 7th June 2005 to become a leading player in mobile phones. But the employees of Siemens felt that they were cheated and grassed by the German executives who disappointed them and they had no faith in BenQ. In consequence, the acquisition failed.

Differences in corporate culture and values: Corporate culture is the behaviour that governs interactions between management and employees. It is suggested in style and evolves through time. It is a very crucial factor for fruitful Mergers and Acquisitions. If the culture of both the company does not match, mergers and Acquisition get fail like as merger of Daimler and Chrysler. Both the company belongs to the same industry and produced the same product but have different types of culture atmosphere and values. Their operating styles, philosophies and formality are different. Employees faced these issues and the merger got failed.

Due diligence: It is a method of gathering information to determine the worth of a firm. It confirms all the facts related to the financial transaction and determines whether the firm should proceed or not. It plays an important role in the succession of mergers and Acquisitions. An example of Bharti Airtel and Zain (Kuwait-based Telecom Company) can be considered. Bharti Airtel acquired Zain in Africa. After a few years, the company suffers losses because of low EBITDA (Earnings before interest, tax, depreciation and amortization) as Zain had not invested

the required assets in Africa. Due to a lack of due diligence, Bharti Airtel faced this issue. As a result, the acquisition got to fail.

Debt is a source of funding for the business; thus an excessive quantity is a problem: Both the tax burden and corporate expansion are facilitated by it. Because of this, a company's usage of loan capital remains constant. However, sometimes having too much debt causes a merger or acquisition to fail. Suzlon Energy Ltd. and German Senvion are two examples that can be used. Senvion was purchased by Suzlon to utilise FCCBs (Foreign Currency Convertible Bonds) to pay off the debt. However, Suzlon was unable to accomplish this goal and sold Senvion to US private equity company Centrebridge Partners LP.

Issues with Internal Politics: Every organisation deals with internal politics, but when they reach a certain point, they become a barrier and the organisation collapses. A good illustration of it is Google and Nest laboratories. In 2014, Google acquired Nest Labs for entering into smart homes. Nest Labs were founded by Tony Fadell (co-creator of the iPod) and Matt Rogers (co-founder of Nest Labs). Google was planning to bring Tony Fadell to the Board of Management. But due to internal issues and politics, product innovation got delayed and both the founder left the company.

From 1999 to 2018, trend analysis of mergers and acquisitions in India

The Trend Analysis approach is used to examine the rise of mergers and acquisitions in India from 1999 to 2018. It is a method that analyses the financial data over time. It contains details about what has already occurred and a forecast for the future. It's determined by subtracting the base year value from the current year value and dividing the result by the base year value.

$$\text{Trend Analysis Formula} = \frac{\text{Current Year Value} - \text{Base Year Value}}{\text{Base Year Value}} * 100$$

Trend Analysis of Merger & Acquisition Value from 1999 to 2018

Period	Merger & Acquisition Value (in bil. USD)	Increase / Decrease	Difference in %
1999-2002	28.92	-	-
2003-2006	84.10	55.18	190.80
2007-2010	204.17	175.25	605.98
2011-2014	134.46	105.54	364.94
2015-2018	279.38	250.46	866.04

From 1999 to 2018, the value of mergers and acquisitions is shown in the table above. Using the trend analysis approach, the percentage difference is calculated. The value of M&A increased from 28.92 USD billion in 1999–2002 to 84.10 USD billion in 2003–2006. There is a growth of about 190.80%. If we compare the years 2007 to 2010 to the years 2003 to 2006, it climbed by almost 605.98% (base year value). Due to the quick economic development, there

