

Contents

Articles

NEW EDUCATION POLICY 2020

Joshen Joji Ottaplackal, Anbu Krishnamoorthy

Education Reform in India: A SWOT Analysis of NEP 2020 and its Interaction with Constitutional Values

Dharti Rami, Kamini Shah, Vishal Acharya

A Study on the Awareness and Perception of National Education Policy 2020 in Students and Teachers of Gujarat

Subha Maji, K. Anbu

Sustainable Livelihoods for the Elderly in India: Insights from Elders' Self-Help Groups and National Education Policy 2020

Vikrantkumar Dasani, M.N. Parmar

Children of Nomadic and De-notified Tribes and Education Opportunities: A Challenge of Inclusiveness

Rudri Dave, Usha Kaushik, Monika Singh

Integrating Information and Communication Technology (ICT) in Classroom Teaching for Improving English Pronunciation: An Experimental Study

Dhara Jha, Devanshi Dave, Abhishek Parikh

Investment and Spending Habits of Generation Z and the Role of Financial Literacy: Implications under NEP 2020

Sanjay Vanani, Hiren Patel

Social Entrepreneurship Education in Social Work Colleges in Gujarat: Evaluation of Curriculum, Pedagogy and Teaching Practices

Gautam Gopal Dua, D.T. Thannikkottu, K.J. Patel, V. Acharya

Exploring Parents' Attitude to Subscribe to the Ed-tech Services: Evidence from India

Amrita Chakraborty

Spotting the Omnipresent 'Emojis' in the Contemporary Communication Paradigm: A Historical Analysis

Bhumika Patel, Ankita Mistri, Swati Dave

Mobile Wallets Adoption by Younger Generation with Reference to North Gujarat

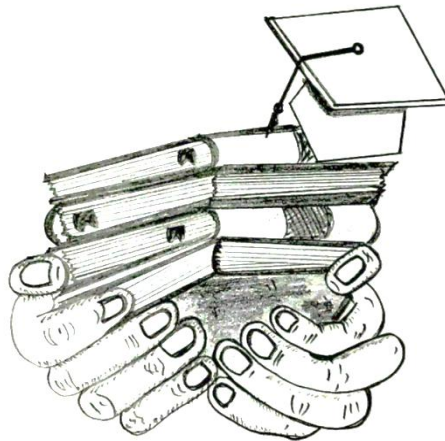
Pampa Das, Rasananda Panda, Jigarkumar H. Shah

The First Three Decades of Foreign Direct Investment in India: Temporal Variation, Sectoral Trends, and Time-Series Analysis

NEW EDUCATION POLICY 2020

Concept Note

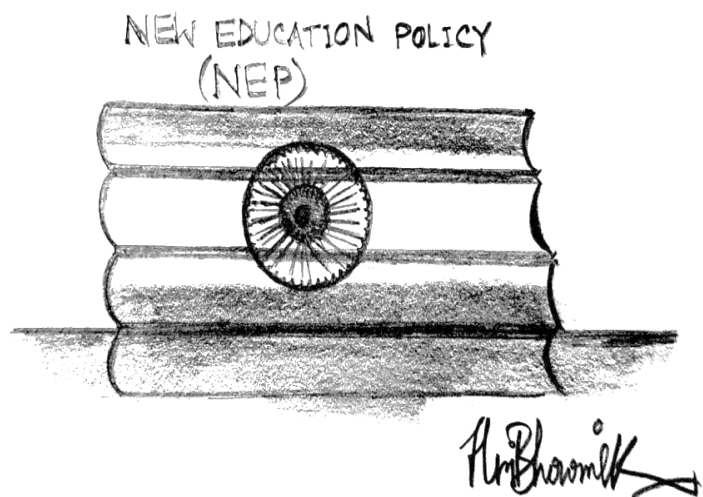
If India has to ascent to leadership on the global stage in terms of economic prowess, advanced technology, national integration, and cultural identity, access to quality education is the key. It is the fundamental instrument for the nation to make its presence felt. After 1986, the National Education Policy 2020 (NEP 2020) is another attempt by the Government of India that aims to bring transformative changes in the Indian education system based on the pillars of “Access, Equity, Quality, and Affordability & Accountability” to transform India into a vibrant knowledge hub. The new scheme proposes drastic revision and revamping of all aspects of the Indian education structure to create a new system that is aligned with India’s aspirations in the 21st century along with India’s tradition, culture, and value system leading up to Developed India in 2047.



Alexander

Ever since the NEP 2020 was promulgated, nationwide debate and discussions have been sparked to ponder over the contours of the formulation and prospects of its implementation. The Faculty of Social Science & Humanities of Ganpat University, Gujarat, organized the 3rd Multidisciplinary Conference on the theme of Education Reforms and its Global Impact through National Education Policy, during 17-18 March 2023. The selected papers of the deliberation have been incorporated in this issue of *Liberal Studies* journal where scholars have enquired about important aspects of the NEP and related issue areas. Various authors have attempted to

provide expert analysis on the strengths, weakness, opportunities, and threats (SWOT) involving the policy while



many others have brought to the fore specific issue areas like sustainable livelihoods for the elderly, education of nomadic and de-notified tribes, infusion of ICT in the system, financial literacy of Zen Z, social entrepreneurship education, parents' attitude, etc. Two other interesting papers, like the trend of use of Emojis by the current generation by Amrita Chakraborty, and a time-series analysis of the FDI flow during the first three decades since India's independence by Pampa Das et al., are included towards the end to maintain the transdisciplinary outlook of the journal.

Articles

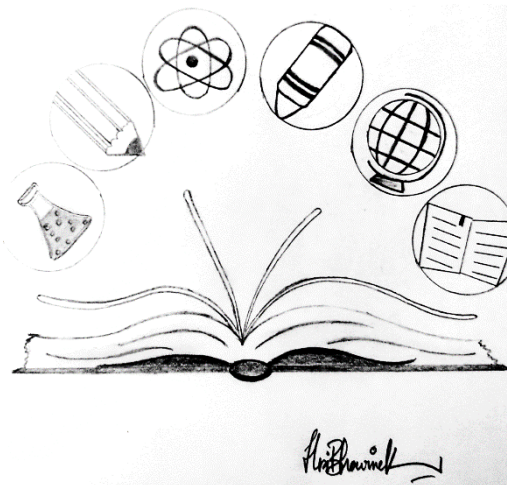
Education Reform in India: A SWOT Analysis of NEP 2020 and its Interaction with Constitutional Values

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Abstract

India's education system is at the cusp of transformation with the National Education Policy 2020 (NEP, 2020), a forward-looking policy aimed at modernizing the sector to meet the evolving demands of today's world and revolutionizing how education is structured, governed, and delivered. This research paper employs a SWOT analysis to assess the strengths, weaknesses, opportunities, and threats of the NEP 2020, and its interaction with constitutional values in India. The paper aims to identify the key factors that impact the implementation and effectiveness of the NEP 2020, and its alignment with the constitutional values of India, such as equity, social justice, and inclusivity. The research methodology involves a



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comprehensive review of the NEP 2020 document and related literature and an analysis of the policy's alignment with constitutional values and potential impact on education outcomes in India.

The paper concludes that although the NEP 2020 is a broad and ambitious plan for transforming education in India, its success in aligning with constitutional values and improving education outcomes will hinge on the efficient implementation of the policy. Additionally, policymakers and stakeholders must work together to address challenges and threats that may arise in the process. The findings of this paper can inform policy recommendations and provide insights for policymakers, educators, and other stakeholders to improve the alignment of education policies with constitutional values and promote more equitable and inclusive education systems in India.

Keywords: National Education Policy, Constitutional Values, Education Reform

Introduction

The Government of India recently released the National Education Policy 2020 (NEP, 2020), which supersedes the previous education policy that had been in place since 1986 and was revised in 1992. The NEP 2020 is a comprehensive and ambitious framework for education reform in India, aimed at transforming the education system to meet the needs of the twenty-first century. Policy envisions an education system that is holistic, integrated, and multidisciplinary, promoting critical thinking, creativity, and innovation. The policy targets the issues of low learning outcomes, unequal access, and the need for skilled workers in India's changing economy. It proposes significant changes, including a new curriculum, skill development integration, early education expansion, and a new higher education regulatory framework. The policy also seeks to promote equity, social justice, and inclusivity in education, and to bridge the digital divide and rural-urban divide in India. Overall, NEP 2020 presents a new roadmap for the education sector and has generated enthusiasm and criticism from various stakeholders. Its effective implementation is expected to have a far-reaching impact on the education system and the social and economic development of the country.

In this context, the Constitution of India serves as the backbone of the country's education system, providing guiding principles and values that shape education policy. These constitutional values have helped to define the purpose of education in India and the goals that education policies are

designed to achieve. From the right to education (Article 21-A, Article 45, Article 51A (j)) to the promotion of diversity and social justice (Article 15, Article 16, Article 46, Article 29(1)), the Constitution of India has played a critical role in shaping education policy and ensuring that education is accessible to all individuals.

SWOT analysis technique is used to further explore the Constitution's implications on education policy. It evaluates a policy's internal strengths and weaknesses and external opportunities and threats, providing a practical framework to assess its feasibility and effectiveness. The tool can help identify the most advantageous areas to concentrate resources and effort (Start & Hovland, 2004). The study seeks to provide a comprehensive evaluation of the NEP 2020, and to identify the key factors that may impact its implementation and effectiveness in achieving the education reform goals in India.

Review of Literature

The review is comprised of two parts. The first part analyses the past education policies in India and the reasoning behind creating a new policy framework. The second part critically analyses the NEP 2020 document, drawing on various research articles and newspaper reports published in reputable news outlets. This approach enables a comprehensive evaluation of the policy's strengths and weaknesses. It provides insight into how the NEP 2020 aligns with constitutional values and the broader social and economic goals of the country.

Evolution of Education Policy in Independent India

In 1968, the First Education Policy of independent India was implemented based on recommendations from the Kothari Commission. The Commission was established to evaluate the Indian education system, and its report, "Education and National Development," submitted in 1966, is a significant benchmark in the history of education policy in India. However, despite its extensive scope, the 1968 Policy was primarily focused on establishing a national education system and needed to be more adequately implemented and reviewed for over 15 years. One of the reasons for its limited scope was that education was a state subject, and state governments were not particularly interested in policy proposals from the central government. Although education became a concurrent subject in 1976, the implementation of the policy continued to be weak (Dewan & Mehendale, 2015).

During the mid-1980s, there was a growing recognition of the practical importance of education in developing human resources, which influenced the approach to education policy (Dewan & Mehendale, 2015). India's second National Policy on Education was launched in 1986 to provide education to all members of society, particularly those who had been historically marginalised. The policy prioritized providing fellowships for disadvantaged individuals, promoting adult education, recruiting teachers from marginalized communities, establishing new schools and colleges, and developing open universities. Additionally, the policy encouraged the integration of information technology into education. In preparing for the policy, a status paper was created that acknowledged the challenges facing the education system and outlined policy directions (Ministry of Education, 1985). The resulting policy was adopted by Parliament in May 1986, along with a Programme of Action.

In 1990, a commission chaired by Acharya Ramamurti was appointed to evaluate the effectiveness of the National Policy of Education in 1986. However, in 1991, a committee appointed by the cabinet, the Central Advisory Board of Education, led by Janardhan Reddy, reviewed the report and rejected many of its critical recommendations. In 1992, the committee submitted its report, the National Programme of Action, which aimed to improve education quality and promote national integration while emphasizing practical applications and moral values in education (Ranganathan, 2007).

The latest education policy, the Nation Education Policy 2020, is the first all-encompassing educational policy since India's liberalization in 1991, which marked a transition from a centralized economic model to an open-market approach to globalization. Therefore, the policy caters to the requirements of a new economy, distinct from that of 1986. India's liberalization in 1991 significantly impacted the country's education system. With the opening up of markets and increased competition, there was a shift like jobs and skills required for the workforce. The traditional focus on rote learning and academic excellence was no longer enough, and education was needed to be more practical, job-oriented, and industry-relevant. Thus, a new education policy is warranted.

Critical Analyses of the NEP 2020

India's education system is at the cusp of transformation with the National Education Policy 2020, a forward-looking policy aimed at modernizing the sector and revolutionizing how education is structured, governed, and delivered. This critical analysis examines the key features of

the NEP 2020, its potential strengths and weaknesses, and its implications for the future of education in India.

NEP and Early Childhood Care and Education (ECCE)

Early Childhood Care and Education (ECCE) is a critical component of a child's development, and India's National Education Policy (NEP) recognizes this by emphasizing the importance of a strong and holistic ECCE system. Its emphasis on ECCE aligns with Article 45 of the Indian constitution. According to findings from the Indian Early Childhood Education Impact Study conducted in 2017, children who have received quality early childhood education are more likely to achieve higher learning levels, particularly during the early years of primary education. However, while the NEP has some positive aspects related to ECCE, there are also areas for improvement.

One of the strengths of the NEP's approach to ECCE is its emphasis on play-based and activity-based learning. Research has shown that throughout history, play has played a crucial role in early childhood education, and open-ended play, in particular, has been considered significant in enabling children to interact with materials in a manner that permits them to investigate and form their own conceptual interpretations of the world (Langford, 2010). This approach is developmentally appropriate for young children and helps them develop a love for learning. Additionally, the policy's recommendation for the professional development of ECCE teachers is a positive step towards ensuring that children receive high-quality education.

Although NEP 2020 acknowledges the significance of ECCE, some issues need to be resolved. The policy's objective of achieving universal access to quality ECCE needs more clarity on how this goal will be accomplished, particularly about ensuring the provision of high-quality ECCE. The IECEI (2017) report published by UNICEF reveals that 70 per cent of sampled four-year-olds in India already attend a preschool program, indicating progress in expanding access to ECCE. The main issue plaguing ECCE is quality. The current provision of early childhood education (ECCE) in India operates through two models, Anganwadi Centres and private preschools, which differ significantly across various factors. While Anganwadi Centres primarily serve as centres for nutrition and daycare, private preschools are an extension of primary schools. Nevertheless, neither model offers an optimal environment for the comprehensive development of children at this stage. These findings suggest the need to

prioritize enhancing the quality of ECCE in India to support the optimal development of young children.

NEP and Medium of Instruction

NEP 2020 recommends using the mother tongue or regional language as the medium of instruction in schools till at least Class five. While this proposal has been put forth to promote the use of local languages and encourage multilingualism, it could have significant implications for students from marginalized communities. While learning in one's mother tongue has advantages (Akintola & Rafiat, 2020), it also means that students may begin learning English later in life, which can be more challenging. This may result in a divide between those with access to English-medium schools and those without, leading to discrimination based on language proficiency. In India, proficiency in English is often associated with intelligence and capability, leading to its association with class and caste privilege. NEP's insistence on the medium of instruction in the mother tongue may unintentionally widen the social hierarchy based on proficiency in English (Kumar, 2020). This will ultimately lead to an economic disadvantage for those who do not have easy access to English. English is widely viewed as the language of privilege and employability, particularly in the globalized economy. Focusing on regional languages in schools under NEP could inadvertently reinforce existing social and economic disparities, especially for underprivileged students who lack access to English-medium schools. These students may struggle to gain the English proficiency required to compete in higher education or the job market, further entrenching existing inequalities.

Moreover, the NEP's language policy may have gendered implications. Studies have shown that parents prefer private schools for their sons, (ASER Report, 2020), where English is often the medium of instruction, while girls are often sent to government-run schools where instructions are mostly given in the local language. This could result in boys gaining a competitive advantage over girls regarding English proficiency and access to opportunities. The NEP's language policy also needs to consider the needs of students whose parents have transferable jobs. These children may be required to move frequently, making it difficult to maintain continuity in their education, particularly if the local language changes with each move.

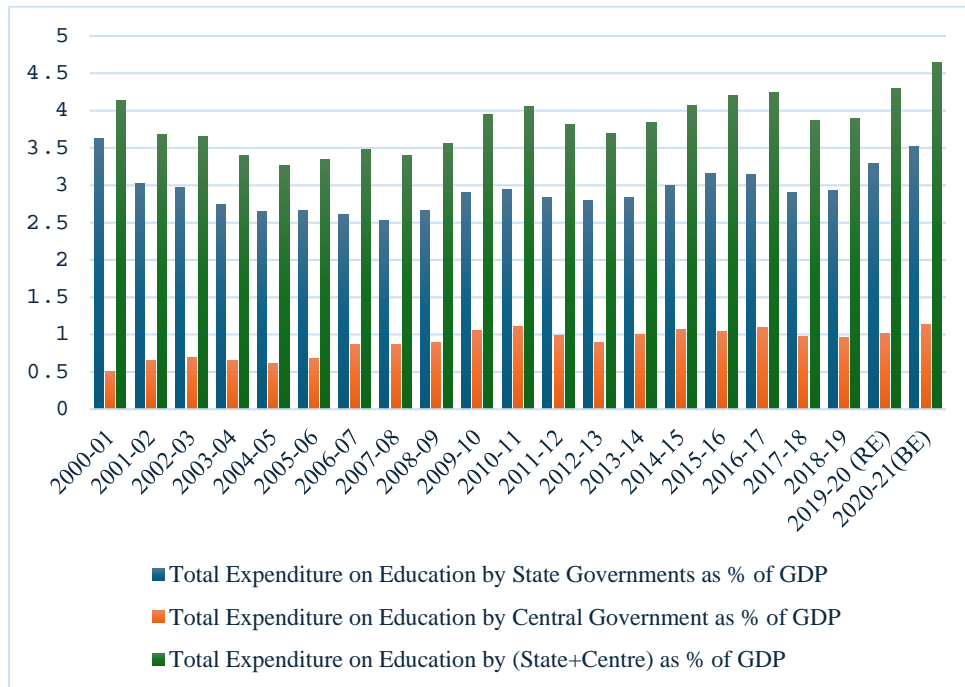
The Indian Constitution acknowledges the significance of regional languages and promotes their advancement by incorporating 22 languages in the Eighth Schedule. The National Education Policy's proposal to use

regional languages as the medium of instruction until at least Class five aligns with this constitutional provision. While the NEP's proposal to promote regional languages and multilingualism is well-intentioned, it must be implemented cautiously to avoid inadvertently exacerbating existing social and economic inequalities. The government must ensure that students from marginalized communities have access to quality education in English and that the focus does not compromise their proficiency in the language on regional languages.

NEP and Expenditure on Education

Academicians have also raised concerns regarding the much-needed funds to implement NEP 2020 (Pillai, 2020). One of the critical aspects of the policy is the pledge to increase the education expenditure to six per cent of GDP. However, the analysis of the education expenditure as a percentage of GDP in the table below reveals a different picture. The data presented in Chart 1 was sourced from the “*Analysis of Budgeted Expenditure on Education 2018-19 to 2020-21*” (2022). The expenditure on education has remained around four per cent of GDP. When adjusting for inflation (Chart 2), the expenditure on education appears to have decreased in the early 2000s, peaked in 2009-10, and has since remained relatively stable. This differs from the pattern seen in nominal values, where the expenditure appears to have steadily increased over the years. The adjusted values provide a more accurate representation of the actual purchasing power of the funds allocated for education, as they account for the effects of inflation. This pattern of funding can limit the prospects of the NEP in reforming Indian education. The NEP aims to bring about fundamental changes in the education sector by focusing on key areas such as skill development, teacher training, and curriculum reform. However, the lack of funding can hinder the implementation of these initiatives. For example, the NEP proposes establishing a National Research Foundation to fund research projects in the education sector. However, the foundation's effectiveness will depend on its funding, which remains uncertain given the low education expenditure in the country.

Chart 1
Expenditure for Education



From “Analysis of Budgeted Expenditure on Education 2018-19 to 2020-21,” by

Ministry of Education, Government of India. 2022. Retrieved from

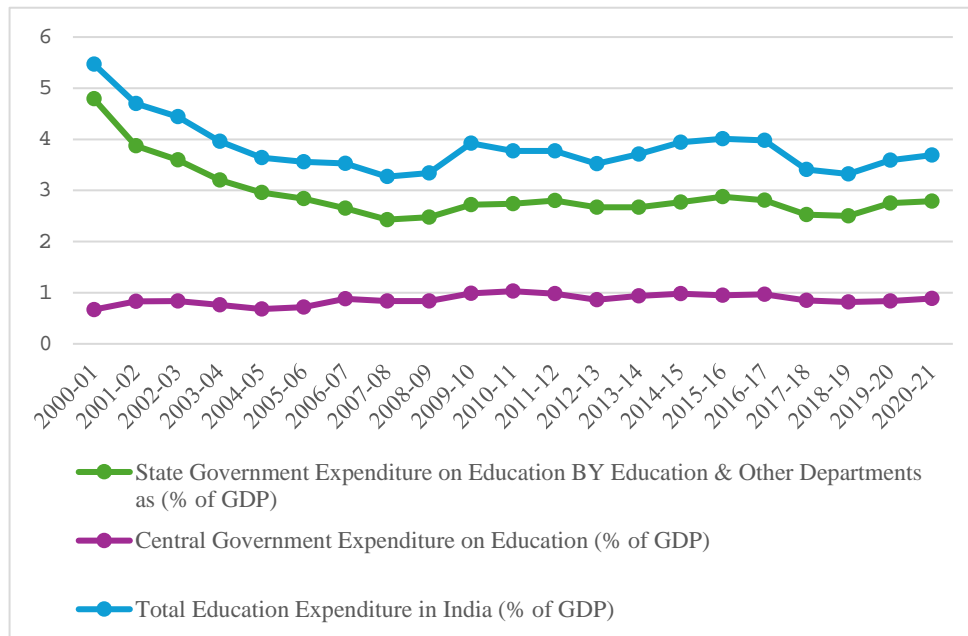
https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/budget_exp.pdf

The neoliberal policy pursued by the post-1991 opening of the Indian economy has decreased spending in the social sector, including education (Venkatanarayanan, 2015). The government's focus on liberalization and privatization has shifted priorities toward economic growth at the expense of social justice. The trend has particularly affected the education sector, with a decrease in government spending and an increase in private sector investment. The NEP's plans to phase out the university affiliation system and grant autonomy to colleges in 15 years raise concerns about the potential for increased privatization of education, which could have negative implications for social justice (Priya, 2020). Private institutions charge higher fees, making education less accessible to marginalized communities. The concern regarding the standard of education

offered by private institutions arises from the possibility that their profit-driven approach might compromise the caliber of education.