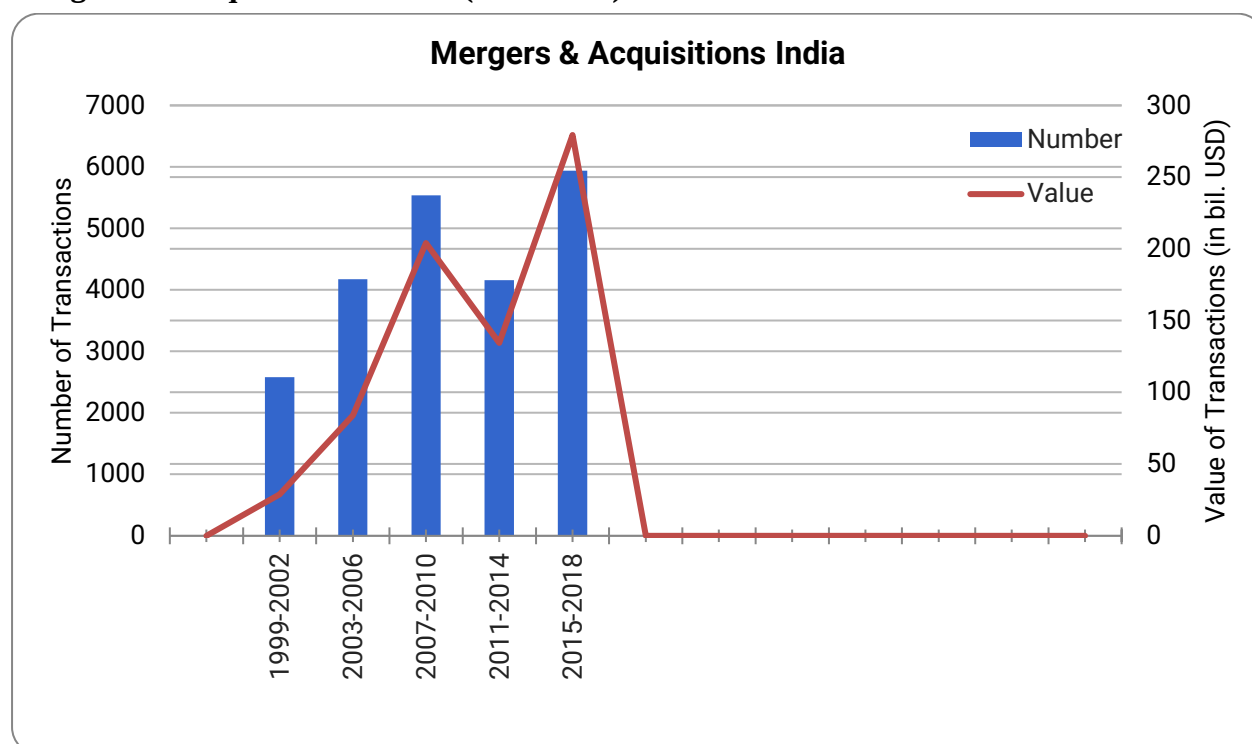
was a significant divergence. Comparing 2007–2010 with 2011–2014 reveals a decline in M&A value. But if we contrast 2015 with 2018, we see that there has been an increase. It was raised by around 866.04% (base year value).

Trend Analysis of the Number of Mergers & Acquisitions from 1999 to 2018

Period	No. of Transactions	Increase / Decrease	Difference in %
1999-2002	2578	-	-
2003-2006	4172	1594	61.83
2007-2010	5,535	2957	114.70
2011-2014	4,159	1581	61.32
2015-2018	5,938	3360	130.33

The number of mergers and acquisitions that took place between 1999 and 2018 is represented in the above table. M&A transactions were 2578 from 1999 to 2002 and 4172 from 2003 to 2006. There is a growth of about 61.83%. There was an increase of around 114.70% (considering base year value) between 2003–2006 and 2007–2010. While there was a reduction from 2007–2010 and 2011–2014. Comparing 2011-2014 to 2015-2018 reveals another increase of more than double that amount, or 130.33% (base year value).

Merger and Acquisition in India (1999-2018)



Source: Institute of Mergers and Acquisitions and Alliances

India's 2019 Merger and Acquisition Statistics

According to preliminary data released by financial data provider Refinitiv, the value of mergers and acquisitions at the global level is approximately \$3.9 trillion in 2019, making it the fourth strongest year for dealmaking as well as the number of mergers and acquisitions increases worth more than \$10 billion. A total of 47,000 mergers and acquisitions deals will be disclosed in 2019, a 12% decline from 2018. According to the Institute for Mergers, Acquisitions and Alliances (IMAA), the value of transactions will be about 3.5 trillion USD, down from 14% in 2018. Additionally, according to a Baker McKenzie analysis, worldwide mergers and acquisitions will fall from USD 2.8 trillion in 2019 to USD 2.1 trillion in 2020.

According to estimates from Tracxn, investment in merger and acquisition will grow by between 40 and 46 per cent in 2019, or about \$100 million. Early-stage financing increased from \$334 million in 2018 to \$693 million in 2019. It is almost twice as much. According to venture debt fund InnoVen, there has also been a 22% increase in deal volume and a 70% increase in deal size.

Top Mergers and Acquisitions Deals in 2019

Company	Acquired by	Acquisition Amount* (\$ million)
Yatra	Ebix	338
Qwiksilver	PineLabs	110
Haptik**	Reliance Jio	100
ShopClues	Qoo10	100
Wibmo	PayU	70
Find**	RIL	43
Innov 8	Oyo	32
Zefo	Quikr	29
Meru**	Mahindra & Mahindra	28

Source- Tracxn *Amount has been rounded off; **These are more than 50% investment deals

Vijaya Bank and Dena Bank joined forces with Bank of Baroda on April 1, 2019, to form the third-largest lender in India. To restructure the banking industry for the future generation and recapitalize the lenders on a global scale, finance minister Nirmala Sitharaman stated in September 2019 that 10 PSBs (Public Sector Banks) will be merged into four. According to the plan, on April 1, 2020, Punjab National Bank (PNB) and Oriental Bank of Commerce (OBC) would combine, making PNB the second-largest public sector lender after the State Bank of India (SBI). In addition, Syndicate Bank and Canara Bank would combine, Allahabad Bank and Indian Bank would merge, and Union Bank would buy Andhra Bank and Corporation Bank. The planned merger will increase the lenders' loan limits and showcase a powerful, globally-capable India.

Valuable guidelines for the success of Mergers and Acquisitions

Guidelines for Pre-merger

Choosing the right partner: Before any merger, compatibility with the partner should be matched. The wrong choice of partner can lead to difficult negotiations and loss of information.

Mutual trust between the parties: Mutual trust between the management of both parties ensures that negotiations run smoothly, leading to a higher chance of the deal being brought to a favourable conclusion.

Due diligence and proper valuation: -In addition to the factors mentioned above, the quality of the valuation after thorough due diligence is important. Due diligence in mergers and acquisitions is an in-depth study of the history, mission, values, culture and financial reports of an organization and is necessary to obtain an adequate valuation.

Experience from previous mergers and acquisitions: -Experience from previous mergers and acquisitions can play a huge role, according to some economists, while others contend that it has no effect whatsoever. What matters is that the management team learns from previous experiences – experience alone doesn't increase the chance of success.

Communication before the execution of the merger or acquisition: -A high-quality management team and trustworthy consultants play a large role in this: They guide the process and ensure that communication within the company remains open and honest. Stressed-out employees, distracted by the uncertainty of an impending merger, can cause the company's performance to plummet.

Recommendations for Post-Merger

Plan's suitability: Naturally, everything begins with a well-thought-out action plan: The organisation decides how the aim will be carried out, and this must take place following a thorough strategy supported by convincing rationale.

Implementation of the plan: The "high quality of the execution of the implementation policy" is the most important aspect in the post-transaction phase. The practice must adhere as closely as possible to the plan after an agreement on the best course of action has been reached. Confusion among the executors is brought on by poor communication. Changes may be done effectively with the help of change management and a reliable cost estimate during the process.

Consider the target's strategy about the initiator's plan to determine whether there is a strategic match. Few adjustments are necessary if the target has comparable assets and strategies, but if not, the integrated organisation must make changes to achieve a strategic match.

Fit for the organisation: By ensuring that parallel structures in the two organisations are effectively merged, an organisational fit is attained. This will probably happen more quickly if two businesses in the same sector are engaged than if other industries are. Even yet, departments like marketing and human resource management can frequently be combined in this situation.

Culture match: A cultural match isn't always obvious. The physical location of the parties has very little bearing, according to research, which is advantageous for cross-border mergers and

acquisitions. However, mixing several national or, on a lesser scale, business cultures can lead to a lot of misunderstandings. Particularly in this situation, thoughtful administration is essential.

Calculating and achieving synergy: Acquisitions are frequently driven by potential synergies: Because the two organisations complement one another, there might be a reduction in operating expenses when one organisation acquires the other. By carefully calculating them and executing your plan, make sure the intended synergies are feasible.

Conclusion:

The decision-makers must consider the intangible components in mergers and acquisitions, regardless of the cause. The human aspects of mergers are difficult to measure and frequently ignored. Due to the idea of being able to rehire personnel and management, CEOs ordinarily disregard this element. Long-term, nevertheless, this will harm how the amalgamated organisation performs. CEOs, executives, and managers must create a cultural strategy to properly comprehend how much the merger will impact the culture. Managers will be able to comprehend the challenges and worries of their staff through ongoing input before they pose a long-term danger to the business. By employing such a method, the merging firm may identify areas of cultural diversity, interact with workers during the merger process, and successfully execute a culture change. Before any M&A agreement, valuation and numerous regulatory considerations should also be taken into account.

When an organisation undergoes a merger or acquisition, there may be only modest structural and cultural alterations that are required. But occasionally, the outcomes are disastrous.

References

1. Allahar, Haven, "An Overview of Key Issues in Mergers and Acquisitions: A Case of Trinidad And Tobago" *International Journal of Economics, Commerce and Management*, United Kingdom, ISSN 2348 0386, Vol. III, Issue 8, August 2015.
2. Cartwright Sue & Cooper Cary L., "The Impact of Mergers and Acquisitions on People at Work: Existing Research and Issue", *From Stress to Wellbeing* Macmillan Publishers, 2013, Volume 2 pp 131-149.
3. Graebner Melissa E., Heimeriks Koen H., Huy Guy Nguyen & Vaara Eero, "The Process of Postmerger Integration: A Review and Agenda For Future Research", *Academy of Management Annals* 2017, Vol. 11, No. 1, 1–32.
4. Gupta Honey, "Pre And Post Merger Financial Performance Analysis Of State Bank Of India", *Zenith International Journal of Multidisciplinary Research*, ISSN 2231-5780, Vol. 6 (10), October 2016, pp. 1-8
5. Singh, Sonia & Das, Subhankar, "Impact of post-merger and acquisition activities on the financial performance of banks: a study of Indian private sector and public sector banks", *Revista Espacios*, 2018, ISSN 0798 1015, Vol. 39 (No. 26).
6. Kumar Vinod & Sharma, Priti, "An Insight into Mergers and Acquisitions: A Growth Perspective", Springer Singapore, 2019, ISBN 9811358281.