Furthermore, the existing disparity in the quality of education across various regions and social strata can be attributed to insufficient investments in the education sector (Agrawal, 2014). The low expenditure on education is reflected in the poor infrastructure, lack of basic facilities, and shortage of qualified teachers in many schools. The quality of education in rural and socio-economically disadvantaged areas needs to catch up to urban areas due to inadequate funding. The NEP 2020 seeks to bridge this gap and improve access to quality education, but insufficient funding may hinder its success. The policy proposes to set up a new education financing agency to provide funding for education. However, the success of this agency will depend on the government's commitment to increasing education expenditure.

Chart 2
Expenditure for Education (Inflation-Adjusted Value in 2011-2012 Terms)



Data adapted from “Analysis of budgeted expenditure on education 2018-19 to 2020-21

by Ministry of Education, Government of India. 2022”. Retrieved from

“https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/budget_exp.pdf. Inflation adjustment based on Consumer Price Index”

The Indian Constitution acknowledges education as a fundamental right for all citizens, specifically for children between six and fourteen, as stated in Article 21-A. Additionally, it obligates the state to provide free and compulsory education to all children, guaranteeing equal opportunities for marginalized communities. These directives are enshrined in several articles of the Constitution, including Articles 15, 16, 46, and 335. Inadequate investment in education has led to unequal education quality among different regions and social groups, violating the constitutional right to equal opportunities. The low expenditure on education has also led to a lack of basic facilities, poor infrastructure, and a shortage of qualified teachers in many schools. The NEP 2020 aims to address these disparities and promote equitable access to education. However, the success of these initiatives will depend on the government's commitment to increasing education expenditure and ensuring that education remains a public good rather than a commodity.

NEP and School Complexes

The NEP 2020 proposal to merge smaller schools into larger ones has been a topic of much debate among educationists and activists. While the idea behind school mergers is to create larger schools that can offer more facilities and better-quality education, the reality is often quite different, especially in rural areas where schools are the only source of education for many children. One of the significant concerns regarding school mergers is the increase in dropouts that it may lead to. When smaller schools are shut down, and students must travel longer distances to attend school, many may drop out due to the increased travel time and expenses. This is especially true for girls, who may not have the same level of mobility as boys, and may not be allowed to travel long distances to attend school (Chowdhury, 2017). Sharma (2020) pointed out the ill effects of school mergers. A project (SATH-E1) undertaken by NITI Aayog, along with some state governments, has resulted in the merger of 40,000 schools in four different states in India, illustrating the possible adverse effects of school mergers. The amalgamation of schools in these states has led to a significant increase in the dropout rate, especially among girls. Another concern with school mergers is the impact on the quality of education. Merging smaller schools into larger ones may lead to a decline in the quality of education due to difficulties in management and a lack of individual attention to students, which can discourage attendance (Arias & Walker, 2004). Lastly, the NEP suggests rationalizing small schools deemed "economically sub-optimal and operationally complex to run" (p. 28).

The implementation of the NEP could lead to the shutdown of schools located in underprivileged regions, thereby exacerbating the educational inequities faced by children from marginalized communities (Pallavi, 2014). This can have severe implications for gender justice and equity in Education. While school mergers may seem like a good idea on paper, the reality is much more complex. Before implementing such policies, The government must carefully consider the potential impact of school mergers, especially in rural areas. Furthermore, it is imperative to implement measures that safeguard against any compromise in the quality of Education and ensure that access to education for marginalized communities is not restricted.

The Indian Constitution guarantees the fundamental right to Education through Article 21-A. This right encompasses access to schools that cater to the specific needs of local communities, particularly in rural and remote regions. When evaluating the NEP's proposition to consolidate schools, assessing its compatibility with constitutional provisions on education and equality becomes crucial. Merging schools may lead to limited education access for rural and remote children, potentially infringing upon their right to Education. Moreover, the closure of schools that serve disadvantaged communities, such as those in economically backward or marginalized areas, could be seen as discriminatory, as it may disproportionately affect certain groups of students. Implementing the NEP's school merger and rationalization proposals in line with the constitutional principles of education and equality is crucial. All children, irrespective of their background, should have access to quality education in nearby schools that meet their needs.

NEP and Education as a Right

The Right to Education Act has established primary Education as a free and compulsory right. However, it is also necessary to extend this policy to include secondary education. NEP 2020 shows that while there has been significant progress in achieving near-universal in Elementary Education, there is a significant drop in enrollment in later grades. This suggests that there are significant barriers to accessing and completing secondary Education, which may be preventing children from realizing their right to Education. The NEP 2020's goal of achieving a 100 per cent Gross Enrolment Ratio in preschool to secondary levels by 2030 is in alignment with the UN's Sustainable Development Goals (SDGs) for Education. However, the policy's failure to recognize secondary Education as an explicit right may limit its effectiveness in addressing challenges faced by children in accessing and completing Education.

To achieve SDG target of relevant and effective learning outcomes for all, it is essential to ensure that children not only have access to Education but also receive a quality education that equips them with the necessary skills and knowledge. Consequently, extending the right to education to the secondary level can impose a legal obligation on the state to guarantee access to education. However, the policy has been criticized for its lack of clarity in achieving universal access (Rampal, 2020). The government must offer more specific details concerning its strategy to achieve universal access to education and the precise measures it intends to implement to address the specific challenges faced by children in attaining and completing secondary Education. By doing so, the policy can effectively address the systemic barriers that are preventing children from realizing their right to education beyond the primary level and contribute to achieving SDG's objective of inclusive and equitable education for all.

NEP and Higher Education

The NEP 2020 has several positive proposals for higher Education. One of the most significant changes proposed is the shift towards multidisciplinary and flexible Education. The policy advocates for the breaking down of disciplinary silos and the creation of flexible programs that allow students to choose courses across disciplines. By adopting this approach, students can cultivate a more extensive array of skills and knowledge, ultimately preparing them to meet the evolving demands of the job market (Vereijken et al., 2022).

Another favourable proposition involves the establishment of the National Research Foundation (NRF), tasked with funding and overseeing research endeavours spanning various disciplines. The NRF aims to promote research that addresses societal challenges and encourages collaboration between academic institutions and industry. This proposal is expected to help India's research ecosystem become more robust and innovative (Dubey, 2021).

The NEP 2020 seeks to integrate vocational education into the mainstream education system by establishing a National Skills Qualification Framework (NSQF) that will recognize and certify vocational skills. This will give students comprehensive knowledge of the skills necessary for their future careers. The NEP 2020 suggests integrating vocational education with conventional academic programs in higher education institutions. This integration will allow students to acquire both academic knowledge and vocational skills, enhancing their employability and career prospects (Wadia, 2021). The policy emphasizes the need for industry-academia

collaboration to develop vocational education programs relevant to the industry's needs. It proposes the establishment of industry-led sector skill councils to identify the skill requirements of different sectors and develop vocational courses accordingly.

The NEP also places significant emphasis on utilising technology in higher education. It proposes the establishment of the National Educational Technology Forum (NETF) as a platform for national discussions on technology's role in education. Additionally, the policy suggests creating an online education platform that would grant students access to high-quality courses from renowned institutions worldwide. This approach is expected to democratise education and increase access to quality education, particularly for students in remote areas (Pokhiriyal, 2020).

The NEP also proposes the entry of foreign universities, which is expected to increase competition and raise the quality of education in India. The policy suggests that foreign universities will have to comply with Indian regulations, including the reservation policy and fees regulations. This proposal is expected to benefit Indian students, as they will have access to a more diverse range of courses and teaching styles.

However, there are also some challenges associated with the NEPs proposals for higher education. One of the challenges is the potential inequities that could arise from the entry of foreign universities. There is a risk that foreign universities will cater only to the elite, as they may not be affordable for the majority of students. The policy must ensure that foreign university entry does not lead to increased inequalities in the education system (Kennedy, 2023). It could potentially impact the realisation of Article 16 and Article 41 of the Indian constitution. Another potential challenge is the digital divide. The policy's focus on technology is indeed positive, but it is essential to address concerns raised by a recent study conducted by the Azim Premji Foundation (2020), which revealed that approximately 60% of students in India face difficulties in accessing online learning opportunities. It is imperative to have adequate infrastructural support for the poor and vulnerable to reap the benefits of the digital revolution.

The NEP 2020 has put forward numerous proposals that hold the potential to revolutionise India's higher education system. The policy's focus on multidisciplinary and flexible education, the creation of the NRF and NETF, and the entry of foreign universities are all positive proposals. However, there are also some challenges associated with the policy, particularly regarding the potential inequities that could arise from the entry

of foreign universities and concerns about the digital divide. Nevertheless, the policy's proposals align with India's constitutional values of social justice, equity, and access.

Methodology

The methodology used in this paper is a review of literature based on a SWOT analysis of the NEP 2020 and its interaction with constitutional values. The review was carried out by utilising a diverse range of sources, such as academic journals, government reports, and policy documents. The SWOT analysis is a commonly employed tool in strategic planning, to assess the strengths, weaknesses, opportunities, and threats associated with a specific policy or program (Start & Hovland, 2004). In this paper, the SWOT analysis was used to examine the strengths and weaknesses of the NEP 2020 in terms of its alignment with constitutional values, and the opportunities and threats that the policy presents.

The first step in the methodology was to identify and collect relevant literature on the NEP 2020 and its interaction with constitutional values. This included a comprehensive search of academic databases, government websites, and policy documents. The gathered literature was subsequently subjected to a screening process, employing inclusion and exclusion criteria that centred on the study's relevance to the research question and its overall quality. The SWOT analysis was then conducted using a matrix framework, where the strengths and weaknesses of the NEP 2020 were evaluated based on their alignment with constitutional values, and the opportunities and threats were evaluated based on their potential impact on the policy. The analysis was done in a systematically and objectively, with each point backed up by evidence from the literature. Finally, the the SWOT analysis findings were synthesized and discussed in the context of the research question. The methodology employed in this paper sought to deliver a comprehensive and unbiased analysis of the NEP 2020, considering its alignment with constitutional values, and shedding light on areas that may require enhancement and potential challenges.

Findings

Below are the strengths, weaknesses, opportunities, and threats identified through the SWOT matrix framework in the analysis of the NEP 2020 and its interaction with constitutional values:

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> • The NEP 2020's prioritization of early childhood care and education, vocational education and training, and the integration of technology to improve learning have the potential to foster a holistic and inclusive education system. By addressing these diverse aspects of education, the policy aims to create an all-encompassing and accessible learning environment. • The policy's focus on multidisciplinary and flexible education can promote critical thinking, creativity, and innovation among students. • The proposal to establish a National Research Foundation and increase 	<ul style="list-style-type: none"> • The emphasis on regional languages in schools under the NEP can potentially worsen current social and economic disparities, with a disproportionate impact on disadvantaged students who lack access to English-medium schools. This could result in discrimination based on language, gender, and economic status. • The policy's proposal to merge smaller schools into larger ones may increase dropouts, especially among girls, and prevent children from realizing their right to education beyond the primary level. • Even though the policy promises to raise education expenditure to six percent of GDP, the education expenditure has remained stagnant at around four per

<p>funding for research and development can play a significant role in fostering the growth and progress of the education sector.</p>	<p>cent of GDP. This lack of funding can hinder the effective implementation of the policy initiatives.</p>
<p>OPPORTUNITY</p> <ul style="list-style-type: none"> • The NEP 2020's focus on vocational education and training can nurture a skilled workforce and contribute significantly to India's economic growth. • The policy's focus on technology and online education can provide access to education for students in remote areas and those who face barriers to traditional forms of education. • The proposal to create a National Educational Technology Forum has the potential to foster the development of innovative solutions to address various challenges in the education sector. 	<p>THREATS</p> <ul style="list-style-type: none"> • The NEP 2020's proposition to permit foreign universities to establish campuses in India may result in the commercialization of education, potentially prioritizing profit over the delivery of quality education. • The policy's emphasis on private sector participation in education can lead to the exclusion of marginalized communities who need help to afford private education. • Concerns regarding the digital divide and lack of policy commitment to expand the scope of the right to education beyond the primary level could hinder the success of NEP 2020.

The SWOT analysis of the NEP 2020 highlights its strengths, weaknesses, opportunities, and threats, and its interaction with constitutional values. The policy's focus on early childhood education, vocational training, and experiential learning has the potential to enhance the quality and relevance of education, promote equity and inclusion, and foster innovation and creativity. Moreover, the policy's commitment to increasing public spending on education and promoting multilingualism can advance social justice, cultural diversity, and linguistic rights. However, the policy's implementation faces several challenges and limitations. The policy's language policy, which prioritizes regional languages over English, may exacerbate existing social and economic inequalities, especially for marginalized communities. The policy's proposal to merge smaller schools into larger ones may lead to an increase in dropouts, particularly among girls and children from rural areas. Moreover, the policy's failure to extend the right to education to secondary education and ECCE may limit the effectiveness of policy initiatives.

The interaction between NEP 2020 and constitutional values reveals both synergies and tensions. Indeed, on one hand, the policy's emphasis on equity, inclusion, and cultural diversity resonates with the constitutional principles of social justice, equality, and plurality. On the other hand, the policy's language policy and school mergers may conflict with the constitutional values of equality, non-discrimination, and the right to education. Thus, the policy needs to balance promoting regional languages and ensuring English proficiency, creating larger schools and preserving local identities, and enhancing primary education and extending secondary education.

Discussion

The strengths of the NEP 2020 in terms of constitutional values are notable. The policy's focus on holistic development and skill-based learning aligns with the constitutional values of equality and progress. By promoting learning beyond textbooks and developing skills that prepare students for employment, the NEP 2020 emphasizes equal opportunities for all students, regardless of their socioeconomic background. The policy's emphasis on technology integration also aligns with the constitutional value of freedom, as it promotes access to information and resources, and fosters creativity and innovation.

On the other hand, the weaknesses of the NEP 2020 in terms of constitutional values are concerning. The policy's centralization of decision-making power raises questions about its alignment with the constitutional

value of democracy. The emphasis on a top-down approach to policy implementation may hinder the participation of stakeholders, including parents, teachers, and students, in decision-making processes. Moreover, the policy's emphasis on the school complex, the study of silence towards a right-based approach in education, and the privatisation of higher education raise concerns about its alignment with the constitutional value of justice. The NEP 2020 could benefit from a more comprehensive approach that acknowledges and values diversity and inclusivity. Policymakers should consider these strengths and weaknesses when implementing the NEP 2020, and work towards a more comprehensive approach that aligns with all constitutional values, ensuring that every student has access to quality education that fosters their holistic development, encourages creativity and innovation, and prepares them for employment.

Conclusion

Overall, the SWOT analysis of NEP 2020 revealed several strengths, weaknesses, opportunities, and threats associated with the policy. The policy has several positive aspects, including its focus on providing universal education, promoting multilingualism, and integrating vocational education into mainstream education. However, there are concerns regarding certain areas that have not received sufficient attention, such as teacher training and the involvement of private players in the education sector. Moreover, the interaction of NEP 2020 with constitutional values is complex and multifaceted. While the policy appears to be aligned with certain constitutional values, such as promoting equity and access to education for all, it also raises concerns about the potential marginalisation of certain groups, particularly those economically or socially disadvantaged.

Based on these findings, it is evident that the NEP 2020 presents both opportunities and challenges for the Indian education system. While the policy holds the potential to revolutionise the education landscape and foster more significant equity and inclusion, policymakers must approach its implementation with careful consideration and vigilantly monitor its effects on diverse communities. Moreover, it is important that the policy is aligned with constitutional values and does not undermine the diversity and pluralism central to Indian society. In conclusion, NEP 2020 is a bold and ambitious policy that has the potential to impact the Indian education system significantly. However, its success will depend on several factors, including effective implementation, adequate funding, and alignment with constitutional values. If implemented carefully and thoughtfully, NEP 2020 could be a transformative policy that paves the way for a more equitable and inclusive education system in India.

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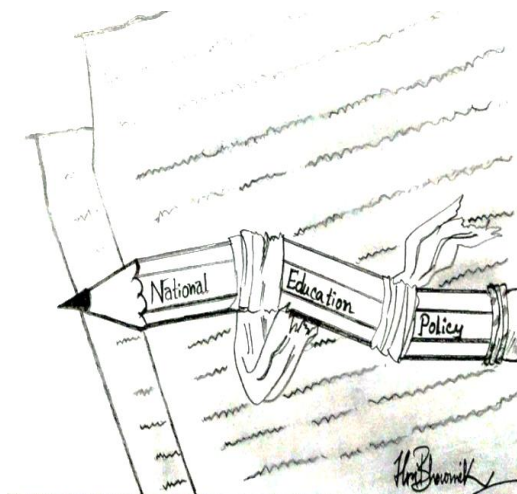
Awareness and Perception of National Education Policy 2020: A Study of Students and Educators of Gujarat

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Abstract

National Education Policy (NEP) was approved by the Union Cabinet of India on July 29, 2020, to reform the existing education system from elementary to higher education. By incorporating existing teaching pedagogy with the inclusion of vocational training and training in India, the NEP aims to provide industry-ready manpower and to develop the student's academic and non-academic spheres through holistic development. The study examines the level of awareness and perception among teachers and students from the Indian state of Gujarat with the help of a structured questionnaire from more than 100 respondents. The awareness is measured using MCQ questions related to several aspects of NEP 2020, while the perception is measured with a 5-point Likert scale. The study is descriptive and uses convenient purposive sampling, the responses of which



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are collected from students and teachers of Gujarat. The study observes a significant difference in the awareness level of NEP 2020 among male and female teachers and students. Additionally, we observe that teachers with more than 15 years of experience are more aware and have a positive perception of NEP 2020. Similarly, PG and other higher degrees are more aware and positive towards the NEP 2020.

Keywords: National Education Policy, Gujarat, Educators, India

Introduction

“We want that education by which character is formed, strength of mind is increased, the intellect is expanded and by which one can stand on one's own feet.”

– **Swami Vivekananda**

National Education Policy was approved by the Union Cabinet of India on 29 July 2020 to reform the existing education system from elementary to higher education by incorporating existing teaching pedagogy with the inclusion of vocational training and training in India, to provide industry-ready workforce and to develop the students' academic and non-academic spheres through holistic development (Panditrao & Panditrao, 2020). Looking back, India has implemented three education policy reforms: the first in 1968, the second in 1986 (updated in 1992), and the third in 2020 (Devi & Cheluvaraju, 2020). The aim behind the NEP is to create decent people capable of logical thought and action, compassion and empathy, courage and resilience, scientific temper and creative imagination, and strong ethical moorings and values. The goal is to produce active, productive, and contributing citizens to construct an egalitarian, inclusive, and plural society as envisioned by our Constitution (Ministry of Human Resource Development, 2020). However, this aim cannot be fulfilled if the policy stakeholders are not aware of it or have a negative perception of it.

The present study will observe the awareness of the NEP 2020 and its key areas and how two significant stakeholders of NEP 2020, educators and students, perceive it. The study addresses the awareness of the different educators, i.e. teachers from the school, and professors from colleges and universities, about the fundamental principles, multidimensional assessment, key changes in school education, and key changes in higher education. Similar variables are also asked of the students of various courses. For perception, changes in education policy, the requirement of

staff training, practical implications of NEP 2020, the implication of NEP 2020 in the rural areas, and the way of teaching and learning environment are observed by educators and students. These variables are key topics of the New Education Policy 2020 that will enable us to understand what to expect in the future.

Review of Literature

(Maruthavanan, 2020) Data was collected from secondary school teachers in Madurai district utilizing a quiz using a multiple-choice questionnaire with 25 topics relevant to NEP 2020. An independent t-test was used to examine the difference in knowledge of the NEP 2020 among secondary school teachers depending on demographic characteristics. The findings show a significant difference in NEP 2020 awareness among secondary school teachers based on gender, years of service, and family type, while there is a significant difference in NEP 2020 awareness among secondary school teachers based on location and school management type.

(Devi & Cheluvvaraju, 2020) Examined the awareness of various stakeholders about the impact of National Education Policy 2020 on commerce and management discipline in Bengaluru using a structured questionnaire. The result of the study showed that awareness of NEP 2020 among stakeholders is limited, but they feel that NEP 2020 is a needed hour as the present education policy fails to generate industry-ready masses. It was suggested that the stakeholders begin evaluating the NEP 2020 working parameters to determine the abilities needed to operate with NEP 2020.

(Aithal & Aithal, 2020) Investigated the efficacy of the National Education Policy 2020 in meeting its objectives. The study emphasized the overview of National Education Policy 2020 and compared it to a current education policy, through which they discovered the shortcomings aligned with an existing education policy and trends that would be developed in the future with the new education policy 2020. The research also made critical recommendations for educational departments on implementing the new education policy 2020, such as giving incentives for article publishing, faculty training, and Ph.D. requirements, among other things.

(Devi & Cheluvvaraju, 2020) Using a structured questionnaire, explored the perceptions of various stakeholders on the impact of the 2020 National Education Policy on the trade and management sector in Bengaluru. The results of this survey show limited awareness of NEP 2020

among stakeholders, but the inability of current education policies to create a crowd that can handle the industry means that NEP 2020 feels it is the time they need. It was suggested that stakeholders should begin evaluating the operational parameters of NEP 2020 to determine the functionality required to operate on NEP 2020.

(Khan & Bhatnagar, 2019) Conducted a study on education reform in Patna and its impact on higher education. This study used a survey method that observed high school students' perceptions of teaching practices and learning environments. Results showed significant differences in high school students' perceptions of classroom teaching practices and learning environments based on gender, family income, school type (public vs. private), and school board (CBSE vs. BSEB). but no significant differences were found based on family type.

(Matsumoto, 2019) has done a Literature Review on Education Reform in the UAE. According to him, existing studies show that the country struggles to align market-driven academic goals with dominant cultural paradigms. A transition away from a reliance on a formerly lucrative petroleum industry raises the stakes of their academic outcomes. This literature review used terms explored in Comparative Education, such as policy borrowing, to explain the government's approach to reform and a areas for future research.

(Alves, 2018) did a study on The Transnational Phenomenon of Individual Planning in Response to Pupil Diversity as a Paradox in Educational Reform. The study found that customized planning permits school structures and procedures to remain constant in the face of a shifting population. According to the findings, students who 'struggle' to learn are generally met with pre-established add-on solutions in an unchanging system. While personalized planning may be conceived of as part of an educational reform to build more inclusive educational systems, it is generally a means to avoid a genuine reform to develop better responses to student variety.

Research Methodology

Objectives

- To determine if gender differences in NEP 2020 awareness and perception exist among educators and students.
- To investigate whether there is any relationship between awareness level and perception of NEP 2020 and Education Qualification of Teachers and Educational Level of Students.