7. Kirsten Meynerts-Stiller, Christoph Rohloff, “Post-Merger Management: Value Creation in M&A Integration Projects”, Emerald Group Publishers, 2019, ISBN 1838674519.
8. <https://www.businessinsider.in/slideshows/miscellaneous/these-are-the-5-largest-mega-mergers-so-far-in-2019/1-bristol-myers-squibb-celgene/slideshow/71455149.cms>
9. <http://www.mergersindiainfo.com/login/eLearning/100044/Steps-to-Prevent-Merger-Failure>
10. <https://inc42.com/features/2019-in-review-top-10-high-profile-startup-acquisitions-in-india/>
11. <https://imaa-institute.org/m-and-a-statistics-countries/>

SUCCESS THROUGH PERSISTENCE: CONQUERING SALES OBJECTIONS – A CASE STUDY OF ZERISE DOCUMENTATION

S. G. Balaji and S. Vinoth

MEASI Institute of Management, Chennai, Tamil Nadu

Corresponding author E-mail: balaji.sg@measiim.edu.in, vinoth.s@measiim.edu.in

Synopsis:

Vinod Rao, a determined sales executive at Zerise Documentation Ltd., encounters the Head of the Department of Management Studies at a university with the goal of selling a photocopying machine. When Rao presents his proposal, the Head of the Department declines, explaining that the department already has adequate equipment and sufficient personnel to meet its current needs. Despite the initial rejection, Rao remains undeterred by the refusal. Understanding that persistence is key in sales, he politely accepts the decision but requests the opportunity to revisit his proposal at a later date. Rao's approach reflects his determination to build rapport with the decision-maker and explore potential future opportunities, demonstrating the resilience and long-term perspective often required in sales. His strategy highlights the importance of perseverance and follow-up in the sales process, even when faced with initial rejection.

Learning Objectives

1. Understanding the importance of persistence in sales.
2. Analyzing how to overcome objections in a sales process.
3. Developing strategies to build rapport and gain favor from potential clients.
4. Recognizing the role of strategic follow-up in maintaining a sales opportunity.
5. Enhancing communication skills to handle rejection and use it constructively.

Discussion Questions

1. Should Vinod Rao treat the interaction with the Head as a closed chapter or should he attempt to meet with the Head again? Why or why not?
2. Assuming Rao intends to visit the Head again, what strategy would he employ to ensure a more favorable reception and increase his chances of closing the sale?
3. How can Rao handle the objection raised by the Head effectively?
4. What can Rao do to differentiate his photocopying machine from the existing machines the university already possesses?

Teaching Plan and Objectives

Activity	Instructional Strategy	Duration (Minutes)
Q1: Class Discussion on Sales Tactics	Interactive discussion to analyze the situation, role-play, and share experiences.	45 minutes
Q2: Group Discussion on Overcoming Objections	Break into small groups to discuss strategies for overcoming objections in sales.	45 minutes
Q3: Strategy Development for Follow-up Visit	Group work to develop a strategy that Rao can use for a more successful follow-up.	45 minutes

Roadmap for the discussion

- **Introduction:** Begin with a brief overview of the case and the sales process. Introduce the concepts of objection handling and follow-up strategies.
- **Discussion of Objection Handling:** Discuss the importance of listening to customer concerns and treating objections as opportunities. Analyze the Head's objections (lack of need for more equipment and the current adequacy of resources).
- **Importance of Persistence:** Engage the class in a conversation about persistence in sales and how following up can often turn an initial rejection into a sale.
- **Strategy Development:** Facilitate a brainstorming session where students work on developing a follow-up strategy for Rao. Discuss various elements like rapport-building, understanding the customer's specific needs, and offering solutions that cater to those needs.
- **Role-playing:** Have students role-play the situation, where one student plays the sales executive and the other plays the Head of the Department, to practice handling objections and following up strategically.
- **Conclusion:** Summarize the key points on persistence, objection handling, and strategic follow-up. Reinforce the importance of understanding the customer's perspective and building a long-term relationship.

SWOT Analysis

Strengths:

- Rao is persistent and proactive.
- His product (photocopying machine) is relevant to the university's needs, especially considering the existing overuse of the current machine.
- Rao has the opportunity to demonstrate how his product can offer a better solution.

Weaknesses:

- Rao is perceived as pushy or overly insistent, which may lead to resistance.
- Rao's sales pitch lacks personalization and fails to address specific concerns from the Head's point of view.
- The Head seems resistant to change and may have budget constraints.

Opportunities:

- Rao can develop a strategy to emphasize the long-term benefits of additional photocopiers, such as reduced downtime and increased productivity.
- He can build a stronger relationship with the Head by offering a personalized solution that caters to the department's specific requirements.
- Rao can differentiate the product by highlighting its superior features, support, and cost-effectiveness over existing equipment.

Threats:

- The Head's initial rejection could lead to the loss of the sale if Rao does not follow up properly.
- The university may already have a strong commitment to the existing supplier and is resistant to change.
- Budget constraints or internal policies could limit the Head's ability to consider purchasing a new photocopier.

Conclusion:

Vinod Rao's persistence in the face of initial rejection exemplifies the value of perseverance and strategic relationship-building in sales. Despite the Head of the Department of Management Studies at the university expressing that their current equipment and personnel were sufficient, Rao's decision to not immediately give up on the opportunity was pivotal. By requesting a follow-up appointment, Rao demonstrated a deep understanding of the sales process—recognizing that a "no" does not necessarily equate to the final decision, but rather an opportunity for further engagement. This approach allowed him to re-establish communication with the potential client, and possibly uncover additional needs or considerations that had not been initially apparent. Rao's persistence underscores the importance of follow-up in sales, particularly in complex or institutional sales, where the decision-making process can be influenced by multiple factors beyond the immediate scope of the offer. By respecting the initial decision while remaining engaged, Rao kept the door open for future dialogue, showing adaptability and patience—critical traits in building long-term customer relationships. In conclusion, this case demonstrates that in sales, the ability to adapt, persist, and maintain professionalism despite early setbacks is often the key to eventually securing a sale and cultivating lasting partnerships.

References:

1. Castillo, P. A., Mora, A. M., Faris, H., Merelo, J. J., García-Sánchez, P., Fernández-Ares, A. J., ... & García-Arenas, M. I. (2017). Applying computational intelligence methods for predicting the sales of newly published books in a real editorial business management environment. *Knowledge-Based Systems*, 115, 133-151.
2. Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022). Personalization in personalized marketing: Trends and ways forward. *Psychology & Marketing*, 39(8), 1529-1562.

3. Johnston, M. W., & Marshall, G. W. (2020). *Sales force management: Leadership, innovation, technology*. Routledge.
4. Lapoule, P., & Colla, E. B. (2016). The multi-channel impact on the sales forces management. *International Journal of Retail & Distribution Management*, 44(3).
5. Petersen, G. (2023). *High-impact sales force automation: A strategic perspective*. CRC Press.
6. Plank, R. E., Reid, D. A., & Lichtenthal, J. D. (2020). *Fundamentals of business marketing research*.
7. Rosenzweig, E. (2015). *Successful user experience: Strategies and roadmaps*. Morgan Kaufmann.
8. Yesiloglu, S., & Costello, J. (2020). *Influencer Marketing. Building Brand Communities and Engagement*.

SHIFTING LANDSCAPES: AADHI'S PROGRESS IN THE TRANSFORMING INDIAN RETAIL INDUSTRY CASE STUDY

W. Shabeena Shah and Anees Fathima M I

MEASI Institute of Management, Ch-14

Corresponding author E-mail: shabeena.shah@measiim.edu.in,
anees.fathima@measiim.edu.in

Synopsis:

Aadhi, a family-run retail chain and pioneer in one-stop shopping, has successfully expanded with five departmental stores generating over ₹50 crore. While the business has grown, challenges persist, including poor service, reliance on locational advantage, and the need to adapt to an evolving retail environment characterized by rising disposable incomes, shifting consumer preferences, and increasing competition from international players. The company is exploring strategic options like franchising in major metros and launching a retail institute affiliated with the University of Bombay. To sustain success, Aadhi must address internal inefficiencies, enhance customer experience, and remain competitive in the dynamic retail sector.

Learning Objectives

1. Understand the dynamics of the Indian retail industry and its evolution.
2. Analyze the challenges and opportunities faced by family businesses in retail.
3. Explore strategies for balancing innovation, operational efficiency, and market expansion.
4. Evaluate the role of professional management in sustaining business growth.
5. Develop recommendations for addressing service quality and leveraging strategic options.

Discussion Questions

1. What are the key strengths and weaknesses of Aadhi's business model?
2. How can Aadhi enhance its service quality and customer experience to maintain its competitive edge?
3. Evaluate the strategic option of franchising in major metros. What are its potential benefits and risks?
4. What role can the retail institute play in Aadhi's long-term success and positioning?
5. How can Aadhi effectively balance its family-run heritage with professional management?

Suggested Teaching Plan and Objectives

Activity	Instructional Strategy	Duration (Minutes)
Q1: Class Discussion	Analyze Aadhi's current strengths and weaknesses, engaging students in identifying areas for improvement.	45 minutes
Q2: Group Discussion	Small groups debate the merits and risks of franchising and propose innovative strategies for expansion.	45 minutes
Q3: Group Discussion	Groups brainstorm potential approaches for integrating professional management with family involvement.	45 minutes

Roadmap for the Discussion

1. **Introduction (10 minutes):** Provide an overview of the Indian retail industry and Aadhi's position within it.
2. **Class Discussion (Q1, 45 minutes):** Focus on SWOT analysis to identify internal and external factors impacting Aadhi.
3. **Group Discussion (Q2, 45 minutes):** Deliberate on franchising and the establishment of the retail institute as growth strategies.
4. **Group Discussion (Q3, 45 minutes):** Discuss ways to modernize family-run businesses while retaining core values.
5. **Conclusion (10 minutes):** Summarize key insights and proposed strategies.

SWOT Analysis

Strengths:

- Pioneer in one-stop shopping.
- Established market presence with ₹50 crore revenue.
- Diverse product portfolio (20,000 products in 32 counters).
- Professional management in senior positions.

Weaknesses:

- Poor service quality.
- Heavy reliance on locational advantage.
- Limited focus on high-margin non-essential items over essential goods.

Opportunities:

- Rising disposable incomes and consumer demand in metros.
- Expansion through franchising in major cities.
- Potential to train retail professionals via the retail institute.