Hypotheses

- H₀₁: Awareness of NEP 2020 and Perception of NEP 2020 do not differ due to gender differences among teachers (educators).
- H₀₂: Teaching experience does not have any linkage with awareness of NEP 2020 and perception of NEP 2020.
- H₀₃: The awareness of NEP 2020 and Perception of NEP 2020 does not differ due to gender diversity among students.
- H₀₄: The level of education of students does not have any linkage with awareness of NEP 2020 and perception of NEP 2020.

Methodology

The present study has been conducted via a structured questionnaire that includes demographic information of respondents and 28 statements related to various topics of NEP 2020 including Awareness of Fundamental Principles, Multidimensional Assessment, Key changes in School Education, Key changes in Higher Education, and Perception on Changes in education policy, Requirement of training in staff, Practical implications, Implication of NEP 2020 in the rural area, the way of teaching and Learning environment using Google forms. The questionnaire for students was sent to selected colleges, and the questionnaire for teachers was sent to selected areas of Gujarat due to limited time. Non-probability convenient sampling has been used as the study is conducted as a pilot study where the teachers from commerce science and arts faculty and students from UG, PG and other higher education from commerce and management are taken as samples. A total of 72 students and 54 teachers have been considered for the study. To know the difference in the awareness level and perception among male and female teachers and students, an independent two-sample t-test was employed. At the same time, a chi-square test was taken to know the association of teaching experience with awareness and perception among teachers and the association of level of education with awareness and perception among students.

Test of Reliability

Reliability Statistics	
Cronbach's Alpha	N of Items
0.834	10

For the reliability test, we have conducted Cronbach's Alpha test using SPSS which showed 0.834 co-efficient indicating good consistency of the statements.

Results and Discussion

The Government of India had visioned creating the national education policy to put Indian students on same level as students around the world.-However, the success of it is based on how much the teachers and students are aware of the NEP 2020. While conducting the study, we observed that the university educators had more awareness of the fundamental principles of NEP 2020, multidimensional assessment and key changes in higher education, while the school teachers had moderated awareness of it. We also got feedback from teachers that they find it difficult to understand the NEP 2020 as the NEP 2020 is not available in the regional language. We also observed that the majority of the respondents - teachers and students have a positive perception toward NEP 2020 and its implementation regardless of their gender, except for the implementation of NEP 2020 in rural areas as many school teachers were skeptical of it.

H₀₁: Awareness of NEP 2020 and Perception on NEP 2020 do not Differ Due to Gender Differences (educators).

Independent Samples Test						
Variables	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Difference	Results
Awareness on fundamental principles in NEP 2020	0.052	52	0.959	0.01433	0.27793	Insignificant difference
Awareness on multidimensional assessment	-0.713	52	0.479	-0.19067	0.26736	Insignificant difference
Awareness on key changes in school education	-1.881	52	0.066	-0.52017	0.2766	Insignificant difference
Awareness on key changes in higher education	0.48	52	0.633	0.12167	0.25355	Insignificant difference
Perception on changes in education policy	-0.258	52	0.798	-0.0335	0.12997	Insignificant difference
Perception on requirement of training in staff	-0.242	52	0.809	-0.07267	0.2998	Insignificant difference
Perception on practical implications	-0.551	52	0.584	-0.05033	0.09127	Insignificant difference
Perception on implication of NEP 2020 in the rural area	2.012	52	0.049	0.421	0.20922	Significant difference
Perception on the way of teaching	-0.894	52	0.375	-0.19567	0.21875	Insignificant difference
Perception on learning environment	0.768	52	0.446	0.133	0.17327	Insignificant difference

The above table examined the difference in the male and female teachers' awareness and perception of NEP 2020. The two sample t-test observes that the awareness of NEP 2020 among male and female educators does not differ significantly for fundamental principles, multidimensional assessment, changes in school education and higher education as the majority of the respondents were aware a NEP 2020 while the perception of the male and female respondents also showed insignificant difference except in the perception of Implicating NEP 2020 in a rural area as the male teachers had less positive perception.

H₀₂: Teaching Experience does not have any Linkage with Awareness of NEP 2020 and Perception on NEP 2020.

Variables	Pearson Chi-Square	d.f.	Asymp. Sig. (2-sided)	Results
Awareness on fundamental principles in NEP 2020	49.011	24	0.002	Significant Association
Awareness on multidimensional assessment	48.758	30	0.017	Significant Association
Awareness on key changes in school education	45.189	30	0.037	Significant Association
Awareness on key changes in higher education	71.432	30	0.000	Significant Association
Perception on changes in education policy	48.126	18	0.000	Significant Association
Perception on requirement of training in staff	36.221	22	0.029	Significant Association
Perception on practical implications	15.374	8	0.052	Significant Association
Perception on implication of NEP 2020 in the rural area	37.429	14	0.001	Significant Association
Perception on the way of teaching	36.663	16	0.002	Significant Association
Perception on learning environment	22.949	14	0.061	Insignificant Association

The above table examines the association between teaching experience and the awareness and perception of NEP 2020 among educators. The chi-square test was conducted, which shows that educators with an experience more than 15 years of experience have a significant association with awareness on fundamental principles, awareness of multidimensional assessment, awareness of key changes in school education, and awareness of key changes in higher education in NEP 2020 as the p-value is less than 0.05. Similarly, the perception of changes in education policy, perception of the requirement of training in staff, perception of practical implications, perception of the implication of NEP 2020 in the rural area and, perception of the way of teaching have a significant association with the teaching experience while perception on learning environment has insignificant association.

H₀₃: The Awareness of NEP 2020 and Perception on NEP 2020 does not differ due to gender diversity among students.

Independent Samples Test						
Variables	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	Results
Awareness on fundamental principles in NEP 2020	2.017	70	0.048	0.4	0.198	Significant Difference
Awareness on multidimensional assessment	2.405	70	0.019	0.434	0.181	Significant Difference
Awareness on key changes in school education	-0.25	70	0.803	-0.053	0.212	Insignificant Difference
Awareness on key changes in higher education	-0.356	70	0.723	-0.072	0.204	Insignificant Difference
Perception on changes in education policy	1.829	70	0.072	0.355	0.194	Insignificant Difference
Perception on requirement of training in staff	-0.235	70	0.815	-0.046	0.196	Insignificant Difference
Perception on practical implications	1.616	70	0.111	0.145	0.09	Insignificant Difference
Perception on implication of NEP 2020 in the rural area	-0.992	70	0.325	-0.261	0.263	Insignificant Difference
Perception on the way of teaching	1.927	70	0.058	0.407	0.211	Significant Difference
Perception on learning environment	0.002	70	0.999	0.000	0.275	Insignificant Difference

Above table shows the independent two sample t-test on the awareness and perception of NEP 2020 among the male and female students. The results shows that the awareness among the male and female students does not differ significantly in the awareness on key changes in school education and awareness on key changes in higher education, while the male students are more aware about the fundamnet policies and multidimensional assessment compared to female as the p value are less than 0.05. The perception also does not differ significantly in male and female students except in the perception on the way of teaching as per NEP 2020.

H₀₄: Level of Education of Students does not have any Linkage with Awareness of NEP 2020 and Perception on NEP 2020.

Variables	Pearson Chi-Square	d.f.	Asymp. Sig. (2-sided)	Hypothesis testing
Awareness on fundamental principles in NEP 2020	50.472	24	0.001	May Reject
Awareness on multidimensional assessment	66.854	32	0.000	May Reject
Awareness on key changes in school education	70.479	26	0.000	May Reject
Awareness on key changes in higher education	122.021	32	0.000	May Reject
Perception on changes in education policy	23.123	16	0.11	May Reject
Perception on requirement of training in staff	50.122	18	0.000	May Reject
Perception on practical implications	31.666	8	0.000	May Reject
Perception on implication of NEP 2020 in the rural area	63.986	20	0.000	May Reject
Perception on the way of teaching	43.258	18	0.001	May Reject
Perception on learning environment	28.545	20	0.097	Failed to Reject

The above table examines the association between students' level of education (UG, PG and Higher studies) and the awareness and perception of NEP 2020 among students. The chi-square test was conducted, which shows that students from PG and higher Education have a significant association with awareness of fundamental principles, awareness of multidimensional assessment, awareness of key changes in school education, and awareness of key changes in higher education in NEP 2020 as the p-value is less than 0.05. Similarly, the perception of changes in education policy, perception of the requirement of training in staff, perception of practical implications, perception of the implication of NEP 2020 in rural areas, and perception of the way of teaching has a significant association with the level of education while perception on learning environment has an insignificant association.

Conclusion

The previous studies conducted in India after the NEP 2020 was approved suggested that the stakeholders were not very aware (moderated awareness) (Saraswathy & Nagavalli) (Maruthavanan, 2020) about the National Education Policy 2020 which is alarming as the successful implementation is somewhat based on the awareness and positive awareness of NEP 2020 in the stakeholders. The study observed that the awareness of NEP 2020 among the educators was higher, and they had a more positive perception toward the implementation of NEP 2020. Similarly, the students also have moderate awareness about NEP 2020, but their perception is also somewhat positive as they expect the NEP 2020 will bring industry-ready students. Still, only a positive perception will not guarantee successful implementation. Instead, continuous evaluation and monitoring are necessary to bring out the positive results of NEP 2020. The study can be a bridge for future researchers on how current educators and students envision NEP 2020, which can be a base for conducting future training sessions for educators to learn about NEP 2020 in detail. For students, the authorities can organise seminars to understand better how NEP 2020 will help shape their future.

Limitation of the Study

- The study's responses are limited to 72 students and 54 educators.
- The study's focus is solely on NEP 2020 awareness and perception.
- The study is only focused on Gujarat.

Future Scope of the Study

- In future investigations, the researchers can include more students and educators.
- Other crucial aspects of NEP 2020 can also be observed by the researchers.
- The researchers can broaden their investigation to include additional states as well as the entire country.

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Sustainable Livelihoods for Elderly in India: Insights from Elders' Self-Help Groups and National Education Policy 2020

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Abstract

The ageing population in India is increasing, which has led to an urgent need for sustainable livelihood opportunities for the elderly. This paper aims to identify the opportunities and constraints towards achieving sustainable livelihoods for India's elderly population. Additionally, in this context, this paper attempts to explore the role of the new education policy of India 2020 (NEP, 2020) in enhancing the sustainable livelihoods of older adults in India. This review paper uses a qualitative approach to analyze the existing literature on elderly livelihoods in India and the provisions mentioned in the NEP 2020 to understand the challenges and opportunities related to elderly livelihoods. The review finds that along with many challenges, also there are several positive opportunities exist for improving livelihoods, such as skill development programs offered by the Government and Non-Governmental agencies. The New Education Policy of India (NEP-2020) has several provisions that can positively impact the livelihoods of the elderly population, the policy's emphasis on lifelong learning, vocational education and training, digital literacy, and intergenerational learning can enable older adults to remain active and productive members of society, in addition to, several pension and saving schemes, and community-based initiatives, i.e., Elders' Self-Help Groups (ESHGs).

Keywords: Elderly, Sustainable Livelihood, Elders' Self-Help Groups, Social Security, National Education Policy.

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Introduction

India's population is ageing faster than researchers, national and international organisations, and demographers estimated. In India, the number and ratio of older people are expanding at a rate that is 40.5 per cent faster than that of the overall population, from 8.6 per cent in 2011 to 13.1 per cent in 2031; the share and proportion of the ageing population will similarly rise (NSO, 2021). According to a United Nations report, one in six persons worldwide will be elderly by 2050 (NSO, 2021; Population Division, 2020). The population is living longer due to the development of science, modern medicines, advanced treatment facilities, state-of-the-art technology, globalization, and mushrooming urban societies. The easy access to modern medical facilities, advanced healthcare support systems, and a decline in fertility associated with reduced mortality rates increase the overall life expectancy of senior citizens worldwide. Those living longer also deal with the various difficulties that come with it. Due to the fast-changing family and social architectural structure, the worth and status of the elderly, particularly those excluded from society on multiple grounds, are having trouble in dealing with the newly emerging socio-economic, psychological, and deteriorating physical challenges. Furthermore, evolution in the expected roles, responsibilities, and attitudes towards the older generation are visible in the traditional family structure and society. The migration of younger earning adults, searching for decent employment and a better lifestyle, creates a space in the household, leaving the older adults behind to deal with the “empty nest” situation. The family members considered the “primary caregivers” to the elders and responsible for most unmet needs, including socio-economic, healthcare, medical help, and mental and emotional support, are no longer able and willing to provide support.

Furthermore, inadequate income sources, insufficient early savings, and increased costs for healthcare facilities, medical treatment, and other necessities for living a healthy, worthy, and dignified life have strained society's resources and caused economic difficulties for the elderly. The old-age dependency rate (ODR) likewise rises with each decade, that is, 10.9 per cent in 1961 to an estimated 20.1 per cent by 2031, as forecasted by the National Statistical Office (NSO, 2021), and that is evident in the study conducted by a non-governmental Organization; where it shows that almost half of the elders' source of income comes in the form of remittance and allowances by their family members (HelpAge India, 2022).

The older people must continue to be active and provide helpful services inside and outside the family if they want to live freely without

taxing the family's resources. This can only be accomplished by providing the elderly with the necessary opportunities and amenities to continue contributing to the development efforts of the family, the community, and society (NPOP, 1999). The new National Education Policy of India 2020 has several provisions that can positively impact the sustainable livelihoods of the elderly population. The policy emphasizes the importance of lifelong learning, which can help older adults acquire new skills and knowledge, making them more employable later. The approach also encourages integrating vocational education and training to provide older adults with skills in demand in the job market. Furthermore, the new education policy also highlights the importance of digital literacy, which is increasingly essential in today's ultra-digital age. The policy also promotes intergenerational learning, which can help reduce social isolation among older adults and enhance social interaction and integration.

In a world characterized by an increasing number and proportion of older people worldwide, the UN General Assembly (UNGA), in a resolution 46/91 on 16 December 1991, adopted "The United Nations Principle for Older Persons", stated that "opportunity must be provided to willing and capable older persons so that they can be able to pursue the opportunity for their overall development and contribute in the activities of socio-economic development in the society" (General Assembly, 1991, p. 46/91). In this regard, Self-Help Groups (SHGs) can transform the rural population into tangible developmental outcomes such as financial inclusion, livelihood diversification, and skill development (NABARD).

Grameen Bank, established in 1983, experimented with Self-Help Groups (SHGs) as a 'poverty alleviation' tool by availing 'micro-credit' facilities to the poor villagers, especially women, as many economists and banking institutions regarded the poor as 'Not creditworthy' because they lacked collateral. After realizing that providing a small amount of money is all low-income families need to escape the unending suffering of local moneylenders, they can enjoy the fruits of their labour and not worry about mountainlike interest rates compared to the moneylenders and their control over the market (Yunus, 1998). By establishing a system called 'Social collateral.' Social Collateral assures that micro-credit recipients will repay the loan and not become delinquent in the loan repayment system (Conning & Center, 1996). It is considered an essential component for the success of the Micro-credit program (Hadi & Kamaluddin, 2015). The Grameen Bank provided small loans to the groups, which consisted of 5-10 members initially, and found that their loan repayment rates were very high as they were repaying their loans in a timely, mainly due to the peer pressure and

with a hope that in need they will quickly avail the loan again. The result also shows that those who helped the loans through self-help groups (SHGs) regularly escaped extreme poverty within 8-10 years (Yunus, 1998).

1. Challenges: Faced by the Elderly in India

2.1. Population Ageing

The demography of India is transforming very fast; as projected, by 2031, the percentage share in the total population, the elderly's share, will be 13.1 per cent and will reach 193.8 million elderly population with a growth rate of 40.5 per cent than the general population growth rate, which is 8.4 per cent (NSO, 2021). The "demographic transition" is attributed to lower fertility and mortality rates due to improved healthcare services. It has been discovered that the reduction in mortality is more significant than the reduction in fertility (Vaishnav et al., 2022)

The tremendous effects of population ageing and their ramifications for all aspects of human life are substantial. Economic growth, intergenerational transfers, labour markets, pensions, investments, and savings will all be impacted by population ageing. Population ageing impacts housing, migration, family structure, healthcare, and social health. (Prasad, 2011)

The younger generation seeks new identities, including financial freedom and redefined social positions within and outside the family in this fast-evolving economic and social environment. Rural families' reliance on the land has decreased due to the shifting economic landscape, which has profoundly impacted the ties between and across the generations (Bhat & Dhruvarajan, 2001). The older population of India is quickly losing the customary support of extended families (Ageing in India).

2.2. Healthcare

Due to a lack of human and financial resources, India's health systems, like many developing nations, cannot protect, maintain, and promote the health and socio-economic well-being of the elderly. The harsh realities of globalization, shifting cultural practices and beliefs, a high disease load from noncommunicable diseases, and inadequate family backing and social welfare provisions all affect the elderly (Krishnaswamy B et al., 2008). The medical and socio-economic issues that elderly individuals in India experience must be highlighted. Exploring ways to enhance their quality of life is also necessary (Ingle & Nath, 2008). The

aged, especially those from lower socio-economic backgrounds, are in severe financial danger because of the high cost of healthcare facilities and a lack of medical and related insurance (Sahoo et al., 2021).

2.3. Inadequate Social Assistance Measures

The National Social Assistance Program is inadequate to lead a life with dignity, which covers only a fraction of the impoverished population. The strict criteria for qualifying for social security programs should be made more lenient to benefit a more significant population. (Lena et al., 2009). A recent survey by Mercer, 2022 shows that India ranks 41 out of 44 countries' pension systems.

2.4. Financial Insecurity and Elder Abuse

Socio-economic and healthcare issues also give birth to other associated evils like elder abuse. Seth et al. (2019) state that elder abuse is mentally more intense than physical. As the elderly advance in life, their physical strength also deteriorates, affecting their mobility and source of income; having less money without any sustainable livelihood security and losing a spouse or partner is at risk of getting abused. In their study, Sebastian & Sekher, (2016) found that nearly 60 per cent of the respondents in the household that participated in the study had experienced mild to severe forms of abuse in addition to neglect. In a study, Chandiramani, (2017) stated that elder abuse could be knowingly or unintentionally or careless neglect, potentially harming the older person in the short and long term. To address the issue of elder abuse it does not appear to be modifying the subject, more attention and strong regulation. There is limited research on elderly abuse in India's judicial system's causes, effects, and effectiveness (Bhattacharya & Bhattacharya, n.d.).

The above literature shows that the elderly worldwide, including in India, face socio-economic, health, and emotional insecurity challenges. There are many scopes to improve the condition of the elderly living their daily life. From the above literature, some of the critical challenges are pointed out below.

Issues	Statement of the issues
Loneliness and social isolation	With changing family structures and increased migration, many older adults in India are left without social support, leading to loneliness and isolation.
Healthcare	Access to affordable and quality healthcare is a significant challenge for many older adults in India, particularly those in rural areas. This leads to inadequate treatment of chronic diseases and a higher risk of health complications.
Financial insecurity	Many older adults in India live in poverty and lack adequate financial support. They are often dependent on their children or rely on government pensions, which may not be enough to cover their basic needs.
Elder abuse	: Elder abuse, including physical, emotional, and financial abuse, is a growing concern in India. Older adults are vulnerable to mistreatment from family members or caregivers, and many cases go unreported.
Lack of mobility and accessibility	The built environment in India is often not designed with the needs of the elderly in mind, making it difficult for them to move around independently. This limits their ability to participate in community activities and socialize with others.

3. Sustainable Livelihood

The term 'sustainable' implies long-term or enduring. A stable source of income ensures a person's long-term security and keeps him stress-free (Karki, 2021). World Commission, 1987, for the first time, used the term sustainable development. It stated, "Humanity can make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs." Furthermore, the commission also believed that "sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfil their aspirations for a better life."

Robert (1991) gave a working definition by modifying the World Commission report on the purpose of sustainable livelihood and stated that "A livelihood comprises the capabilities, assets (Stores, resources, claims, and access) and activities required for a means of living: a livelihood is

sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation, and which contributes net benefits to others livelihoods at the local and global level and in the short and long term.”

Sustainable livelihood approaches of social work practice improve the understanding of poor people's livelihoods. It organizes and demonstrates the variables that affect the availability of employment prospects. It can be aided by planning development initiatives and assessing how well existing activities contribute to maintaining livelihoods (Serrat, 2017).

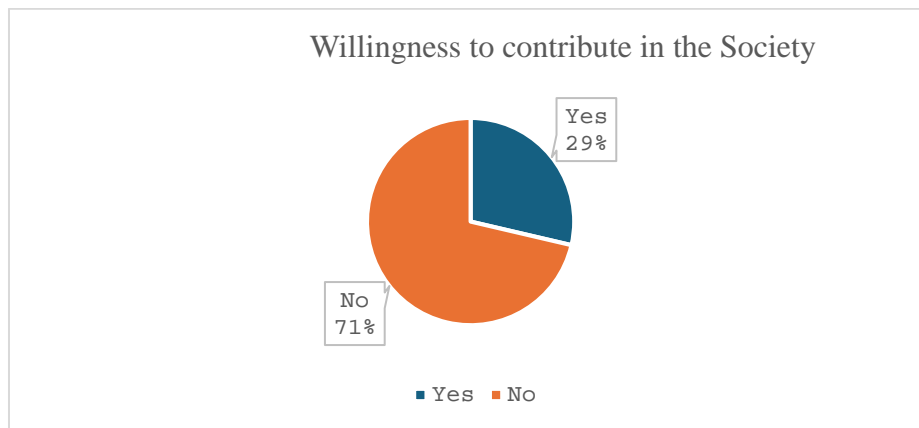
4. Learning for Life: The New Education Policy of India and its Promise of a Dignified Livelihood for Older Adults

India's population is ageing rapidly, with the number of older adults expected to reach over 193 million by 2031, as per the projection by NSO (2021) report. This demographic shift presents both opportunities and challenges for the country. It is a challenge to ensure that older adults or senior citizens have access to sustainable livelihoods that allow them to lead fulfilling lives and contribute to their communities (NPOP, 1999). “Adult education and lifelong learning” are essential in achieving this goal.