Threats:

- Increasing competition from international and domestic retailers.
- Changing consumer preferences.
- Risk of operational inefficiencies impacting customer retention.

Conclusion:

Aadhi, with its rich history as a family-run retail chain, has achieved significant milestones in terms of expansion and revenue generation, marking its dominance in the local retail market. However, despite its strong foundation, Aadhi is at a critical juncture where it must confront various challenges in order to secure its future growth. The business's dependence on locational advantage and poor service quality have hindered its ability to compete effectively in a rapidly evolving retail landscape. As consumer preferences shift towards more personalized, high-quality experiences, Aadhi must revamp its service standards and operational strategies to meet modern expectations. In addition, the company faces increasing pressure from international players and a rising tide of competition from both online and offline retailers, each of which is targeting the growing middle-class consumer base in urban areas. The increasing disposable income in metropolitan cities creates an opportunity for Aadhi, but it also amplifies the need for better positioning in terms of pricing, product assortment, and customer experience. By capitalizing on its regional brand strength and leveraging local knowledge, Aadhi can still carve out a niche, but it must innovate swiftly and effectively to maintain relevance. Franchising in major metros and launching a retail institute affiliated with the University of Bombay are promising strategic initiatives that can help the company address both growth and skill development challenges. The franchising model, if executed well, would allow Aadhi to expand into new markets without bearing the full operational costs, while simultaneously building a network of partners who can contribute to its success. The retail institute, on the other hand, can play a dual role in not only creating a skilled workforce but also fostering a stronger brand presence and leadership in the retail sector. To achieve sustained success, Aadhi must focus on internal improvements, particularly in customer service, inventory management, and supply chain efficiency. Streamlining operations will not only enhance profitability but also improve customer satisfaction, which is key to long-term customer loyalty. It must also invest in technology to improve the customer shopping experience, such as introducing omnichannel strategies, enhancing digital presence, and leveraging data analytics to offer personalized services. In conclusion, while Aadhi is well-positioned for future success, its ability to adapt to the challenges and opportunities presented by the evolving retail environment will be decisive in determining its trajectory. By addressing the internal inefficiencies, modernizing customer interactions, and focusing on strategic growth through franchising and education, Aadhi can build on its legacy and become a strong player in the competitive retail sector. However, without prompt and decisive action, the company risks losing its competitive edge to faster-moving and more innovative competitors in the dynamic retail market.

References:

1. Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(2), 81-93. <https://doi.org/10.1509/jmkg.65.2.81.18255>

2. Euromonitor International. (2022). The Indian retail market: Trends and forecasts. Euromonitor International. Retrieved from <https://www.euromonitor.com>
3. Hassan, L. M., Shiu, E., & Parry, S. (2019). The impact of customer experience on customer loyalty in retailing. *Journal of Retailing and Consumer Services*, 50, 1-10. <https://doi.org/10.1016/j.jretconser.2019.04.004>
4. McKinsey & Company. (2021). The future of retail in India: Shaping the next decade. McKinsey & Company. Retrieved from <https://www.mckinsey.com/industries/retail/our-insights/the-future-of-retail-in-india>
5. Berman, B., & Evans, J. R. (2013). *Retail management: A strategic approach* (12th ed.). Pearson Prentice Hall.
6. Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.
7. Levy, M., & Weitz, B. A. (2014). *Retailing management* (9th ed.). McGraw-Hill Education.

**NAVIGATING COST EFFICIENCY AND CUSTOMER SATISFACTION:
A SUPPLY CHAIN CHALLENGE AT PROCESS MANUFACTURER LTD:
A CASE STUDY**

M. S. Siranjeevi and K. Sindhura

MEASI Institute of Management, Ch-14

Corresponding author E-mail: siranjeevi.ms@measiim.edu.in,
sindhura.kannappan@measiim.edu.in

Synopsis:

The case revolves around a process manufacturing company struggling with profitability due to rising operational costs and intense market competition. The company's products, on the verge of becoming commodities, lacked significant differentiation, making customer retention and market share growth challenging. The company relied on high-quality products and a customer engineering support program to secure sales stability, but its market share remained stagnant or shrinking. The company was vertically integrated, with limited sources of raw materials, which led to long-term vendor contracts and, in some cases, the creation of facilities to capture byproducts from other industries. Despite efforts to cut costs and improve profitability, including workforce reductions and cuts in supply chain management, the company's cost reductions were already below industry averages. The management sought further cost savings, hiring an outside consulting team to benchmark its supply chain costs and identify additional opportunities for savings. The benchmark revealed limited room for further reductions in most supply chain areas, but there were still opportunities in global transportation management and inventory control. However, these savings were often offset by negative impacts on customer service, including occasional production line shutdowns due to material shortages. While the company had managed to sustain its customer base through product engineering support, this dependency was starting to hurt customer relationships. The consulting team's recommendations focused on balancing cost reductions with improving customer service and internal processes. Key suggestions included investing in demand forecasting, inventory planning, and production processes, which would reduce inventory carrying costs by approximately \$1.5 million per year with an investment of \$600,000. Further savings could be achieved by redesigning warehousing and transportation processes, saving \$2.8 million annually with an investment of \$400,000. To improve customer service, it was recommended to revise the inventory management policy to ensure continuous supply and to invest in enhancing the customer service operation. A customer survey, customer service system redesign, and installation of a new telephone system would require an investment of \$240,000, while a redesign of one division's customer service process could save \$200,000 annually with a \$75,000 investment. The case emphasizes the need for the company to invest in process improvements and customer service while maintaining cost

reductions. The company's future success hinges on finding a balance between financial efficiency and meeting customer expectations.