4.1. The Role of “Adult Education and Lifelong Learning” for the Elders in India

The role of 'adult education and lifelong learning' is significant in providing sustainable livelihoods to the elderly of India. India is experiencing a demographic shift, with an increasing number of people over 60. Many of these elderly individuals face financial insecurity and struggle to support themselves. (Endow & Mehta, 2022) In a study, point out a need to recognize the country's existing knowledge treasure and provide adequate worth, dignity, status, and financial incentives to deserving skilled workers, even if the traditional technical and formal education does not cover them. The Western-centric system of knowledge must be challenged, annihilating other knowledge systems. At the very least, the two designs must be combined to correct the disparity between formally educated workers, either trained or untrained. Women's domestic skills need more remuneration and recognition as skill systems. A recent study conducted by HelpAge India, 2022, shows that about 53.7 per cent of caregivers are willing to provide skill-building opportunities to the elders so that they can remain gainfully employed, be socially included, and learn new things. However, the very

same report also shows that only one-fourth of the elderly (29.8 per cent) are willing to contribute to society, and the rest (74.2 per cent) are not interested at all in any volunteer work.



Source: HelpAge India's Bridge the Gap: Understanding Elder Needs report
<https://www.helpageindia.org/aboutus/publications/helpage-research-reports/>

Adult education and lifelong learning programs can help elderly individuals develop new skills and knowledge that can help them earn a living. These programs can include vocational training, computer literacy, entrepreneurship training, financial management, and job placement services. The HelpAge India (2022) report also pointed to taking action in re-training for gainful employment by providing opportunities similar to the needs and skills of older adults.

As a developing Asian country, India should understand the value cheap education with a skilled workforce. In the future, this will be beneficial in maintaining the economic growth rate considering the rapid expansion of manufacturing products and technological advancement. A country's development depends entirely on a solid and effective educational system. Economic growth is only conceivable with improvements in academic level, labour productivity, and knowledge capacity (Yadav et al., 2022).

A critical aspect of "adult education and lifelong learning" is that it can help bridge the digital divide that many elderly individuals face. As the world becomes increasingly digital, those who need more digital literacy skills can be left behind. The significance of IT and technology must be recognized, given the current situation of the globalized world and the speed of change. So, expanding access to these fields of knowledge over time is essential. However, India is a 'labour-surplus' country, and there is an urgent

need to push for 'labour-intensive' technological options until most of the population has a level playing field (Endow & Mehta, 2022). To provide improved social and mental well-being and to reduce digital inequalities in society, it will be a landmark step to include the elderly in the world of the digital revolution. (HelpAge India, 2022). Education programs can provide training on basic computer skills, social media, online marketplaces, and other digital tools to help elderly individuals find new job opportunities.

Moreover, lifelong learning can help elderly individuals stay engaged and active, positively affecting their mental and physical health. It can help them develop new hobbies, interests, and social connections, leading to a better quality of life.

4.2. New National Education Policy of India 2020: The Opportunity for the Older Adults

National Education Policy 2020 (NEP, 2020), specifically Part 3 of Chapters 20-24, emphasizes the need for sustainable livelihood opportunities in India, particularly for marginalized communities. This policy recognizes the importance of skill development and vocational training for creating employment opportunities that can provide a sustainable livelihood for people. It also stresses the importance of entrepreneurship and innovation as critical economic growth and job creation drivers. The policy highlights the need for collaboration between educational institutions, industry, and the government to foster a culture of entrepreneurship and promote innovation.

Promoting a Culture of Lifelong Learning: In chapter 21, the policy emphasizes the importance of fostering a culture of lifelong learning, which involves creating an environment that encourages individuals to pursue education throughout their lives. This includes providing access to various opportunities, such as online courses, community classes, and vocational training programs. Another vital role of adult education and lifelong learning is to provide older adults with the skills and knowledge they need to pursue new career opportunities.

Establishing community-based learning centre policy recommends installing community-based learning centres, which can provide older adults access to various educational and vocational training programs. These centres also serve as social hubs, providing opportunities for social interaction and community engagement. In Chapter 24 of Part III, the policy emphasises the need to develop digital infrastructure to promote online learning. The policy aims to increase the 'Gross Enrolment Ratio' (GER) in

higher education to fifty percent by 2035. To achieve this, the policy proposes the development of a National Education Technology Forum (NETF) in chapter 23.4 that will facilitate the integration of technology in education. The NETF will promote using online resources and Massive Open Online Courses (MOOCs) to provide learning opportunities to people of all ages, including older adults.

In Chapter 22, the policy emphasizes the importance of recognizing prior learning, which involves acknowledging the knowledge and skills that older adults have acquired through their life experiences. By recognizing this knowledge, older adults can be encouraged to continue learning and pursuing new opportunities. Moreover, the NEP 2020 in Chapter 20 of Part III emphasizes the need for vocational education and training to provide older adults with the necessary skills to secure a sustainable livelihood. The policy aims to establish a National Skills Qualification Framework (NSQF) to offer a standardized vocational education and training framework. The NSQF will enable individuals to acquire skills and certifications recognizing by the industry and promote their employability.

Encouraging intergenerational learning: The policy emphasizes the importance of intergenerational learning, which involves bringing together people of different ages to learn from one another. This can help older adults stay engaged with younger generations and share their knowledge and experience.

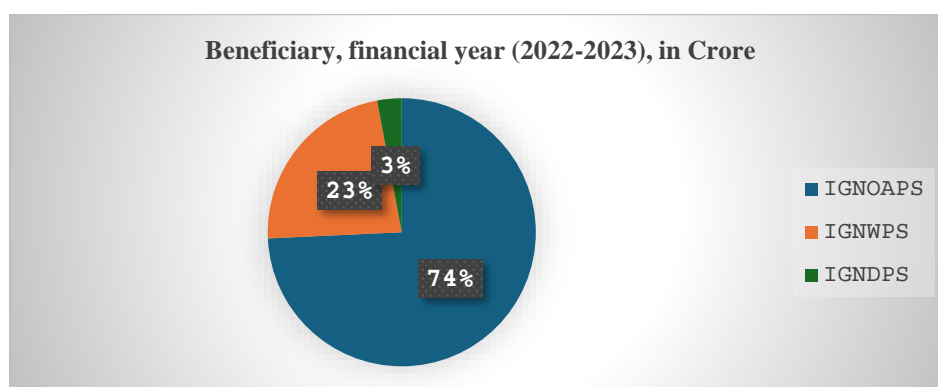
5. Governments' Welfare programs and Schemes for the Elderly in India

5.1. Social Security Schemes and Programs

In India, social insurance schemes and social assistance schemes and programs cover the social security of the elderly. 'Employees' Provident Fund' (EPF), 'Varishtha Pension Bima Yojana', and 'PM Vaya Vandana Yojana' are all social insurance schemes that guarantee a minimum pension based on contributions (Agewell Foundation, 2019). For private-sector employers and employees (in companies with more than twenty employees), as well as in other engagements like civil servants' services, personnel engaged in military occupations, and different public-sector organizations, EPF contributions are required. However, only 26 million workers (6.5 per cent) can access an EPF pension (Agewell Foundation, 2019).

5.2. National Social Assistance Programme

The government's old age pension amount in India varies across different states. The central government runs the 'National Social Assistance Programme' (NSAP), which provides monetary assistance to eligible elderly, widows, and disabled people below the poverty line. As of 2021, the highest old age pension provided by a state government in India is in Telangana, where eligible individuals receive Rs. 2,016 monthly. In contrast, the government of Bihar provides the lowest amount of old age pension, where qualified individuals receive Rs. 400 per month. It is worth noting that the central government's NSAP also assists Rs. 200 per month to eligible individuals aged 60 years or above, regardless of gender, in addition to the amount provided by the state governments. As per the data provided by the National Social Assistance Program, MORD, the total number of NSAP beneficiaries is 29.55 million, of which 21.92 million are getting benefits from IGNOAPs, and 6.72 million are getting IGWPS. Under IGNDPS, 8.69 million beneficiaries are getting benefits Under NSAP. In addition to government-sponsored pension schemes, earning-related pension schemes are available for the employee and supplementary employer-contributed pension schemes. According to Mercer CFA Institute Global Pension Index 2022, India ranks 41 out of 44 pension systems worldwide. This indicates that India needs revolutionary strategic reform in the pension system so that the needy and marginalized population can get a dignified, adequate pension.



Source: National Social Assistance Program, Ministry of Rural Development
<https://nsap.nic.in/>

5.3. The “Maintenance and Welfare of Parents and Senior Citizens ACT, 2007” (MWPS Act 2007)

The Maintenance and Welfare of Parents and Senior Citizens Act (MWPSA) of 2007 required children with appropriate finances to care for elderly individuals who could not care for and manage themselves. The Union Government revised the act in 2018 to broaden the network of relatives looking for grandchildren and relatives. When most basic needs are unmet, elderly persons can bring their family members before a tribunal to request maintenance orders. If relatives disobey maintenance requirements, they could face fines or jail time. Only a tiny part of the elderly population is covered by government social protection because National Old Age Pension Schemes' (NOAPS) eligibility is mainly determined by the family's ability to support: 18.6 per cent of those over 65 receive payments (MORD, n.d.; NSAP).

Since the formal social security measures reach out to a minor section of the population; as a result, they have suffered from socio-economic and health insecurity and fall short of basic amenities due to inadequate income (Chakraborty & Chakraborty, 2018). In India, old age dependency, unemployability, and insufficient social security measures are interlinked and can lead to socio-economic challenges. When the elderly population cannot support themselves, it can lead to a rise in poverty and vulnerability. In addition, the lack of employment opportunities for the elderly can further exacerbate their financial difficulties. Moreover, inadequate social security measures fail to provide sufficient protection for the elderly in emergencies or unforeseen.

6. ‘Self-Help Groups’ (SHGs): An Opportunity to generate living for the Elderly

6.1. ‘Self-Help Groups’ in India

Self-help groups (SHGs) have emerged as a vital support system for the elderly in India. These groups allow members to pool their resources and support one another financially and emotionally. SHGs also provide a platform for the elderly to participate in income-generating activities, which can alleviate financial stress and improve their overall life satisfaction and quality.

6.2. Historical Evolution of Elders' Self-Help Groups

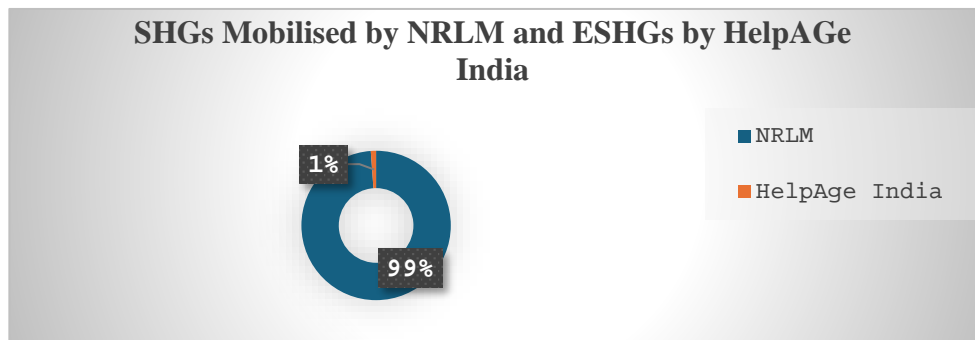
In India, Elder Self-Help Groups' (ESHGs) are a not-for-profit organization founded by homogenous, like-minded groups of 10 to 20 poor, active older adults over the age of 60 years with similar goals and purposes (NABARD, n.d.-b; Rasi, 2013) Elders' Self-Help Groups (ESHGs) are a subset of the more significant Self-Help Group movement that originated in India in the 1990s as a pilot project to connect 500 underprivileged SHGs with institutional financial institutions. The "SHG-BPL" paradigm has developed into an affordable option (Malhotra, (2018) which adheres to the "Panchasutras", which include obligatory group meetings, disciplined savings of predetermined sums decided upon at the group proceedings, lending of loans internally among members, prompt loan repayment, and tracking proper bookkeeping of accounts and related documents. Following the above-mentioned simple rules made the valuable microfinance program worldwide (NABARD).

6.3. Progress of Elders' Self-Help Groups

Following the devastating effects of the tsunami in 2005, which struck India's southern coastal regions, jeopardizing the life of the vulnerable section of the community, particularly, the poor, marginalized women, children, and elderly, Tamil Nadu was the state to initiate the formation of Elders' Self-Help Groups (ESHGs) first. According to multiple reports, The Elders' Self-Help Groups (ESHGs) significantly contributed to reducing the multifaceted poverty of this vulnerable group in our society, especially the old, during that time. The concept was then implemented in North Bihar by HelpAge India, a non-governmental organization operating throughout India. Because of the river Koshi, which originates from the Himalayan Tarai region. This region has regularly witnessed natural calamities in the form of floods in various districts. People in the region frequently lose their livelihoods and a roof over their heads due to flooding and other natural calamities. The vulnerable elderly, who rely solely on their family members for socio-economic, healthcare, medical facilities, and moral and emotional support, make their lives more vulnerable and unworthy and appear to burden the family members who provide for their family's daily needs. To respond to floods, the Elders' Self-Help Groups (ESHGs) were established in 2007 in some flood-affected regions. They have been working effectively in the region since then, with over Ten Thousand enthusiastic elderly members working actively and consistently to improve from complete dependence to self-dependent and lead a life with autonomy and self-satisfaction (Khan et al., 2017).

6.4. Recent Statistics

As per the most recent data, HelpAge India supports Seven Thousand Four Hundred groups in 16 states and union territories of India, with nearly one lakh elderly members. The Ministry of Rural Development has recently adopted this model (HelpAge India). The Ministry of Rural



Development supports 8.26 million mobilized groups comprising 88.92 million households in India.

Source: <https://nrlm.gov.in/dashboardForOuter.do?methodName=dashboard>,
<https://www.helpageindia.org/our-work/welfare-development/livelihood-support/>

6.5. Sustainability of Livelihood Opportunities Through Self-Help Groups (SHGs)

Jagannatha, 2020 According to a recent study, resource mobilization and loan issuance to self-help groups have significantly increased, indicating positive progress and playing a crucial part in women's empowerment in the Indian state of Karnataka.

According to Lakshmi Jayapal, 2014, in "A Study on Women Empowerment through Self-Help Groups in Central Tamil Nadu," stated the fact that the majority of the women participants quickly access bank loans with convenient repayment options through the group and engage in other forms of general empowerment and personal development, such as sociocultural and political participation, demonstrates that the majority of the women participants have significantly changed their way of life. According to the researcher, most respondents used this loan to settle other economic difficulties and repay the previous debt; they hardly ever used it for activities that would have generated money.

The National Rural Livelihood Mission (NRLM) recognized the role of SHGs in reducing poverty by initiating multiple programs for the most

vulnerable, preferably women (NRLM). However, they could have foreseen the potential capabilities of the active older adults by providing an opportunity to gain a sustainable livelihood so that they could be involved in our country's mainstream active economy.

According to Alam & Yadav (2015), Elders' Self-Help Groups (ESHGs) play a positive role in improving the lives of the elderly and raising their status in the family and community because they economically contribute to household duties, according to a study that documented the experiences of elderly, who participated from Tamil Nadu districts. Their savings and turnover were raised as they received ongoing assistance from the groups through materials and the necessary funds to launch small businesses and other pertinent income-generating endeavours. As long as they continued participating in the group process, they became less dependent on their family and more economically independent (Alam & Yadav, 2015).

Another study by Khan et al. (2017) on Elderly Self-Help Groups (ESHGs) conducted in North Bihar mentioned in their key observations that, after joining the ESHGs, the participant's sense of belonging, economic stability and sustainability increased as they got continuous support from the banking institution, as they recently shifted their perception that elderly are creditworthy as the ESHGs were following the "Good Practice" guidelines set by the UNFPA.

In the study mentioned above by Mooner Alam, the prime focus was on ESHG functioning and its impact on the psycho-social development of the elderly. However, he said that the credit, thrift, and saving habits of the elderly increased. However, an in-depth study on those members who are involved in income-generating activities, their needs, challenges, what practices they are following, leading to success or failure of their economic venture, as well as, overall financial outcome and its impact on the lives of the elderly participants are not appropriately studied.

The advent of green and clean technology is ready to transform the livelihood characteristics at a grassroots level in rural India if carefully embraced. Singhal & Kabiraj (2023), in a News Paper editorial page, strongly advocated the use of "distributed renewable energy" (DRE), based on the report of a council, namely the Council on Energy, Environment and Water (CEEW). The information showed that in 80% of women who adopted DRE-Powered technology, their income was enhanced due to mechanization. Furthermore, they are also relieved from laborious manual activities. Although there are so many possibilities for DRE-powered

technology in the future, the author has pointed out some associated challenges in the article. Like every innovation, this technology has shortcomings as the DRE-appliances are prescribed as high-risk purchases, which the small and marginal farmers and entrepreneurs need help to afford. Secondly, difficulties in getting an easy loan to purchase and market constraints create problems in generating higher income. Moreover, the elderly, due to their limited mobility, are held back from establishing market linkage.

7. Findings

The sustainable livelihood of the elderly in India is a critical issue that has received significant attention recently. A review of the extensive literature on this topic reveals several challenges faced by the elderly population in the country, including poverty, lack of access to healthcare, social isolation, increasing dependency rate, reduced source of income, and increasing expenses on healthcare and other essential commodities to lead a life of dignity with self-respect and inadequate government support. However, there are also numerous opportunities to address these challenges and improve the livelihoods of the elderly. The National Education Policy 2020 has highlighted the need to focus on lifelong learning and skill development for all age groups, including the elderly, to enhance their employability and income-earning potential. Additionally, various government and non-government social security schemes and programs are aimed at providing financial assistance, healthcare, and social support to the elderly population.

Moreover, the role of elders' self-help groups (ESHGs) is also significant in promoting the sustainable livelihood of the elderly. These groups provide a platform for the elderly to come together, share their experiences, and support each other in various ways, including starting small businesses, accessing government schemes, and advocating for their rights. DRE also presents an opportunity for the sustainable livelihoods of elderly individuals. With the increasing demand for renewable energy sources, there is a growing need for skilled workers in the green energy sector. Elderly individuals with experience and expertise in traditional energy sources can benefit from training and employment opportunities in the green energy sector. Additionally, they can overcome the challenges associated with the high cost of purchasing and maintaining the DRE through Collateral, i.e., Elders' Self-Help Groups (ESHGs), by easing the loan application process. Overall, addressing the challenges faced by the elderly population in India requires a comprehensive and coordinated effort from the government, civil society organizations, and the private sector, focusing on improving access to education, healthcare, social support, and

economic opportunities by connecting small and marginal producers with consumption hub in the Urban areas.

8. Discussion

The literature review on sustainable livelihoods of elderly individuals in India highlights several challenges and opportunities in promoting this population's well-being and financial security. One of the primary challenges is the need for more access to adequate social security schemes and programs. This lack of access often leads to economic insecurity and poverty among elderly individuals, particularly those unable to work due to age or health issues. The National Education Policy 2020 (NEP, 2020) focuses on revamping India's education system and makes no explicit provisions for the elderly's livelihood. It does, however, emphasize the promotion of continuous learning programs and continuing education courses for people of all ages, including senior citizens. These programs can assist individuals in acquiring skills that will be valuable in their professional lives or, if desired, in starting a new career. Furthermore, increasing adult literacy rates through these programs might lead to more excellent employment options for seniors who choose to work or continue working past retirement age.

Another opportunity for sustainable livelihoods of elderly individuals is the formation of self-help groups. The National Education Policy 2020 (NEP, 2020) strongly emphasizes encouraging lifetime learning initiatives and continuing education courses for people of all ages, including senior citizens. By allowing elders to get together and learn new skills or share their knowledge with others, self-help groups can play a crucial role in advancing this objective. NEP 2020 acknowledges the need to support adult literacy initiatives for various age groups, including senior citizens who may have missed out on earlier educational chances. Senior citizen SHGs can help with these efforts by setting up literacy programs or other educational events. These groups provide a platform for elderly individuals to come together, share their experiences, and support each other in various ways, including skill development, microfinance, and entrepreneurship. The government and non-governmental organizations have recognized the importance of self-help groups and have initiated several schemes and programs to support their formation and operation. In addition, NEP 2020 seeks to improve community involvement in education through programs like School Management Committees (SMCs). Senior citizen SHGs could actively participate as SMC members, which will help them support the growth of schools and maintain relationships with the younger generation. In general, self-help organisations can play a

significant role in attaining the NEP-2020 objectives relating to community participation and lifelong learning for people of all ages.

“Distributed Renewable Energy” (DRE) is another opportunity for the sustainable livelihoods of elderly individuals. The increasing demand for renewable energy sources presents a growing need for skilled workers in the green energy sector. Elderly individuals with experience and expertise in traditional energy sources can benefit from training and employment opportunities in the green energy sector. This opportunity can not only provide financial security but can also contribute to environmental sustainability.

Overall, the literature review on the sustainable livelihoods of elderly individuals in India highlights the challenges and opportunities this population segment faces. Investment in education and skill development, the formation of self-help groups, and the promotion of distributed green energy are all potential avenues for improving the livelihoods and overall empowerment of elderly individuals in India. However, significant challenges remain, and concerted efforts are necessary to address these issues and ensure a sustainable and equitable future for all.

9. Conclusion

In conclusion, the extensive literature review on the sustainable livelihoods of elderly individuals in India highlights the need for comprehensive and integrated programs that address the challenges faced by this population segment. The National Education Policy 2020 recognizes the importance of promoting lifelong learning opportunities and intergenerational learning programs for elderly individuals. The government and non-governmental organizations have initiated several schemes and programs, including social security programs and self-help groups, to support and provide resources for elderly individuals. Promoting distributed green energy can also provide employment opportunities and contribute to sustainable development.

Furthermore, the National Policy for Older Persons (NPOP) outlines a framework for ensuring the well-being and security of elderly individuals in India. Implementing this policy, combined with efforts to promote education, healthcare, and sustainable livelihoods, can help address the challenges faced by elderly individuals and provide them with the support and resources necessary to lead dignified and fulfilling lives. Addressing the challenges and leveraging this population segment’s opportunities will ensure a sustainable and equitable future for all.

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Children of Nomadic and De-notified Tribes and Education Opportunities: A Challenge of Inclusiveness

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Abstract

Every child has the right to get an education, which is essential for the development of any child. In India, the Right to Education Act, of 2009 provides free and compulsory education to children till fourteen years of age. Irrespective of their caste, class, gender, region, or religion, every child is entitled to get an education. Certain sections of our country are far away from the purview of education. They are a large number of children of Nomadic and De-notified Tribes (NTDNTs). Due to historical injustice and migration in nature, these communities have been excluded from getting education. Certain concrete steps like mobile schools, residential schools, and so on have been taken to educate these children, but there is a long way to go to achieve desirable results. This paper will attempt to understand the education status of nomadic and De-notified groups and what needs to be done for their inclusiveness in society in general. This paper has taken the base of existing literature to support the arguments.

Keywords: Nomadic and De-notified Tribes, Children, Education, Inclusiveness, and Challenges.

Introduction

The British Government in India enacted the Criminal Tribes Act (CTA) in the year 1871 which declared certain tribes as ‘born criminals’ under the act. These wandering communities were looked down upon as hereditary criminals who were “addicted to the systematic commission of non-reliable offenses” (Kumar, 2004). These groups were engaged in different occupations, such as cattle gazers, acrobats, fortune tellers, magic

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tricks, etc., but the Britishers misunderstood them as hereditary criminals. Some of the communities were engaged in criminal activities, but considering all nomadic groups as born criminals was a major mistake of the British government (D'Souza 2001). Being a wandering tribe, they had proper geographical knowledge of the country and also assisted local kingdoms against the British Government, which was considered a threat against them. Through the amendment of CTA, the British wanted to control these groups and brought different communities under various amendments of the act from 1871 to 1944. The British government nearly declared 200 nomadic tribes as born criminals under the Criminal Tribes Act, 1871. They were treated in an inhuman manner, and many harsh provisions were imposed on them under the act.

It was in the year 1952, after five years of independence they were declared as 'De-notified.' Nomadic and De-notified Tribes (NTDNTs) are the most marginalized section of the society. Nomadic people continuously move from one place to another for their livelihood. It always remains hard for the state to keep monitoring them due to their frequent movement, so they first become a victim of suspicion and mistrust compared to the settled populations. The roots of their miseries are not recent but traced to the pre-independence era. Historical injustice and various forms of discrimination suffered by these groups have kept them far away from the developmental measures of mainstream society. These communities were living on their traditional occupations such as pastoral, hunting, transportation, craftsmanship, trading, entertainment, forage, etc, which have been badly affected by new economic changes. Their age-old traditional occupations are not sufficient nowadays to meet their daily requirements, and at the same time, they are not highly skilful and educated people, so it becomes difficult for them to adopt new forms of lifestyle according to the changing economic system.

Many of these families are deprived of amenities such as land, BPL Cards, birth certificates, and domicile status certificates due to the non-availability of proper documents. This leads them to double disadvantages and impoverishment in life. In their routine life, these groups also face many incidences of human rights violations and atrocities from other social groups because they are not able to take the support of law enforcement officials and judiciary. Education is considered as a most powerful tool for development of individuals or society as whole. It has all the potential for transformation into terms of social, economic and political aspects. The Right to Education (RTE) Act, 2009, was mainly introduced to bring poor

and disadvantaged sections into the sphere of formal education by the government of India. Its objective was the development of all children irrespective of their background, but there are many factors, such as poverty, social exclusion, low awareness, and migration which create hurdles for people of nomadic and De-notified communities to enrol their students in formal school systems. Even if their children are enrolled, they need help to continue their education. The children of nomadic groups have remained far from benefits of education under the provision of the RTE Act. This paper has tried to understand the concept of nomadic and De-notified tribes and education states among them with the help of existing literature. It has attempted to suggest some of the efforts that need to be taken for to bring children of these groups into the purview of education.

Meaning of Nomadic

Nomad means those people who do not have permanent houses to live in and they wander from one place to another for pastures. The purpose of their mobility is livelihood. According to Sadr (1991), Nomads are members of tribes, nations, or races having no permanent settlement, and they constantly move in search of food and pastures. They are categorized as hunters and food gatherers, itinerant fishermen, and pastoralists.

De-notified Tribes

De-notified tribes are communities listed as born criminals under the Criminal Tribes Act, 1871 and its subsequent amendments. It was believed that they were habituated to commit non-bailable offenses. Once a tribe is declared as criminal under the act, all its members are compulsion to register themselves with the local magistrate. If they fail to register, they are charged with severe provisions under the Indian Penal Code (IPC). Under the Habitual Offender Act 1952, these communities were decriminalised and declared as De-notified Tribes. According to the Eleventh Five-Year Plan, these communities are still marginalized and living very miserable lives. Not much focus has been made to understand their specific needs. National Commission for De-notified Tribes, Nomadic Tribes, and Semi-Nomadic Tribes, in its report, stated that there are roughly nearly 110 million population of nomadic, semi-nomadic and De-notified groups who still face violence and atrocities by mainstream society.

Education Status of Nomadic and De-notified Children

Education is considered the best tool for individual and community development, bringing social, economic, and political transformation in society. The government of India brought the Right to Education Act (RTE), 2009 to bring underprivileged groups into the purview of the formal education system which will result in their growth. It will help them to be empowered. However, the children of nomadic communities could not benefit from the act due to various reasons such as poverty, lack of awareness, social exclusion, migration, etc., which kept them away from the school system. Not having another supportive mechanism to deal with the challenges of their life, they were not able to take advantage of various provisions of the Right to Education Act.

Nomadic communities move from one place to another in search of livelihood. Due to their migratory nature, the existing schooling system does not help to bring children of nomadic communities into formal education. The children also move with their parents from one place to another and have responsibilities to support their families. Due to these challenges, they are far away from the education system today. The Renke Commission formed in the year 2008, suggested in its report that teachers should be developed from nomadic communities who will teach and move with them wherever these groups move. These groups reject the normal schooling system due to their migratory nature, so these steps can bring fruitful results in educating them. The migration has very adversely affected the education of nomadic children. There are very few children of nomadic groups able to attend school in the place where they migrate. Almost three-fourths of nomadic children are not able to attend school at their migration destination which results in cases of child labour and other kind of exploitation. The majority of nomadic people are not aware of the RTE Act. (Puri, 2016). After independence, our leader expressed political resolution to strengthen the education system to achieve economic development and ensure social justice (Velaskar, 1990).

In the report of the Education Commission 1964-66, it was mentioned creating a common space, irrespective of caste, class, and gender, for all the children to bring them into the education system. School is the place to fulfil the dream of inclusiveness of all children. However, we still need to catch up to achieve goal of hundred percent literacy. The literacy rate was 74.04 per cent in the census report of 2011. People belonging to less privileged sections suffer more than the privileged ones.

They still need to be made aware of services like education, good health, livelihood options and other resources. Children of these groups are at most a disadvantage due to their socio-economic backwardness. These groups wander from one place to another in search of livelihood, so their children many times are not able to take advantage of regular schooling, and the government has not been able to establish proper mechanisms where children of nomadic communities can afford school with their regular movements. It is also considered one of the prominent reasons that the dropout ratio is high among nomadic children. This increases the incidence of child labour among these communities, who they get engaged in occupations like rag picking, acrobats, labourers and substance abusers. The nomadic children do not have proper documents such as birth certificates, caste certificates, etc which are required to get into government schools. Nowadays, parents want to provide education to their children, but there is no suitable education system according to the lifestyle of nomadic communities, which will help nomadic children to take benefit of formal education.

The Renke Commission has observed very critical aspects of nomadic, semi-nomadic, and De-notified tribes. It mentioned that education is a distant dream for these groups. Most of their population is illiterate, but of those who are educated, the majority of them are up to standard 10th. They have less accessibility to education due to their livelihood pattern and sustenance. Children get engaged in working from an early age. They do not attend school regularly because they perceive that education will not help them earn a livelihood. It is wise to expect high literacy from these groups when the government makes some serious efforts to ensure sustainable livelihood for these communities. The nomadic nature of these communities creates a continuation of studies of the children. It is one of the major reasons for the high dropout among nomadic children (Shah & Bara, 2020). There were more than half of the respondents among Dafer and Salt Khera communities had never enrolled on school education. Only a few of them have attained education up to post-graduate level. The results indicate that they are very far away from educational services in society (Kannabiran et al., 2017).

A study on 'Socio-economic Status and Educational Attainment and Challenges of DNT, NT and SNT' covered twelve communities during 2013-14 at Rajasthan. This study made essential observations regarding the education status of these groups. It stated that one of the reasons for the low level of education among these communities was a lack of awareness among parents regarding education. Even though education is free up to the middle

level in government schools in Rajasthan, hardly these communities have taken benefit of these programs. Being mostly illiterate, parent of NTs, DNTs and SNTs are not very concerned and serious about the education of their children. As per the census of 2011, the literacy rate of children having aged seven years or older was 79.19 per cent and 52.12 per cent for boys and girls, respectively, in Rajasthan, while it was 66.49 per cent for boys and 50.52 per cent for girls among children of DNT, NT and SNT according to data of the survey. The results indicated that the ratio of boys was better than girls among DNT, NT and SNT, but compared to the general population, it was lagging behind (Meena, 2020). The children of De-notified tribes had experienced a form of discrimination for the other students and teachers in schools. They are called their tribe's names with derogatory remarks. Sometimes, teachers asked them to sit down at the last batch in class and they were even asked to do manual work like cleaning classroom, sit separately for mid-day meals, and not to drinking water from a common pot and glass (Korra, 2020).

Steps of Inclusiveness for Nomadic and De-notified Tribes

Under Article 21-A of the Indian Constitution, every child is entitled to free and compulsory education from six to fourteen years of age. The state must ensure that all children are getting quality education under its provisions. It is the right of every child irrespective of their caste, class, religion, region, gender, or socio-economic background. The children of nomadic and De-notified groups are also entitled to the same as other children. However, the situation could be more favourable for the children of these communities. Their parents need to be made aware of the importance of education. The government should focus much more seriously to ensure that children of nomadic and de-notified tribes can have equal education opportunities. Jammu and Kashmir state introduced seasonal educational schools for the pastoralist communities. The teachers made temporary tents for nomadic groups of Himalayan regions who migrated during the winter season. Andhra Pradesh government came up with the concept of a school on the boat for the children of fishing communities of East Godavari district under Sarva Shiksha Abhiyan. IIT Bombay launched an anchored instruction program in their camp schools in Maharashtra to educate children of nomadic communities between five and seventeen years about the 3Rs through interaction, participation, and discovery. In countries like Nigeria and Kenya, they have adopted on-site schools that provide education to children of semi-nomadic groups at the place where they migrate. They introduced distance education to reach out

to nomadic children with the help of television and radio so these children can take benefit of education even if they migrate with their parents with the help of these devices (Suresh & Srinivasan, 2019).

The government should strengthen mobile schools which, will benefit children of nomadic groups to take advantage of it. This approach is adopted in certain regions of the state but such programs should be implemented properly in other areas where there is large a population of nomadic communities. It can be well-suited to the needs of the nomadic and De-notified tribes. The structured and planned activities with the objective of increasing the accessibility of education among nomadic groups can be very fruitful (Pigozzi, 1999). Mobile schools can be very favourable and offer viable atmosphere to achieve higher education levels among children of nomadic and De-notified tribes. The children also face discrimination at the hands of fellow students and teachers. Renke Commission (2008) suggested that discrimination is also one of the reasons for high drop out among them. We need to ensure that the children are not being discriminated against due to their background in the school. It also mentioned the need to develop such teachers among nomadic communities who move with them wherever they go so their children's education is not affected. The residential schools should be established so ~~that~~ parents can keep their children there and migrate for livelihood. The lack of education among nomadic and De-notified children is not only an infrastructural problem but also a lack of curriculum that satisfies their needs. The unique curriculum to be developed which equip them with their nomadic skills and provide livelihood opportunities in future.

Conclusion

Nomadic and De-notified communities have always been victims of social injustice and atrocities. They have been excluded from the purview of the social, economic, and political spheres for a long time. These groups have not been able to benefit from the education system in our country due to their nomadic way of life. Their children are left out of formal education due to their migratory nature. There are certain efforts made by the government to include them in the formal education system, but there is a long way to go to achieve desirable results. The government should identify these groups' special needs and formulate policies and schemes that can provide education to all children of NTDNTs. Education is very important for the holistic development of these communities and making them part of mainstream society.

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Integrating Information and Communication Technology (ICT) in Classroom Teaching for Improving English Pronunciation: An Experimental Study

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Abstract

In India, English is treated as an alien language. As a result, students need help to learn how to pronounce words correctly in foreign languages. Accurate pronunciation helps to develop an individual's social skills by building confidence to speak correctly. Although schools play a fundamental role in teaching English pronunciation, formal phonics training is given only at the pre-primary level in school. After that, the students learn the rest of the phonics by imitating their teachers or elders. The building of an inclusive atmosphere in the classroom through information and communication technology is emphasized in the new National Education Policy in 2020. It promotes the utilization of technology to aid in the improvement of pronunciation. This covers both the usage of online pronunciation programs and the tracking and evaluation of pronunciation using voice recognition tools powered by artificial intelligence. Students who utilize online dictionaries may learn more about the value of proper pronunciation and acquire the skills necessary to do so.

Furthermore, NEP 2020 emphasizes correct pronunciation in language teaching, and it has the potential to have a global impact as it encourages students to educate themselves on the importance of pronunciation in

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language learning. The paper analyzes the English pronunciation of undergraduate students of the Faculty of Management Studies and the Faculty of Social Science and Humanities at Ganpat University. It emphasizes the necessity of enhancing pronunciation to improve reading and speaking abilities. The study is based on pre-experiment and post-experiment analysis. Data is analyzed using various statistical tests to compare a student's pronunciation improvement before and after applying accent-enhancing procedures.

Keywords: Pronunciation, phonics, ICT, pronunciation problems, pronunciation training.

Introduction

According to Hornby (1995), pronunciation refers to how a word is said aloud and how a person says a language's words. The act of producing speech sounds, including articulation, vowel production, accent inflexion, and intonation, is referred to as pronunciation by Rebecca (1993), who also notes that pronunciation is frequently associated with the accuracy or acceptability of the speech sounds.

The Indian government's National Education Policy 2020 strongly emphasizes pronunciation. It is intended to make the Indian education system more accessible and inclusive. The National Education Policy 2020 emphasizes the importance of good pronunciation, which is essential for effective communication. The role of pronunciation in education is a crucial component of learning a language. Pronunciation is the key to being able to communicate effectively in any language. Learners need to be able to produce sounds accurately and fluently and understand the sounds of the language they are learning. Language learners often overlook the importance of pronunciation in language training. This is a mistake as pronunciation can affect the accuracy of language fluency and general intelligibility. It increases the learner's communication stability and helps develop a good understanding of the language being studied. Pronunciation refers to the way words are pronounced when speaking a language. It involves the sounds of the language, the intonation, and the manner of articulation. A good understanding of pronunciation is essential for successful communication in a language. Good pronunciation is a fundamental component of successful language acquisition and can influence a learner's ability to understand and be understood. Pronunciation is essential to language learning as it allows learners to comprehend and be understood by others. It also includes the stress intonation and rhythm of

speech. Poor pronunciation can lead to misunderstandings and communication breakdowns, which can be embarrassing and frustrating for language learners. O'Connor (1980) gives a good illustration of how vital our ears are. He says:

“Language starts with the ear. When a baby starts to talk, he does it by hearing his mother’s sounds and imitating them. If a baby is born deaf, he cannot hear these sounds and therefore cannot imitate them and will not speak.”

The above often occurs to somebody who is learning English. If one cannot listen to English pronunciation well, he cannot produce it well too. English has many complex sounds and words that can be difficult for non-native speakers to pronounce correctly; in addition, English has a wide variety of accents, which can make it difficult for language learners to understand native speakers. With proper pronunciation practice, language learners can increase their confidence when speaking English and can be better understood by native speakers. This is in line with Broughton (2003), who states that the teaching of pronunciation must always be arranged in the context of using native languages to become proficient in understanding and speaking.

By focusing on pronunciation, language learners can learn more about this structure of the language and gain more insights into the native speakers use it. Furthermore, pronunciation can also help build confidence in learners as they become more comfortable speaking the language. In this paper, the importance of pronunciation in education and the various strategies and techniques that can be used to help learners improve their pronunciation are discussed. The application of the English language in India is growing. It has been increasing steadily over the last few years. However, still, it requires more attention to improve its quality as per an article by the *Ministry of Human Resource Development on National Education Policy 2020* that there must be a steady stream of top-notch educational and printed resources in these languages, such as textbooks, workbooks, movies, plays, poems, novels, periodicals, etc., for languages to stay current and vital. To ensure that the most recent topics and ideas can be properly discussed in these languages, dictionaries and vocabularies must undergo regular official changes that are widely publicized. Countries worldwide provide study materials, printed materials, translations of significant texts from other languages, and ongoing vocabularies for languages like English, French, German, Hebrew, Korean, and Japanese. India has remained relatively tardy in generating such learning and study

materials and dictionaries to help retain its languages as dynamic and current as possible while maintaining their purity,

Information and Communication Technology (ICT) has become an essential tool in language learning. It provides learners with various digital tools and resources to help them learn a language, such as an online dictionary, websites, tutorials, and electronic courses. ICT also allows learners to access authentic language resources, such as audio and video recordings of native speakers, and to connect with native speakers of a language through online forums. It provides more interactive, visual, and engaging ways to learn a language.

2. Literature Review

Ramashego, M., and Nel, N. (2019). provide an outline of how information and communication technologies might be used to help struggling readers with their phonics education. The paper covers the different ways that ICT can facilitate such training and the importance of phonics instruction for reading growth and tests. The paper makes the case that ICT can be used in several ways to increase the efficacy of phonics instruction, including by offering more interactive and engaging activities, enabling greater individualization of instruction, enabling more effective assessment, and offering opportunities for phonics skill practice in various contexts. Using software programs as an example, Winn, T. & et al. (2019) explore how technology make teaching phonemic awareness and phonics easier. Also, they cover ideas for utilizing technology to improve phonological awareness and phonics training, such as using it to offer visual and auditory signals, opportunities for practice, and assessment, and love for customized instruction.

P.G. Abbas (2016) discusses the procedures and significance of English pronunciation instruction. The analysis of teachers' roles in pronunciation instruction is another component of the paper. Some recommendations have been made to improve pronunciation. It discusses ways to improve one's capacity for precise, and efficient communication. According to Nguyen, L.T., et al. (2021), pronunciation is something that both teachers and students value highly. The study recommends that instruction in English as a foreign language includes instruction on pronunciation. Sibaja, K.M. (2019) analyses English pronunciation and concentrates on the procedures necessary to advance phonics. Also, it discusses English as a second language in India. The importance of when learning English as a foreign language is covered in Low., Ee Ling (2016). It also emphasizes how instructors overlook pronunciation because they

lack the necessary phonetic and phonological understanding. It fills in the gaps between phonetics, phonology, and pronunciation while giving readers a research-based manual on how to teach English as effectively as possible. It connects the speech processes, addresses the articulation of English speech sounds, and employs multimedia for English pronunciation. Also, it uses the most recent research on English Pronunciation as a second language, which is beneficial for anyone interested in teaching English as a second language. The lack of emphasis on pronunciation in the curriculum for EFL/ESL is discussed by Wei (2006). In this study, its significance in the curriculum has been covered.

P. G. Abbas (2011) makes several recommendations for teaching pronunciation and suggests ways to improve the effectiveness of pronunciation instruction in ESL/EFL classes. The page also offers a variety of perspectives from educators, scholars, and authors on the state of pronunciation instruction. Dalton & Seidlhofer (1994) presents the importance of Pronunciation using the characteristics of various speech sounds, stress, rhythm, syllables, intonation, etc. Also, it covers a variety of pronunciation instruction techniques. Varasarin, P. (2007) looks into how pronunciation practice and language learning techniques affect the study habits of a chosen group of English-language learners and boost their speaking self-confidence. A curriculum for teaching pronunciation to young English language learners is described by Rekowski (2020). It covers a core group of crucial pronunciation issues for young learners and focuses on assignment forms.

To enlarge the relevance of Pronunciation in language teaching methods and address native-like Pronunciation, P. G. Abbas (2017) offers a thorough assessment of some significant issues, viewpoints, and methods of English pronunciation instruction. It focuses on the idea that clear pronunciation ought to be the end goal of oral communication. The study by Shak. P., et al. (2016) is based on a thematic analysis of the sounds that students frequently mispronounce. This study suggests using familiar sounds as the subject matter when creating a pronunciation tutorial video to assist students with limited spoken language ability with their pronunciation issues in the twenty-first century. The 26 letters of the English alphabet do not necessarily denote the same phonetic sounds, according to Mary, N.N. (2014). The contrasts between British and American English dialects and several techniques for improving speaking and listening abilities are also covered. By simulating spelling variance, Fackrell, J. & Skut (2004) aim to expand the scope of an existing name pronunciation dictionary. The study explores how pronunciation issues arise when using out-of-vocabulary

(OOV) terms in automated contact centres and in-car navigation systems. The significance, objectives, methods, and effects of the involvement of EFL teachers in the enhancement of Pronunciation are discussed by P. G. Abbas (2016).

Bakar, M.A., et al. (2019) talk about the evolution of programming that employs visual output techniques. Constructivism and the theory of cognitive load were both used in the development of this program. The study concludes that the module is appropriate for usage in higher education settings where programming is taught and learned. Image Word Inductive Model is discussed in Jiang, X., & Perkins' (2013) systematic experimental investigation. By introducing new words and images, the paper explores the Picture Word Inductive Model from the viewpoint of Bruner's learning structures and the cognitive load theory. A potent strategy for maximizing language learning and teaching, Task-based language teaching was emphasized by Hismanoglu, M., and Hismanoglu, S. (2011), who also described its advantages and difficulties. Gupta, C.D & KPN (2012) Haridas contributes ideas on potential ways to develop and enhance the educational environment in schools in Bihar to the education component of the ICT strategy and school education policy of the Government of Bihar. The purpose of the study is to highlight how ICT may be used to enhance school education while also integrating pedagogical techniques that consider the social restrictions of schooling in Bihar and compare them to the outcomes and implications in other regions of India.

In two public elementary schools, Mphahlele, R., and Nel, N. (2019) investigate using ICTs as a support method for students who are having trouble reading. It examines how ICT helps pupils who have trouble reading. The development of kindergarten pupils' phonemic awareness through technology-based interventions is covered by Brown, Je'Naya D. (2019). A description of the fundamental challenges that must be resolved before any language testing activities can begin can be found in Bachman, F. (1995). The fundamental ideas of effective foreign language teaching are covered in detail by Broughton, G. & et al. (1980) in their discussion of a wide range of teaching issues. Kelly, G. (2001) provides several tasks to demonstrate how to incorporate pronunciation practice with managing grammar and lexis to aid instructors in gaining theoretical knowledge. To improve teaching and learning, assessment, planning, and administration of education, multidisciplinary research, and innovation are encouraged under the National Education Policy, according to Alam (A).