Learning Objectives:

- Understand the relationship between cost management and customer service in a vertically integrated supply chain.
- Analyze the concept of diminishing returns in cost reduction and its impact on customer satisfaction.
- Discuss the importance of balancing financial management with customer service to achieve long-term success.
- Examine the effects of extreme financial focus on company operations and stakeholder relationships.
- Develop strategies to improve customer satisfaction while maintaining cost-efficiency in a competitive environment.

Discussion Questions:

1. What are the potential risks of focusing too much on cost reduction in a vertically integrated supply chain?
2. How can the company improve its customer service while managing costs in a constrained supply environment?
3. What role does product differentiation play in this case, and how can it be leveraged to regain market share?
4. Should the company continue cutting costs in supply chain management, or is there a need for reinvestment in processes, systems, and people?
5. What steps can the company take to ensure that customer relationships are maintained despite the need for cost control?

Teaching Plan and Objectives:

Activity (Depends on the Questions)

- **Q1:** Class Discussion - Analyze the risks of extreme cost-cutting measures.
- **Q2:** Group Discussion - Identify strategies to balance customer service and cost reduction.
- **Q3:** Group Discussion - Discuss the long-term implications of continuing with the current approach.

Instructional Strategy:

- **Q1:** Case study analysis and lecture to explain the key concepts of cost management vs. customer service.
- **Q2:** Group activity to brainstorm strategies for improving customer service without increasing costs.
- **Q3:** Group discussion on long-term business sustainability and the importance of reinvestment.

Duration (Minutes):

- **Q1:** Class Discussion - 45 minutes
- **Q2:** Group Discussion - 45 minutes
- **Q3:** Group Discussion - 45 minutes

Roadmap for the Discussion:

- **Introduction:** Begin with a brief overview of the company's challenges.
- **Step 1:** Discuss the cost-cutting measures already implemented and the diminishing returns.
- **Step 2:** Explore the impact of cost-cutting on customer service and market share.
- **Step 3:** Introduce strategies to balance cost reduction with customer satisfaction.
- **Step 4:** Summarize the need for reinvestment in operations and customer relationships.

SWOT Analysis:

Strengths:

- Vertically integrated supply chain, ensuring raw material availability.
- Low cost structure compared to industry averages.
- Established customer relationships through engineered product designs.

Weaknesses:

- Diminishing returns on further cost reduction.
- Supply chain disruptions affecting customer production lines.
- Off-spec materials leading to poor margins on inventory.

Opportunities:

- Potential to improve customer service and regain market share.
- Opportunity to reinvest in systems, processes, and people for long-term benefits.
- Possibility of diversifying product offerings and differentiating from competitors.

Threats:

- Shrinking market share and customer retention issues.
- Competitors with more effective customer service strategies.
- Negative customer perceptions due to supply chain disruptions.

Conclusion:

The company's journey highlights the delicate balance between cost management and customer service in a competitive, vertically integrated manufacturing environment. Despite the initial success in reducing operational costs, including workforce and supply chain management cuts, it became evident that further cost reductions would yield diminishing returns without sacrificing customer service. The company had reached a critical juncture where its financial strategy, focused primarily on profitability and asset utilization, was inadvertently undermining customer relationships. The lack of product differentiation and the reliance on existing customer engineering support were not enough to offset the negative effects of inventory shortages and poor service levels, which had begun to erode the company's competitive edge. The recommendations provided by the external consultancy team addressed the company's

immediate need for operational efficiencies while also emphasizing the importance of reinvesting in processes, systems, and people to restore customer service and long-term growth. Key improvements in demand forecasting, inventory management, and production planning were suggested to reduce costs, particularly in inventory carrying, and could lead to significant savings. Additionally, by optimizing warehousing and global transportation strategies, the company could achieve further cost reductions. Importantly, the emphasis on customer service improvements, including better inventory management policies and enhancements in the customer service function, would ensure that the company's products and services remain competitive and aligned with customer expectations. In conclusion, while the company's aggressive cost-cutting initiatives had achieved short-term financial gains, it was clear that long-term success would require a shift towards a more balanced approach—one that incorporates both operational efficiency and an enhanced focus on customer service. The recommendations for investing in process improvements and customer service infrastructure, though requiring an initial investment, would not only stabilize customer relationships but also foster a more sustainable growth model. By integrating these improvements, the company could better position itself to meet future challenges, enhance customer satisfaction, and ultimately regain its market share.