Research Gap

Above all, literature reviews, and reading of several articles, books, reports, and websites have been done to analyze the gap in learning pronunciation through the application of information and communication technology. The comprehensive study of the literature has facilitated an understanding of the gap and has applied sufficient ideas to study the role of ICT in enhancing Pronunciation.

3. Background of the Study

Pronunciation in NEP 2020

The National Education Policy 2020 emphasizes the need to develop a communicative language teaching approach that focuses on the development of pronunciation along with other language skills such as grammar, vocabulary comprehension, and communication. It also causes the implementation of pronunciation drills and activities to help students improve their pronunciation. Besides, it suggests the introduction of digital learning platforms to help students learn and practice pronunciation.

The National Education Policy 2020 also encourages the use of technology to facilitate pronunciation development. This includes the use of artificial intelligence-based voice recognition tools to track and assess pronunciation, along with the use of online pronunciation programs.

Using such tools and programs can help students become more aware of the importance of pronunciation and provide them with the tools to improve their pronunciation. The National Education Policy 2020 also calls for the creation of an inclusive environment in the classroom to promote the acceptance of different accents and varieties of languages. This will help to create an atmosphere of respect for foreign accents and provide a platform for everyone to express themselves.

Reasons for Issues with Pronunciation in the English Language

- **History and Development of the English Language:** The history of the English language is extensive and intricate, which ~~that~~ has led to its current state. English amalgamates many languages, including Latin, Anglo-Saxon, and French. This mixture of languages has resulted in a various pronunciations and spellings that can confuse many people. Additionally, the language has evolved, with new word meanings and pronunciation being added all the time. This makes it challenging to keep up with the changing language and can lead to problems in pronunciation.

- **Improper Pronunciation:** Many people struggle with pronunciation because of improper usage. For example, some people correctly substitute one sound for another, such as using a "th" sound instead of a "d" sound. This can lead to confusion and difficulty in understanding the speaker. Some people may miss pronouncing words due to the influence of their native language.
- **Regional Dialect:** Another cause of confusion is using regional dialects. Different areas of the world have their unique dialects, which can lead to pronunciation problems. For example, the word "aunt" is pronounced as "ahnt", While in other areas it is pronounced as "ant". This can make a difficult for people to understand each other, as they may be using different pronunciations for the same word.
- **Difficulties of Learning English as a Second Language:** Those learning English as a second language can be challenging. Those who are learning the language have to learn not only the grammar and vocabulary but also the pronunciation. This can be difficult for many people, as the pronunciation of English words can be very different from their native language. Moreover, many people may not have access to native English speakers, making it difficult to learn proper pronunciation.

Pronunciation: Strategies and Techniques

Various strategies and techniques can help learners improve their pronunciation, including listening, imitation, and practice activities.

Listening activities can help learners become familiar with the sounds and intonation of the language and improve their understanding of the language. Imitation activities can help learners improve their pronunciation as they can practice producing the sounds of the language. Practice activities help learners become more confident in it as they can practice their pronunciation in different contexts.

Role of Information and Communication Technology (ICT) in Learning and Improving Pronunciation

Information and Communication Technology has greatly impacted how children learn phonics and spelling. Over the years, technology has revolutionized how children learn with interactive activities, visuals, and audio-visual technology. ICT can provide an interactive and engaging

environment for phonics and spelling lessons, which can help improve students' learning outcomes. Information and communication technology use in language acquisition has become increasingly important in recent years. The range of ICTs available to language learners is expanding rapidly, and they offer a range of advantages and disadvantages for language learning. ICTs have the potential to provide language learners with a wide range of tools to facilitate their language learning. Such tools can range from Computer-Assisted Language Learning (CALL) programs to online language learning platforms, to mobile applications. These tools can offer several advantages for language learning, such as increased access to learning materials, enhanced interactivity, greater autonomy, and improved motivation.

Information communication systems, such as computers and phones, can play a role in improving pronunciation by providing access to various tools and resources that can help to practice and improve pronunciation.

Some examples of information communication systems that can be used for this purpose include:

Speech Recognition Software: Speech recognition software can help practice pronunciation by listening to speakers' spoken words and providing feedback on their accents and pronunciation.

Language Learning Apps: The world of technology has opened a myriad of possibilities for language learners. English language learning apps are a great way for learners to learn the language. They provide an interactive and engaging learning experience that is tailored to the learner's level and specific learning needs. Unlike traditional classroom settings, language learning apps offer a personalized approach to learning. Apps provide a variety of activities and games to help learners practice and expand their English vocabulary and speaking skills.

Online Dictionaries: Online dictionaries often provide audio recordings of words pronounced by native speakers, which can be a valuable resource for learning how to pronounce words correctly. They are an invaluable resource for students of all levels of language proficiency, from beginning learners to advanced speakers.

Video Conferencing Tools: Video conferencing tools have become increasingly popular in recent years for learning the language. They allow students to interact with native speakers in real-time, enhancing their language-learning experience. It provides students with valuable insight

into a particular language's culture and customs and allows them to learn more than just the language itself. It gives students access to different accents, dialects, and cultural expressions of the language they are learning. They provide the chance to practice their language skills in real-time conversations. Students can access audio and video recordings of native speakers, study materials, and even virtual classrooms. These resources can help students learn more quickly and effectively.

The potential for destruction and the lack of human interaction are two significant downsides of using ICTs for language acquisition. Teachers should be innovative to help their pupils understandably communicate in foreign languages. This will make the class more fun and engaging. As a result, the pupils are eager and driven to learn. The researcher employs text-to-speech software as a tool to help students with their pronunciation in the hopes that this will increase their engagement with the teaching-learning process. It will make it simpler for them to master English pronunciation.

Theoretical foundations for the use of ICT in pronunciation teaching

The conceptual underpinnings of ICT use in pronunciation teaching are based on the following principles:

1) Constructivism: It is an educational theory emphasising the importance of learners and individual experience and understanding when it comes to learning. Constructivism suggests that learners should actively participate in the learning process and that the use of ICT can be effective in this regard. With the use of ICT, learners can interact with the teaching materials, and it can also provide feedback on pronunciation.

2) Cognitive Load Theory: It suggests that learners should be given tasks appropriate to their knowledge and understanding level to avoid cognitive overload. With the ICT aid, students can be given appropriate assignments for their comprehension level. Which can help with pronunciation instruction.

3) Task-Based Language Teaching (TBLT): Task-Based Language Teaching suggests that learners should be given tasks relevant to their needs and that using ICT can be effective in this regard. ICT can provide learners with tasks adapted to their individual needs and can help them become more aware of their pronunciation errors.

The impact of ICT on student's learning outcomes

ICT can greatly facilitate phonics and spelling learning when used in the classroom. It can provide interactive activities and visual aids such as videos and games that can help students better understand phonics and spelling concepts.

ICT can also provide audio-visual technology, such as talking books and speech recognition software, to help students learn how to read and spell. It can create a more engaging and stimulating learning environment for students. With interactive activities and visual aids, students can stay more focused and motivated. This can increase the engagement with material and help them to understand the concepts.

Additionally, ICT can help reduce the time it takes for students to learn phonics and spelling. ICT can help to improve student learning outcomes. For example, using interactive activities and visual aids can help make the material more engaging and easier to understand. Furthermore, audio-visual technology can reinforce the concepts of improving student retention. ICT can help reduce the time it takes for students to learn phonics and spelling. With the use of interactive activities and visual aids, students can stay more focused and motivated, and they can progress through the material at a faster rate. ICT can help to reduce the amount of teacher supervision needed during phonics and spelling lessons. With the interactive activities and visual aids, a teacher can spend less time explaining the material and more time helping students with their learning.

4. Problem Statement

The researcher developed the following research topic in light of the previously mentioned background:

How will the Online Dictionary help enhance the students' pronunciation of the undergraduate students of Ganpat University, Faculty of Social Sciences and Humanities, and Faculty of Management?

5. Research Objective

Based on the aforementioned problem statement, this study aims to determine whether using an online dictionary can help undergraduate

students at Ganpat University's Faculty of Social Sciences and Humanities pronounce words more clearly.

6. Significance of the Study

A few expected advantages of this research are as follows:

- The benefits of this research are anticipated to include:
- The result of this research can be used as a guide by other researchers to undertake another research that is connected to it.
- The findings of this study can help English teachers learn new information and improve their methods for teaching English using ICT, particularly pronunciation.
- It may be a fun way for the pupils to learn pronunciation.

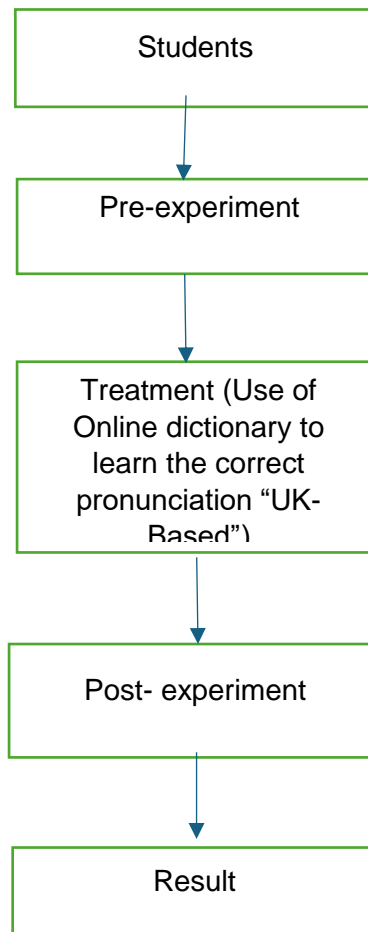
7. Research Methodology

The current study was carried out to compare the pronunciation of students from different fields. It was aimed to identify whether involving Information and Communication Technology in everyday classroom teaching will play a significant role.

The study involved undergraduates from the faculties of social science and humanities and management studies. This study produced 104 responses, but it could only include 87 undergraduate students because of incomplete data.

A convenience sampling method was applied among the first year of undergraduate students. The following elements were taken into account when creating the questionnaire using Google Form: the region, whether rural or urban, the language of instruction (English, Hindi, or Gujarati), and the parents' English language skills. The pupils were given a list of 50 words in the manner of the required questionnaire. The words involved the pronunciation of "ed," which is typically pronounced as "T" or "D," silent letters, 'B' and 'K' pronunciation of 'C' as 'S' or 'K', pronunciation of 'G' words pronounce as 'J' and 'G', pronunciation of 'S' as 'Z' or 'SH', pronunciation of 'T' as 'SH' or 'CH' or 'TH' or 'D' and some unusual spelling. These variables were chosen to examine how ICT affects an individual's pronunciation abilities. Incorrect pronunciations were noted in this form.

7.1 Conceptual Framework



7.2 Design

The researcher adopted a quantitative methodology to examine the data for this study. The researcher employed a pre- and post-experiment strategy to evaluate pupils' pronunciation skills. A statistical technique employed in the study was the Wilcoxon Signed Rank test. A nonparametric test was chosen since the data gathered for this study was not normally distributed. A nonparametric test was opted for. The subject was selected based on the convenience sampling method. Participants were first-year students of the faculty of social science and humanities and the faculty of

management studies. This research is divided into two parts: pre-experiment and post-experiment. Both outcomes were documented, observed, and analyzed. To assess their pronunciation abilities, students were given a set of 50 words one at a time. Any inaccurate pronunciations were noted on the form. Then, they were provided access to the Cambridge "UK-based" pronunciation online dictionary, where students had to listen to and learn the correct pronunciation of the word.

Following that, the same student's pronunciation was assessed. Students who had gone through the pre-experiment process and referred to the assigned online dictionary have gone through the same procedure again, and mispronounced words were noted in the form. In this study, researchers employed Excel, SPSS software for the analysis, and Tableau software to create the visualization impact.

7.3 Factors of the Research

In this research, we have considered the following factors for study: Class, Area, Medium, and Mother and Father's English Proficiency.

- The class was differentiated into the Faculty of Management Studies and the Social Science and Humanities.
- The area was divided into Rural and Urban.
- The medium was divided into English, Gujarati, and Hindi.
- Mother and Father's English proficiency were rated on a scale of 1 to 5. 5 being excellent and 1 being poor.

7.4 Data Collection Procedure

The questionnaire was created using Google Forms. The following factors were considered: The area, whether rural or urban, the medium of study (English, Hindi, or Gujarati), and the English proficiency of the mother and father. A list of 50 words was identified and given to the students in the prescribed questionnaire format. The researcher individually collected the data, calling the students one by one, filling in all their information, and hearing the pronunciation of each listed 50 words in the

form. The researcher had ticked all incorrectly pronounced words in the form.

Following that, they were given the Cambridge "UK-based" pronunciation dictionary, where they needed to listen and learn the word's correct pronunciation. Following that, the same student's pronunciation was evaluated and who had gone through the pre-experiment process was referred to the assigned online dictionary. The same procedure was repeated, and incorrectly pronounced words were noted in the form.

7.5 Research Hypotheses

The research hypothesis has been formulated as follows:

Null hypothesis (Ho): There is no significant difference between the Pre-experiment result and the post-experiment result for integrating ICT in classroom teaching.

Vs.

Alternative hypothesis (Ha): There is a significant difference between the Pre-and post- experiment results for integrating ICT in classroom teaching.

7.6 Research Instrument

The pronunciation experiment is the primary tool of this study. It was used in both the pre-and post-experiment parts. The pre-experiment, which was undertaken during the first meeting, was done to determine the prior knowledge of the students' pronunciation. The second meeting was held to propose using an online dictionary to enhance pronunciation, and the final meeting (following the experiment) was held to determine whether pronunciation was enhanced using the online dictionary.

8. Results

The researcher employed Tableau and SPSS software to analyze and visualize the gathered data. Following is the SPSS output:

Table 8.1.1 Frequency

		Statistics							
		Name	Class	Medium	Area	Mother's English Proficiency	Father's English Proficiency	Pre-Test	Post-Test
N	Valid	87	87	87	87	87	87	87	87
	Missing	0	0	0	0	0	0	0	0

		Class			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FSSH	38	43.7	43.7	43.7
	Management Studies	49	56.3	56.3	100.0
	Total	87	100.0	100.0	

Table 8.1.2 Class-wise frequency table.

		Medium			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	English	62	71.3	71.3	71.3
	Gujarati	23	26.4	26.4	97.7
	Hindi	2	2.3	2.3	100.0
	Total	87	100.0	100.0	

Table 8.1.3 Class-wise frequency table.

Area

Table 8.1.4 Area-wise frequency table.

Mother's English Proficiency					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	26	29.9	29.9	29.9
	2.00	27	31.0	31.0	60.9
	3.00	19	21.8	21.8	82.8
	4.00	8	9.2	9.2	92.0
	5.00	7	8.0	8.0	100.0
	Total	87	100.0	100.0	

Table 8.1.5 Mother's English Proficiency rating wise frequency table.

Father's English Proficiency					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	9	10.3	10.3	10.3
	2.00	19	21.8	21.8	32.2
	3.00	31	35.6	35.6	67.8
	4.00	17	19.5	19.5	87.4
	5.00	11	12.6	12.6	100.0
	Total	87	100.0	100.0	

Table 8.1.6 Father's English Proficiency rating wise frequency table.

The above table shows the frequency for the class, medium, area, and mother and father's English proficiency. In the pre-experiment, the average number of incorrect words pronounced was 13.2989, with a maximum of 44 and a minimum of 1. After integrating information and communication technology into the classroom, the average number of incorrectly pronounced words was 6.2759, representing a nearly 52.81% decrease from the pre-experiment results, with a maximum of 39 and a minimum of 0 (zero).

The paired t-test was supposed to be used for the comparison of the outcome of the pre-and post-experiment. Before, applying the paired t-test,

a test of normality was used to identify if the data was normally distributed or not. The following is the result of the testing of normality:

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test	.160	87	.000	.872	87	.000
Post-Test	.183	87	.000	.780	87	.000

8.2.1 Table for the test of normality

As the sample size is greater than 50, we must rely on the Kolmogorov-Smirnov test, but the significance value is less than 0.05, indicating that the data is not normally distributed. So, we must use the nonparametric test; otherwise, we can use the paired t-test after removing the outliers. However, no outliers were removed from this study to obtain a significant result, and a nonparametric test was used.

Wilcoxon's signed rank test was used for the comparison of pre and post-test results:

Descriptive Statistics								
	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25 th	50 th (Median)	75 th
Pre-test	87	13.30	9.369	1	44	7.00	10.00	18.00
Post-test	87	6.28	6.634	0	39	2.00	4.00	9.00

8.3.1 Table for descriptive statistics.

Ranks

		N	Mean Rank	Sum of Ranks
Post-test - Pre-test	Negative Ranks	79 ^a	43.58	3443.00
	Positive Ranks	4 ^b	10.75	43.00
	Ties	4 ^c		
	Total	87		

8.3.2 Table for ranks given to pre and post-experiment.

- a. Post-Experiment < Pre- Experiment
- b. Post-Experiment >Pre- Experiment
- c. Post-Experiment =Pre- Experiment

Here, the aforementioned table demonstrates that:

- a. 79 participants have more inappropriately pronounced words in the pre-experiment than compared to the post-experiment.
- b. 4 participants have a more incorrectly pronounced word in post-experiment than as compared to pre-experiment.
- c. In 4 Participants' performances no change was found in their pre and post-experiment count.

Test Statistics

	Post-test - Pre-test
Z	-7.724 ^b
Asymp. Sig. (2-tailed)	.000

- a. Wilcoxon Signed Ranks Test
- b. Based on positive ranks.

8.3.3 Table for test statistics

Based on the above table, the p-value is 0.000, which is less than 0.05, which shows us the significant result in the pre-experiment and post-experiment results.

This implies that the Pre-experiment and Post-experiment mark results differ significantly, which means that Integrating Information and Communication Technology in classroom teaching has positively effects on the students. In addition, the researcher is doing an individual percentage analysis and creating visualization with the help of the Tableau software:

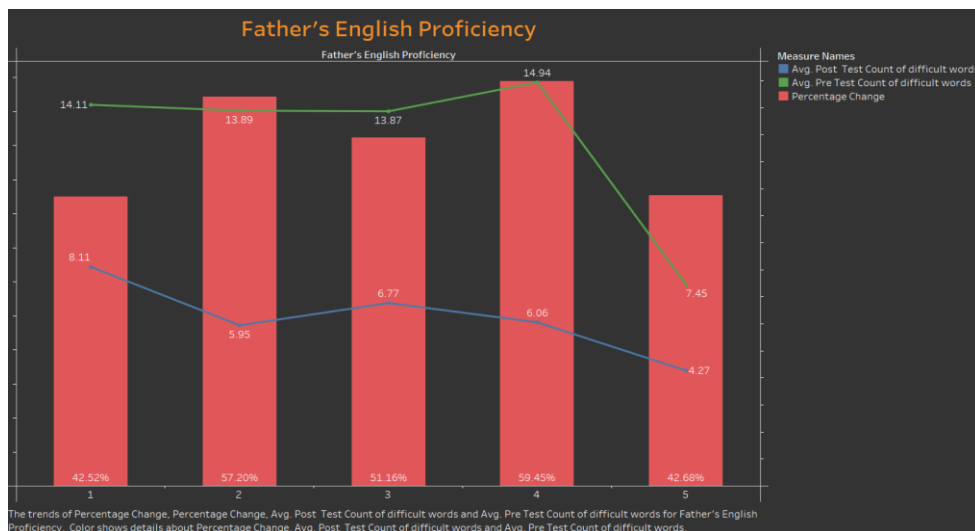


Table 8.4.1 Rating of Father's English Proficiency.

Table 8.4.1, shows the rating of the father's English proficiency with that of the average pre and post-count of incorrect words pronounced by the participants. The experiment's pre-average count is indicated by the green line, the blue line indicates the experiment's post-average count. Looking at the statistics, it becomes clear that students who gave a 4 had an improvement of 59.45%, indicating that the whole home environment greatly impacts students' lives.

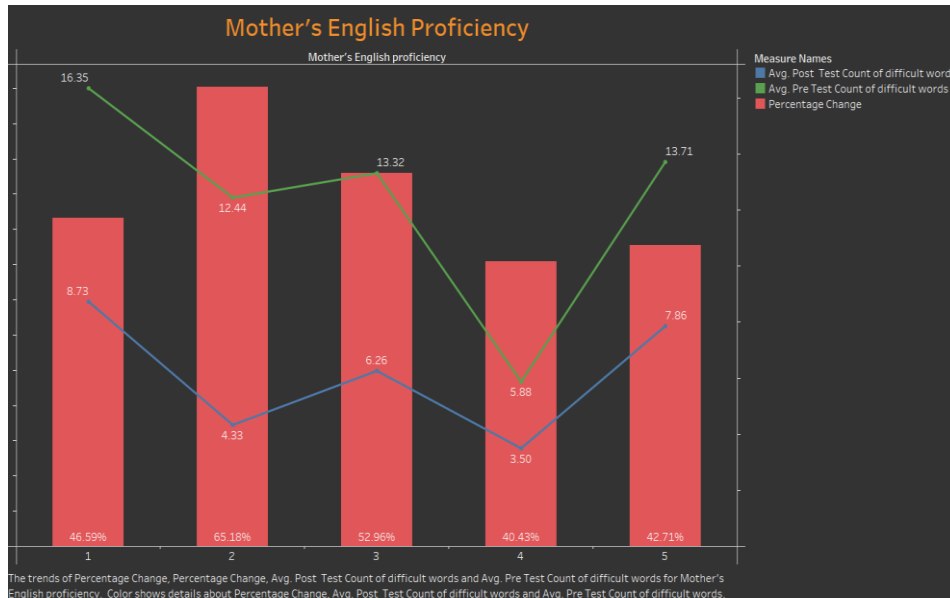


Table 8.4.2 Rating of Mother’s English Proficiency.

The above table 8.4.2, shows the mother’s English proficiency rating with that of average pre and post-count of incorrect words pronounced by the participants. The blue line depicts the experiment's post-average count, while the green line represents the experiment's pre-average count. According to the statistics, the average number of incorrect words pronounced for those who received ratings of 4 and 5 improved by almost 50%.