References:

1. Clarke, T., & Boersma, M. (2017). The governance of global value chains: Unresolved human rights, environmental and ethical dilemmas in the apple supply chain. *Journal of business ethics*, 143,
2. Jia, F., Zuluaga-Cardona, L., Bailey, A., & Rueda, X. (2018). Sustainable supply chain management in developing countries: An analysis of the literature. *Journal of cleaner production*, 189, 263-278.
3. Mangan, J., & Lalwani, C. (2016). *Global logistics and supply chain management*. John Wiley & Sons.
4. Oettmeier, K., & Hofmann, E. (2016). Impact of additive manufacturing technology adoption on supply chain management processes and components. *Journal of Manufacturing Technology Management*, 27(7), 944-968.
5. Pan, S. Y., Du, M. A., Huang, I. T., Liu, I. H., Chang, E. E., & Chiang, P. C. (2015). Strategies on implementation of waste-to-energy (WTE) supply chain for circular economy system: a review. *Journal of cleaner production*, 108, 409-421.111-131.
6. Pomponi, F., Fraticchi, L., & Rossi Tafuri, S. (2015). Trust development and horizontal collaboration in logistics: a theory based evolutionary framework. *Supply Chain Management: An International Journal*, 20(1), 83-97.
7. Wamba, S. F., Dubey, R., Gunasekaran, A., & Akter, S. (2020). The performance effects of big data analytics and supply chain ambidexterity: The moderating effect of environmental dynamism. *International Journal of Production Economics*, 222, 107498.

**Research and Reviews in Literature, Social Sciences, Education,
Commerce and Management Volume IV (ISBN: 978-93-95847-71-1)**

About Editors



Dr. V. Rajeswari, Professor in Electrical Engineering is having 22 years of experience in teaching and 7 years' experience in research. She has completed her Doctoral degree in the year 2015 from Noorul Islam University and M.Tech. & B.E in the year 2003 and 1999 from Kerala University and Manonmaniam Sundaranar University respectively. She has published nearly 40 research articles in various national and international publications and also published 9 patents with 2 granted. Her research reflects and highlights the applicability of dynamic systems to a diverse and varied domain. In addition to research, she has contributed to enhance the success of students by integrating evidence-based teaching through regular usage of technology to improve access to resources and learning assistance.



Soumen Das is an accomplished Assistant Professor at the School of Media Science, Institute of Management Study, Kolkata. With a Master's degree in Journalism and Mass Communication, as well as in English, he also holds a Postgraduate Diploma in Disaster Management and Journalism and Mass Communication. Before joining the Institute of Management Study, Kolkata, Soumen served as a Guest Lecturer at various institutes, including ILead College, Kolkata, bringing a wealth of industry experience to his academic role. He has three years of experience as a Film Editor on various projects and five years of academic experience. Soumen's research interests span Film Studies, Gender Studies, Digital Media, and Communication. His work has been published in peer-reviewed journals and book chapters with both national and international publishers. An award-winning educator, he was recognized as the "Best Film Making Faculty," showcasing his dedication to teaching and inspiring the next generation of media professionals. Beyond academia, Soumen enjoys exploring innovative film techniques and fostering creative talent in his students. He continues to contribute to the field through his research, teaching, and commitment to advancing the study of media and communication.



Dr. Auerineni Ravi Kumar is working as Professor Department of Pharmacognosy in Nimra College of Pharmacy Vijayawada Andhra Pradesh. He has Completed Doctorate in Biotechnology from Bharathidasan University, Tiruchchirapalli Tamil Nadu in 2009 on thesis Entitled "Ethnopharmacological Studies of Selected Plants of Caesalpiniaceae" He has Obtained M.Pharmacy Specialization in Pharmacognosy Secured Highest Marks in Final Semester in Completion and B.Pharmacy Degrees from A U College of Pharmaceutical Sciences Andhra University Visakhapatnam Andhra Pradesh . He has About 31 Years of Teaching Experience. He has worked as Lecturer to Dean Positions in Pharmacy Colleges he has worked. He has Participated in Webinars as Organizer, Guest Speaker, Attended Workshops QIP in Faculty Development Programmes and Presented Papers in Various Sessions. He is Life Member of IPA OPF APTI ABAP. He has Published about more than 105 Research Papers in National and International Journals. He is Author of Books of Industrial Pharmacy I, II, Biopharmaceutics and Pharmacokinetics, Pharmaceutical Jurisprudence Pharmacognosy I, II, Cosmetic Science, Research and Reviews in Plant Sciences Vol II (Fourth Editor) Advanced Organic Chemistry I, Communication Skills. He has about 5 Patents Works on Herbs.



Dr. Gauri Dixit is a good academician, Researcher and Motivator. She has done M.A. in Sanskrit from Chhatrapati Shahu Ji Maharaj Kanpur University (UP) in 2003. She has Completed her Ph.D. from Dr. B.R. Ambedkar University Agra (UP) Presently she is Head of Department of Sanskrit Kamla P.G. College Dholpur (Rajasthan). Overall, she has more than 10 Years of Teaching & Research experience She has published more than 10 Research papers and She has presented papers in more than 20 National and 10 International Conference. She has Organized 2 International and 05 National Conferences. She is also editorial board member of various reputed Journals and coordinator of women and child welfare society of Dholpur (Rajasthan).