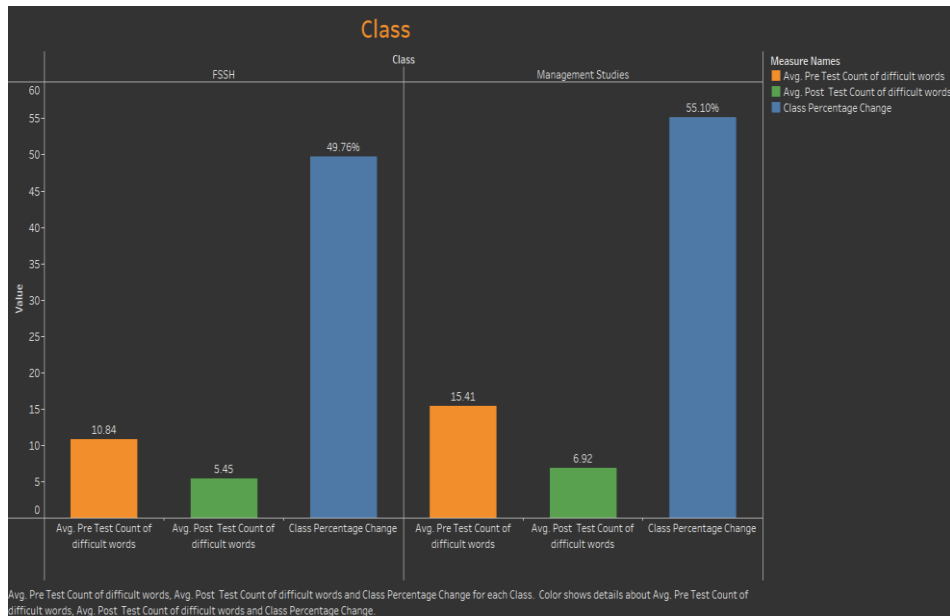


Table 8.4.3 Class-wise Comparison.

Above table 8.4.3, the class-wise comparison is shown. The collected data, compares two departments, i.e., the Faculty of Social Science and Humanities and the Faculty of Management Studies. FMS has a greater improvement of 55% from their average pre-experiment count, and FSSH also has a great improvement of almost 50 % from their average pre-experiment count. This shows the positive impact of Information and Communication Technology in everyday classroom teaching.

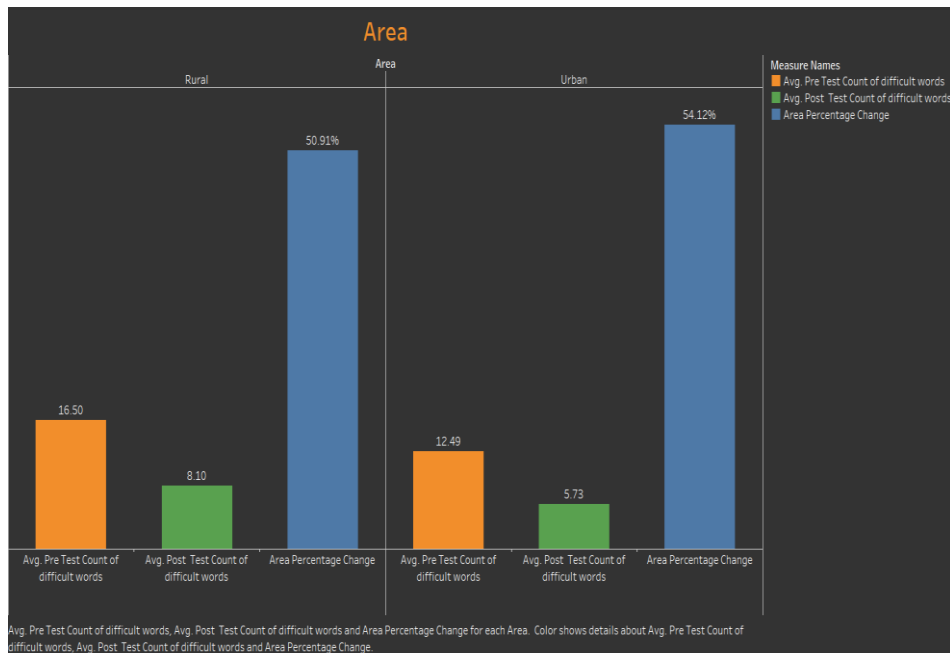


Table 8.4.4 Area-wise Comparison.

Table 8.4.4, shows the area-wise comparison of pre and post-experiment, incorrectly pronounced words. In a rural area, there was an average of 16.50 incorrect pronounced words in the pre-experiment, and they had improved to the average of 8.10 incorrect pronounced words in the post-experiment, which shows an improvement of almost 51% in the rural area. This suggests that ICT plays a significant role in rural areas as well. In contrast, the average number of incorrectly pronounced words in the urban region decreased from 12.49 on average in the pre-experiment to 5.73 in the post-experiment, showing an almost 54% improvement.

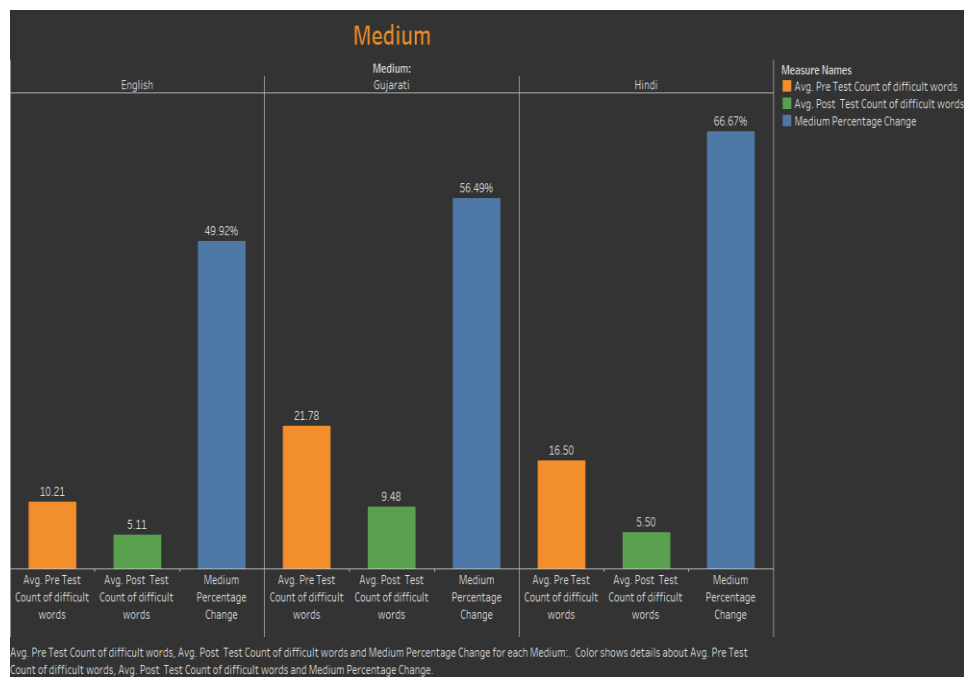


Table 8.4.5 Medium-wise Comparison.

Table 8.4.5, shows the medium-wise comparison. In the present study, students are from the English, Hindi, and Gujarati mediums. The above graph shows an improvement of almost 50 %, 56%, and 67% for the English, Gujarati, and Hindi respectively.

Class	Medium:	Area	Avg. Pre Test Count of difficult words	Avg. Post Test Count of difficult words	Percentage Change
FSSH	English	Rural	7.75	1.75	77.42
		Urban	9.25	4.46	51.74
	Gujarati	Rural	22.33	16.00	28.36
		Urban	18.33	9.00	50.91
Management Studies	English	Rural	13.89	8.78	36.80
		Urban	10.38	5.05	51.38
	Gujarati	Rural	26.75	7.00	73.83
		Urban	20.92	8.85	57.72
	Hindi	Urban	16.50	5.50	66.67

Avg. Pre Test Count of difficult words, Avg. Post Test Count of difficult words and Percentage Change broken down by Class, Medium: and Area.

Table 8.4.6 Overall Comparison.

In the above table 8.4.6, the Overall comparison is shown. The aforementioned table shows that ICT is important for both rural and urban students who study Gujarati and those who study in metropolitan settings and use English as their primary medium of instruction.

9. Discussion

The actual observations gathered through treatment and statistical analysis demonstrate that there is a significant difference between the pre-experiment and post-experiment performances of the experimental groups this discussion outlines the findings of the hypothesis.

The hypothesis says that: There is no significant difference between the Pre- and post-experiment results. (There is no effect of integrating ICT in classroom teaching).

Analysis of results supported the rejection of the hypothesis and demonstrated that the usage of the online dictionary in classroom teaching had a good impact on the under-graduated students.

The means of the experimental groups have dramatically changed, with the pre-questioning group's pre-experiment values changing from ($x=13.30$, $SD=9.369$) to ($x=6.28$, $SD=6.634$) in the post-experiment. We can see the improvement in the pronunciation of undergraduate students by comparing the average count of words that were improperly pronounced before and after the experiment. Also, the p-value is less than 0.05, suggesting the result is significant.

Undergraduate students benefit from using information and communication technology in the classroom. Also, it has demonstrated that the research study's components, which were taken into account, also had a big impact. From the visualization, it is evident that ICT significantly improves student outcomes in both urban and rural areas; by almost more than 50%. The study's results have also demonstrated the importance of the home environment on a student's academic success.

11. Conclusion

The role of pronunciation in education is essential for successful language acquisition. Pronunciation can help learners to understand and be understood by others as well as help them in other areas of language learning such as reading and writing. Good pronunciation helps students to develop their language proficiency and enhances their confidence in spoken communication. Moreover, it is essential for the listener to properly understand the language. To improve pronunciation, it is essential to listen to native English speakers practice phonetic symbols and, read aloud, and use an online dictionary. With the proper techniques and practice pronunciation can be improved even without taking formal phonetics training by using an online dictionary and imitating the pronunciation; hence, the difficulty in understanding can be reduced.

12. Limitation and Scope for the Further Research

The study has several limitations, which might pave the way for additional research in the future. First, due to a geographical restriction, this survey has only gathered responses from undergraduate students at Ganpat University's Faculty of Management Studies and Faculty of Social Sciences and Humanities. In the future, researchers should make an effort to examine more geographical regions to improve the generality of their findings. Second, because the study's smaller sample size, future research should consider including additional samples to produce accurate results. Finally, researchers can use more words and several ICT tools in the future.

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Investment and Spending Habits of Generation Z and the Role of Financial Literacy: Implications under NEP 2020

DOI: <https://zenodo.org/records/11229857>

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Abstract

Each new generation is born with new challenges that continuously change in every aspect of living. The habits related to investment and spending by Generation Z differ from previous generations. In this work, the authors tried to conceptualize a framework of investment and spending habits of Generation Z and the role of financial literacy for better decisions of personal finance. The world has the highest population of Generation Z, and they are and will be the cohort of the majority working class. The investment and spending habits of this age group of the population have a critical implication on the future of economic activities and businesses at large. On the broader side, India has developed and initiated the implementation of New Education Policy (NEP) 2020, and there is a dire need to include basic financial literacy modules and courses at the high school level. There is a need to make basic financial literacy courses mandatory in all the streams for the greater good of all the stakeholders.

Keywords: Generation Z, Investment and Spending Habits, Financial Literacy, Financial well-being, Personal Finance, NEP 2020.

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Introduction

The article tries to interweave aspects of Gen Z, its investment and spending habits, the role of financial literacy, and the National Educational Policy, 2020 (NEP 2020) to strengthen it. India is one of the largest democratic and liberal nations for educational reforms. It has over 850 universities and almost forty-thousand higher education institutions (HIEs). This reflects the high disintegration and diverse sizes of HEIs affiliated with these universities. There is a huge gap between what the NEP 2020 envisages and the ground-level situation. Around 40 percent of these affiliated institutions offer a single degree instead of a multidiscipline-based institutional structure of higher education, which is a basic requirement for the educational reforms in the country for the twenty-first century. (Aithal, P.S., & Aithal, S. (2020). Furthermore, over 20 percent of the colleges are struggling with enrolment and have, on average less than 100 students enrolling. This restricts the institution to enhance the quality of education. There are hardly 4 percent of institutes enrolling more than three thousand students annually because of a lack of standardized quality of education and regional limitations due to underdevelopment. The ruling government decided to revamp the Indian education system by establishing and announcing a broader National Education Policy 2020 to encourage the sector's growth. In the proposed NEP 2020, a fragmental focus is placed on life skills that include financial education and literacy. India generally ranks poorly in terms of overall education and gross enrolment ratio. Hence, financial literacy is a far-fetched dream to achieve.

If one looks at the bright side, India is one of the most populated countries with an adult population. At present, the current percentage of population for Gen Z who is born between 1997-2012 is 27 percent and that is where this study focuses. Gen Z is different in several aspects regarding their behaviour, and decisions related to life, education, occupation, and personal life. The habits of spending and investment are also distinct from the previous generations of millennials, Gen Y, and Baby Boomers.

Thus, this calls for a comprehensive look into the distinct area of study and identify how NEP 2020 can aid the financial literacy and change certain non-desirable spending and investment habits of Gen Z.

Review of Literature

Generation Z

According to the Pew Research Center, Generation Z refers to the generation born between 1997-2012, following millennials (born between

1981-1996). They have very different approaches towards everything, and henceforth they are changing the world with their new approach to everything. Gen Zs are the children of Gen X, people born between 1965 and 1980 and they are the prior generation to Gen Y; People born between 1981 and 1996. Generation Z is also called zoomers, iGeneration, Gen Tech, Digital natives, Gen Wii, Founders, Centennials, post-millennials, or Homelanders. They spend their time largely online (working, learning, spending three to six hours daily on social media, viewing movies and other entertainment content, etc.). Further, Gen Z expects to utilize the information, follow reviews, and do their homework before buying anything (Grigoreva et al. 2021).

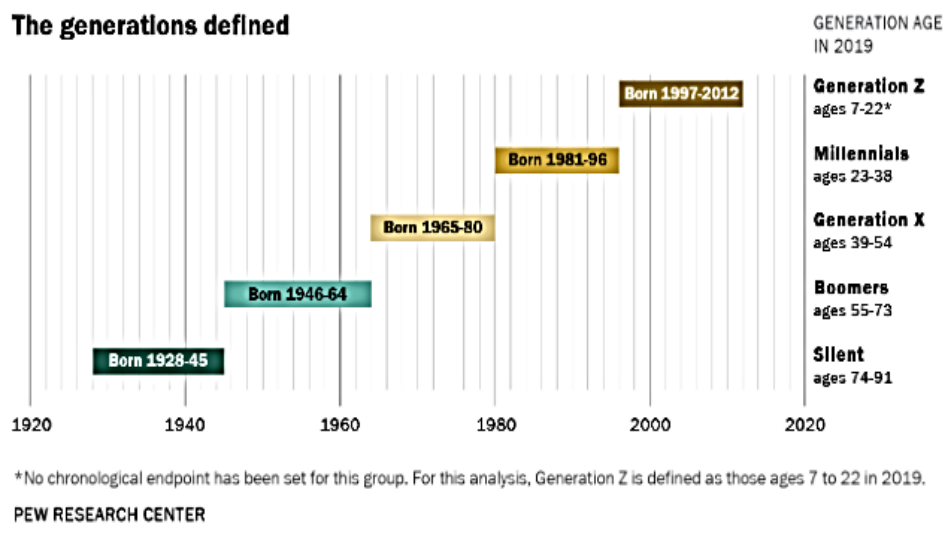


Figure 1: Definition of Generations, Pew Research Center

In comparison to the world's most developed countries, India has a major share of millennials and Generation Z in terms of the total population. Millennials and Generation Z sum up to 52 percent of the population as of 2021, which is higher than the global average of 47 percent. Up to 2030, when India's share of Generation Z and Millennials will be 50 percent, greater than the global average of 46 percent, this trend will continue for the coming decades.

Generation Z has a predominately WEIRD (Western, educated, industrialized, affluent, and democratic) upbringing, which is found to be true for the upper-class and upper-caste population in India's major cities. Gen Z, however, expresses themselves differently in second- and third-

tier Indian towns due to the fusion of two diametrically opposed sources of influence, which makes them uniquely distinctive. To comprehend these differences, it is crucial to take note of how Gen Z in non-metro cities in India differs from the Gen Z global schema.

As far as financial well-being is concerned, Malaysia's Gen-Y was found to be a major defaulter with 47 percent in 2013 (Alwi et al. 2015). It further shows that Gen Y finds difficulties in saving money and has limited knowledge of financial planning. Thus, it is intriguing to check the same phenomena for Gen Z as well. Wijaya and Afgani (2021) found a significant impact of financial literacy and risk tolerance on stock investment among Generation Z.

Regarding the Gen Z population in India, a recent study conducted by Srivastava et al. (2023) attempted to compare and assess consumer behaviour between Gen Z and Gen Y regarding the acceptability and implementation of digital payment and other FinTech services. The findings indicated that behavioural intention was significantly influenced by customer satisfaction, effort expectancy, and performance expectancy.

Investment and Spending Habits

Kreinin (1959) observed a positive connection between age and responsibility for investment in different avenues. Zhong and Xiao (1995) likewise observed that age positively affects stock property. They further clarified that corporate security is one enhancement to benefits reserves. Hossain and Nasrin (2012) likewise observed that age significantly affects capital determination choice.

As per the views of Marda et al., the interest and ease of access affect investment activities for millennials and Gen Z. Adding to it, the authors have found a significant relationship between the ease of having an integrated educational platform and general interest in investment.

According to Mazzatto (2022), the security of Generation Z is their top priority. There is a good chance that Generation Z, like Millennials, may lose faith in huge organizations after seeing the 2008 Financial Crisis at such an early age and the current COVID-19 pandemic as young adults.

Ahuja and Grover (2023) discovered intriguing findings in their recent study concerning the Indian setting on the correlation between Gen Z's propensity to invest in stock markets and their overindulgence in social networking sites. The mediating effects of perceived behavioral control and

financial attitude were also examined in this study. The findings indicated that excessive usage of social networking sites had a beneficial effect on investment intention. Financial attitude and perceived behavioral control were also found to have a significant influence on investment intention.

The results of Michaela and Anastasia's study from 2022 showed that saving practices and financial literacy had a big influence on the capital market investments made by Generation Z. According to this report, Generation Z is changing from a society that saves money to one that invests it.

According to Birari and Patil's (2014) study on investment and spending habits, it was discovered that students with varying levels of education have considerably diverse spending patterns over a wide range of categories. It was also observed that the gender difference is also evident to some extent. This generation's personal disposable income gets spent on products and services such as fast food, shopping, investments, mobile phone costs, and transportation. There is a tremendous opportunity for internet advertising, shopping centers, retailers, motels, fast-food chains, and mobile phone firms to capitalize on young people's spending.

A recent study conducted in Indonesia by Prasetyo and Rahidi (2022) observes Gen Z as one of the fastest-growing investor bases. When Generation Z makes trades in the stock market, they are not entirely rational since they also have behavioural biases and a lack of financial understanding.

According to the study by Dukhande et al. (2022), the respondents who largely belonged to the initial stages of Generation Z found knowledgeable about mutual funds as a possible channel for investing their money, and most of them had already done so. Nugraha & Rahadi (2021) while analysing "Young Generations Toward Stock Investment Intention in an Emerging Market," found that attitudes to behaviour were found to have a major influence on stock investment. This attitude is also affected by financial literacy.

The study's (Ilyas et al., 2021) results provide credence to the idea that investing intention is positively influenced by financial literacy. The intention to invest is independent of one's financial circumstances. The financial mentality has a beneficial impact on investment intention. Both financial well-being and financial literacy have a favourable impact on one's financial attitude. Financial attitude may act as a partial mediating factor in the relationship between investment intention and financial knowledge.

However, one's financial attitude can act as a complete mediator in the relationship between investing objectives and financial security. Better financial attitudes and knowledge are expected among Gen Z and Millennials, which will increase interest in more targeted investments.

A high financial literacy rate is linked to investor rational decision-making because persons with better financial literacy tend to engage in procedures that lead to economic and wise decision-making (Lantara & Kartini, 2015)

In terms of financial investment chances, Gen-Z is particularly receptive by nature, according to descriptive research by Gupta and Nihlani (2021). But they require readily available tools to help them navigate this constantly evolving industry. The study analyzed several variables that affect their investment choices. Even if the process is largely hassle-free as of 2021, an investigation based on the accessibility and simplicity of using demat accounts revealed that there is still room for improvement.

More youthful ages, regardless of whether they be recent college grads, Gen Z, or past, are bosses of progress with regard to conventional monetary services because of a variety of variables.

According to the study done by Michael McQueen Gen Z's explores technology more than the other generations like Gen X and Millennials, according to the study conducted Gen Z spends more than one hour and twenty minutes on average in front of a TV or Mobile or PC as many information regarding financial investment is on one click away for them, and they use this advantage in favor of them.

According to Bascha (2011), Generation Z values honesty, self-dependence, adaptability, and self-freedom as non-negotiable traits. The study also suggested that the Gen Z people are more like a risk-averse generation as they grew up in a very protective environment and under the very secure umbrella of their parents so it is very different to say how will they treat risk associated with the investment

Suryani et al (2022) found multiple overlapping factors determining millennials and Generation Z for their investment decisions. The first set of factors are intrinsic and personal, such as financial literacy, self-motivation, surrounding society, experience of investment, and availability of capital. The second set of factors are external market forces such as publicly available information and its transparency and digital content creators.

According to the EverFi survey (2023), 84 percent of Gen Z rely on their parents and family for financial advice even though the majority of them are worried about financial literacy. This is problematic as many parents have varying financial knowledge and have invested in less sophisticated options for savings, retirement, mortgages, and loans than they did growing up. Further, they frequently do not completely comprehend these options themselves. This can lead to a generational curse being passed on regarding poor financial decisions from one generation to another. Financial education and literacy can help break this curse.

The world has changed significantly from ten years ago due to recent moves towards self-service, automation, AI, and a multitude of App-based services for pre-approval credit cards, stock investments, and loans. Generation Z needs to make additional financial decisions than its predecessors did because many banks and employers no longer provide comprehensive support for retired professionals investing in retirement.

Several members of Generation Z watched millennials struggle with debt and school loans as they grew up, which affected their financial practices. Gen Z tends to be quite leery of taking on any debt. While taking on excessive debt might sometimes be a terrible financial move, Generation Z must also establish credit and take on little, manageable debt to obtain mortgages and loans in the future and make greater financial decisions.

Programs for teaching innovative debt management to Gen Z consumers should focus on enhancing their creditworthiness. Also, knowing how debt works will help Gen Z consumers manage their money more effectively. Even though many people already realize that having too much debt is harmful, many people nevertheless use credit cards from an early age.

According to a recent study by Nag and Shah (2022), financial literacy most positively impacted, Gen Z investors' inclination to invest was most positively impacted by financial literacy. The mediating variables, attitude toward investing and perceived behavioral control, strongly positively impacted investment intention. The attitude toward investing and the perception of behavioral control were both positively impacted by financial literacy.

Financial behavior and financial well-being are positively correlated, but financial fragility has a negative impact on financial behavior, according to a study by Shankar et al. (2022) on the financial well-being of Indian Gen Z students regarding financial literacy, financial

fragility, financial behavior, and financial technology. Remarkably, it was discovered that financial well-being is not much impacted by financial technology or financial knowledge.

Financial Literacy

As quoted by Castro, R.G. et al (2021), financial literacy and financial education are defined by the Organization for Economic Co-operation & Development (OECD) as “To make wise financial decisions and eventually achieve individual financial well-being, one must possess the combination of financial awareness, knowledge, skills, attitude, and behavior known as financial literacy” (OECD, 2012). On the other hand, financial education is defined as “the process by which financial consumers and investors gain a better understanding of financial products, concepts, and risks and, through information, instruction, and objective advice, gain the skills and confidence to become more aware of financial risks and opportunities, make informed decisions, know where to go for help, and take other effective actions to improve their financial well-being.” (OECD, 2005). Knowing how to handle money, planning for various financial goals, and selecting the right financial avenue are just a few examples of the information, attitude, and behaviour that make up financial literacy.

Worasatepongsa, P., & Deesukanan, C. (2022) observed that Generation Z in Thailand, despite having a great hold on financial management ability, showcased poor investment habits.

Nonetheless, despite its importance, India has the lowest level of financial literacy among all the BRICS countries, according to a 2019 National Center for Financial Education. Similarly, “only 27% of Indians are financially literate”, according to a recent survey by the Securities and Exchange Board of India. Financial literacy is rarely promoted in schools, despite parents often trying to educate kids about managing finances by opening a bank account for them or even by giving them a toy moneybox at home. As a result, India's educational system significantly lacks institutional rigour, which leaves pupils uninformed and unprepared. The youth fall into a deeper hole due to the developmental gap in financial literacy (Bhattacharyya, *Telegraph*, 11 Jul 2022). In this rapidly growing digital AI world, fostering financial literacy from schooling years has become crucial. Furthermore, everyone had to "handle their funds" as a result of the recent pandemic, which emphasizes how important financial literacy is in India. Many mobile and digital personal financial tools have been developed over the past several years to help consumers better organize, streamline, and manage their funds. These apps also offer advice on making investments

and creating surpluses. Yet, relying solely on these programs without any background knowledge can be detrimental. Financial "literacy" can be acquired by carefully studying the many facets of the financial world.

Yang et al. (2021) explored strong relationships among "risk tolerance, financial well-being, financial literacy, overconfidence bias, herding behaviour, social interaction, stock market investment intention, and stock market participation."

According to Burnet (1965), financial literacy is not only about writing or reading but it is also about learning, knowing, choosing, improving, comparing, creating, and achieving basic status in society and human rights.

As per an empirical study by Do, H.L., & Pham, B.L. (2022), financial literacy is most strongly impacted by knowledge about investments and savings. Financial conduct, financial attitude, and financial knowledge are additional internal components that have been recognized as reflecting models influencing financial literacy. In addition, the study looked at the positive impacts of age, income, and education level on financial literacy in contrast to gender's negligible effect.

As per the views of Jackson, literacy is not only about learning or understanding things, but it is also about interpreting and reflecting on the behaviour to make decisions and communication. "Literacy as a socially constructed activity and argues that literacy contributes towards both, constructing the reality in which it operates and is concurrently influenced by reality; each plays a part in the production of the other," Gee (1990) noted.

According to Jacob, Hudson, and Bush (2000), financial knowledge has become an essential skill and survival tool for people. In his study, Hogarth J.M. (2006) stated that "financial education includes: (1) being knowledgeable, educated, and informed on the issues of managing money and assets, banking, investments, credit, insurance, and taxes; (2) understanding the fundamental concepts underpinning the management of money and assets (for example, the time value of money in investments and the pooling of risks in insurance); and (3) using that knowledge and understanding to plan, implement, and evaluate financial strategies."

According to Coussens (2006), "Financial literacy represents the combination of financial access, education and understanding plus Investors' interest, attitude and practices that directly affects the financial

effectiveness of the investors and will directly or indirectly affect the society at a large.”

Aryadi (2022) received the conclusive result of the study finding where that financial literacy affected people’s investment decisions.

Juwita et al. (2022) show that non-fundamental variables are still important, as seen by herding and heuristics on millennial and Generation Z investors in Indonesia. Another implication is that, in the very volatile environment of the Bitcoin market, many investment decisions are “not yet” sound.

The globalization period has increased the significance of having a sound financial understanding for long-term money management. Every person has a basic level of knowledge necessary to manage their resources for future requirements. The ability to manage money has long been a crucial life skill for people engaged in economic activity. Financial literacy is defined by Sarega (2017) as information, skills, and beliefs that have the power to change attitudes and behaviour to enhance the accuracy of processing and financial decision-making for obtaining wealth.

According to Tustin (2010), financial literacy fosters people's cognitive and financial abilities and encourages them to budget and manage their finances appropriately. As a result, those who are financially literate are conscious enough to use financial goods like stock, insurance, and others. People must be financially literate to maximize their return on investment.

There are certain dangers when it comes to investment and the financial well-being of Indians. According to a recent poll globally, over 70 percent of Indian respondents can hardly manage their personal finances for a quarter since they underinvest in emergency savings. This was found evident during the times of the Covid-19 pandemic. Many families are left without any survivable funds in the case of huge hospitalization bills and loss of jobs. The VISA survey also found surprising results such as “Indian parents do not talk to their kids about money management as often as they should.” The nation averaged 10 days in a year as compared to the average of 19 days globally when it comes to conversations between parents and their kids about budgeting, saving, and responsible spending.

According to a global poll conducted by Streak, a teen-focused Neobank, only 27 percent of adults in India hold basic financial literacy, which is lower than the rates in the US (57 percent), the UK (67 percent), and Singapore (59 percent). Up to 45 percent of students have no idea how

to make a budget, and 60 percent of students have no idea what investments are, how risk and reward work, or how much money is worth over time. On the other hand, students' comprehension of concepts like interest computation, financial products, and the fundamentals of inflation was only slightly better.

NEP 2020

In 2020, the Indian government unveiled its new education strategy- The National Education Policy 2020 (NEP 2020) was envisaged in response to the recommendations made by a panel of experts led by Dr. Kasturirangan, a former chief of the Indian Space Research Agency (ISRO). It was created to modernize the present educational system and establish a guideline for a better and more inclusive India. On July 29, 2020, the Indian cabinet gave their approval. Looking back to the development of the education policy framework, India enacted the first NEP in 1968 and the second one, following a long pause, in 1986. The incumbent Bhartiya Janta Party (BJP) committed to implementing radical reform in the Indian educational sector in its election campaign for the 2014 parliamentary elections (Saha Mushkan, 2020). The Draft NEP proposes decreasing course content to improve critical thinking, experiential learning, and more all-encompassing learning that encourages peer discussion and logical thinking. Additionally, it proposes changing the course curricula and teaching framework from a *ten plus two* system to a five plus three plus three plus four system design to enhance student understanding based on young children's intellectual growth. A new National Education Policy was adopted by the government on July 29, 2020, to revamp the current Indian educational system.

The gap between public and private institutions has been reduced thanks to tendencies toward liberalizing educational systems. The likelihood of choosing a degree that will lead to better career options in the future has risen significantly in recent times (Hiremath, S. S., 2020). In this common situation, NEP 2020 is introduced to give the Indian educational system a boost and advance it to the next level.

As found in the empirical study by Kalyani, P. (2020), NEP 2020 is beneficial to larger groups of stakeholders, including students, parents, teachers, the education system, employers, and the economy, by impacting employability and opportunities for self-employment.

According to a practitioner-based study by Kumar, K. et al. (2020), there are several significant gaps and problems on the ground level that must

be fixed to encourage “excellent education for all” and achieve NEP 2020's goal of benefiting the entire world. Generally, the age-old Indian educational system has been uprooted by this new NEP 2020. “Additionally, it offers the urgently required structural and institutional adjustments that are completely consistent with the government's massive nation-building initiatives and the SDGs' objectives.” The study by Jorasia and Kumar (2022) shared some constructive observations on the dual degree program proposed under NEP 2020.

Aithal, P. S., & Aithal, S. (2019, 2020) analyzed the NEP 2020 extensively in their two consecutive studies on NEP 2020 regarding implementation strategies. The study listed the merits of NEP 2020 and provided several constructive suggestions for the successful implementation of the NEP agenda. It was determined that the reforms would begin in the academic year 2021–2022 and last through 2030 when the first stage of the transformation would likely become apparent.

Gaur, A. (2022) views NEP 2020 as an advanced document that recognizes the current socioeconomic situation and can address future challenges. He also hopes that by 2030, India might be the world leader in education if properly implemented.

Research Gap

Based on the available literature, it has been observed a lag of conclusive results about the financial habits of Gen Z. Certain salient factors instrument the investment and spending decisions of Gen Z. After a detailed survey of the literature, it has been found to look at the level of financial literacy and its impact on the investment and spending habits of Gen Z.

Further, there aren't any studies looking at NEP 2020 and its execution for the better financial well-being of Gen Z and future generations. In the draft document, it has been mentioned to incorporate financial literacy as a part of the curriculum. There is still a lot to be contemplated compared to these suggestions toward the implementation level.

While browsing through the existing subjects offered from class VII onwards, there is no subject or content in a subject introduced so far in India's current education system. The chapter on Money is getting introduced in class X. Hence, it is recommended to include basic financial education starting from class VI, if possible, as the next generation will be far more rapid in terms of understanding and using monetary transactions than Gen Z.

At present this article creates a conceptual framework and will lead to empirical testing in the coming times.

Research Objective

Core Objective: To understand the role of financial literacy in instrumenting investment and spending habits of Gen Z with the help of NEP 2020 implementation.

Sub-Objectives:

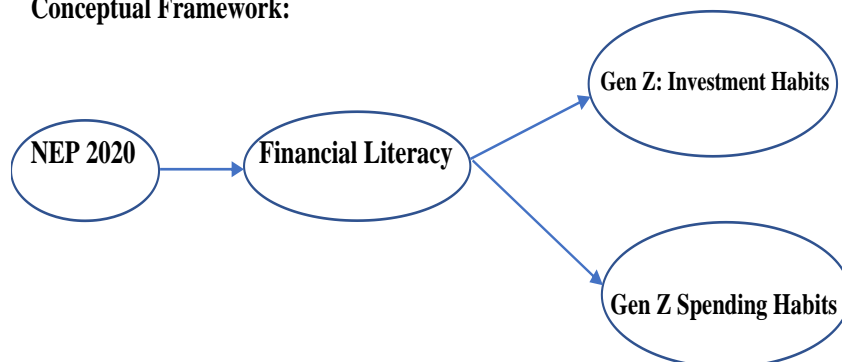
To explore the investment habits of Gen Z.

To explore the spending habits of Gen Z.

To check the available level of financial literacy of Gen Z.

To assess the impact of financial literacy on the investment and spending habits of Gen Z.

Conceptual Framework:



Methodology

This article is purely based on secondary data. It is exploratory in nature. The data sources are academic journals, web resources, consultancy reports, and published reports from government authorities.

This article is based on the conceptual discussion on the characteristics of Gen Z, exploring the overall level of financial literacy scenario in India, identifying specific differences in terms of investment and spending habits of Gen Z and Millennials, and highlighting the gist of the NEP 2020 framework. The measurement scales for investment and spending habits have been identified. Further, there are several reliable scales available for gauging financial literacy. In the subsequent study, the

survey will be conducted, and results will be concluded with the help of statistical methods.

Implications of the Study

We recommend initiating the inclusion of basic financial literacy courses starting from a single chapter while implementing NEP 2020 in the new pattern of reform beginning from secondary school education. As per the NEP 2020, the new segment of secondary school is designed to provide multidisciplinary subjects including Liberal Arts education. Apart from schooling, students opting for non-commerce fields such as humanities, science, fine arts, technology, and engineering should also have at least a single course during their overall curriculum.

We also observed that several families suffer from limited or loss of financial well-being and are heavily trapped from generation to generation in the web of loan sharks and private lenders. This is a generational curse that can be reduced and eliminated if the future generation of those have a basic understanding of managing their financing.

From the study of available secondary resources, it is found that two distinct entities namely, the financial education section of NSFE and NEP 2020 of Higher Education that deal with financial literacy must be connected. According to the NSFE's implementation plan for 2020–25, content must be created targeting specific audiences ranging from teachers, schoolchildren, young adults, women, new employees, entrepreneurs, senior citizens, and illiterate people separately and be delivered via multiple mediums in regional language for better spread and adaptability. For pupils in Grades VI through X, the financial education curriculum has to be updated. Accessibility for people with impairments should be improved for financial literacy content (Divyangjan, etc.). By using co-curricular methods and promoting financial literacy as a crucial component of vocational programmes such as ITI and Poly-Technical courses and developing courses on basic financial literacy for students in higher school classes (Classes XI-XII).

A thorough assessment of the literature was done by Goyal et al. (2021), taking into account a variety of factors that affect personal financial management behaviour (PFMB). Financial literacy (FL), technical components, psychological characteristics, social and cultural dimensions, financial experience, and socioeconomic level were these categories. Some of the primary outcomes of PFMB are financial well-being, quality of life, financial success, happiness, financial vulnerability/resilience, and financial

pleasure. Further research is needed to evaluate the independent impacts of these antecedents and determinants on variables such as financial literacy, financial decision-making, and financial well-being.

Social Entrepreneurship Education in Social Work Colleges in Gujarat: Evaluation of Curriculum, Pedagogy and Teaching Practices

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Abstract

Higher education institutions across the world are considered as the hotspot of ideas and innovation. It has influenced the local ecosystem and transformed not only the business and science and technology but also metamorphosed the social sector. The transformation in the social sector may be witnessed in the form of a wave of entrepreneurship in the social sector. This means infusing business principles in the social development sector has the potential to solve many problems the social sector has been facing for a long time. Social entrepreneurship as an area of study is at a nascent phase in India. Educational institutions across India are finding traction in this emerging area of study. Some universities have started degree programmes on social entrepreneurship. Some of them are offering it as a course within the degree programme. However, higher educational institutions have started pushing social entrepreneurship but systematic intervention is required to make such efforts more meaningful and lucrative.

Against this backdrop, the proposed paper will assess the infusion of social entrepreneurship in the syllabus, pedagogy, and teaching practices of the Social Work Institute located in Gujarat. Social Work College in Gujarat offers undergraduates (BSW), post-graduates (MSW), and Doctoral Programme (PhD). The state of Gujarat has been chosen for the study because it is considered one of the favoured business destinations. The changes in the syllabi of the discipline of social work will be perused for the study across Gujarat. The paper's outcome will help in knowing

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the actual status of social entrepreneurial education in curriculum, pedagogy, and teaching perspectives. It may also help in designing a skill-based & focused approach to prepare students for social entrepreneurship through curriculum, pedagogy & teaching practices intervention.

Keywords: Social Entrepreneurship, Social Entrepreneurship Education, Teaching Pedagogy

Introduction

The significance of social entrepreneurship has gained a spot in the curricula of prestigious academic institutions and is the critical main topic of debate in many academic forums. But in the Indian context, Non-Governmental Organizations (NGOs) often use charities as their primary source of growth model. Although known for a specific purpose, they depend on external funding bases such as government grants, donations, Corporate Social Responsibility (CSR) support, foreign aid, or private charities. However, many NGOs are now moving towards a self-sustaining model of social change. Due to the complexity of social entrepreneurship, it is challenging to develop a model and a fixed definition of it. An excellent example of social entrepreneurship is the Self-Employed Women Association (SEWA), Barefoot College, Akshaya Patra Foundation, Goonj, Smile Foundation, Give India, Swaniti, etc. These are a few examples of non-profit social transformation that could be featured. Especially in Gujarat, social entrepreneurship does not have much weight for many reasons. "In today's contemporary society, there is an emergence of social enterprise which has been considered as responses to inabilities of the commercial and public sector in solving the social problem faced by the society which includes problems like unemployment, poverty, and inadequate social services" (TAM, 2017). "Because Social Entrepreneurship is considered as an approach to resolve the social and societal problems through innovative solutions that ensure the sustainability of social value" (Mort et al., 2003). Furthermore, the term "social entrepreneurship" has a solid foundation in a business context (Peredo & Mclean, 2006).

India is just the second-largest democracy after the United States, where economic development is supported by such a democratic framework, considering the resemblance between India and other developed countries based on their various political backgrounds (Khanna, 2007). Another essential characteristic is that private ownership was unrestricted in the earliest market economies Even though there are many

different religions, ethnic groups, cultures, and languages spoken in India today, English is still regarded as the business language. Due to its vast population and fastest-growing economy, India has a severe shortage of resources and a high demand for meeting social and environmental concerns. Additionally, India is experiencing critical social issues such as poverty, healthcare system, unemployment, environment, water, and sanitation. Therefore, social entrepreneurs may play a key role in addressing such massive challenges

Entrepreneurship Ecosystem in Gujarat

Gujarat is known for its community and enterprising industries. In addition, Gujarat has become a natural choice for entrepreneurial investors due to its friendly business environment, robust infrastructure, rich natural resources, and skilled workforce. And government support policies. The government has promoted start-ups by identifying business ideas and opportunities and facilitating networking, mentoring, and incubation.

- High investment potential in India, according to The National Council of Applied Economic Research
- According to the World Bank and Department of Industrial Policy, the most convenient to do business.
- According to SME Forum India, Gujarat is one of the best states for start-ups.

To promote entrepreneurship in the social sector and look at the entrepreneurial opportunity in Gujarat, this fact motivates researchers to study social entrepreneurship education in higher education institutions in Gujarat regarding social work colleges in India.

Social Entrepreneurship

“Bill Drayton was the first person to be given the term social entrepreneurship in 1980. As of now, social entrepreneurship is gaining significant importance in education, showing that societal problems can be solved through innovation, value creation, sustainability and outcomes associated with entrepreneurial efforts have emerged as a critical area” (Austin et al., 2006). The view of social entrepreneurs depends on the country’s geography, culture, and ecosystem of each country. “There are several studies on social entrepreneurial topics, including multiple definitions, concepts, theories, and discussions” (Seelos & Mair, 2004).

Researchers did not recognize social entrepreneurship as a term (Peredo & Mclean, 2006). “Researchers with opposing opinions and those who supported social entrepreneurship then came after them. As a result, the idea of social entrepreneurship has generated debate ever since the start of the previous decade” (Choi & Mazumdar, 2014).

Social Entrepreneurship Education in India

According to the latest statistics on the University Grants Commission (UGC) website, India has over 1000 universities, 37,000 colleges, and 11,000 independent educational institutions (*Higher Education in India*, n.d.). The higher education sector in India is a significant source of start-up growth and promotion for the social business sector. Academic institutions increasingly offer graduate-level or certificate programs that include academic courses for social entrepreneurs. Due to the involvement of numerous higher education institutions in social entrepreneurship, social entrepreneurship education is now progressing in India. e.g., Tata Institute of Social Sciences, Mumbai; Institute of Rural Management, Anand and Entrepreneurship Development Institute of India, Gandhinagar; Azim Premji University, Bangalore; SVKM's Narsee Monjee Institute of Management, Mumbai; Deshpande Foundation, Hubli are institutions that offer a course either as a certificate, diploma or postgraduate degree on social entrepreneurship.

Social Entrepreneurship Education in Gujarat

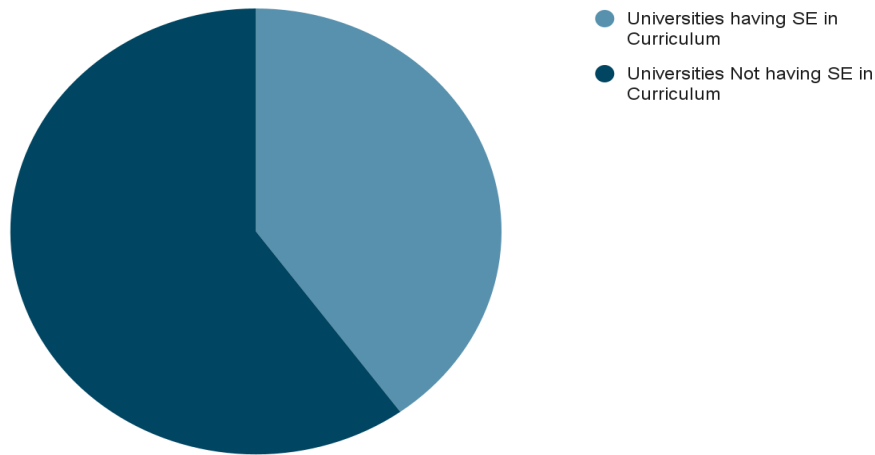
Gujarat has more than 76 universities and 2659 affiliated colleges, according to the All-India Survey on Higher Education 2019-20. However, only a few institutes offering specialized courses in social entrepreneurship in Gujarat, such as Sardar Patel University in an undergraduate program and the Institute of Rural Management, Anand. Since Gujarat is known as the "land of entrepreneurs" therefore social entrepreneurs have a higher chance to grow. I-Hub and some other government-recognised incubation centres sometimes organize an awareness programme through virtual mode or physical mode to create awareness about social entrepreneurship but from the researchers' perspectives, it is not sufficient to address the need as well-trained social entrepreneurs.

Entrepreneurship Teaching Practices

All activities intended to promote entrepreneurial mindsets, attitudes, and abilities fall under the category of “entrepreneurship education” which encompasses a wide range of topics, including idea development, start-up, growth, and innovation (Fayolle, 2009). “To improve students' entrepreneurial learning, teaching practices are vitally important. Education in entrepreneurship calls for active learning techniques, which put the students at the center of the learning process and provide them the freedom to experiment and discover things about themselves. Teaching practice must, therefore, possess the necessary professional skills to support students. At the same time, they learn rather than using the "chalk and talk" method, which was the conventional way, to convey knowledge and information primarily” (European Commission, 2013).

Methods of Data Collection & Analysis

Evaluation of the curriculum, pedagogy, and teaching practices in Social Work College in Gujarat is the primary goal of this research. To accomplish this, we'll examine the global body of social entrepreneurship literature. The most noteworthy contributions are covered in this work, which is crucial to notice. For finding and approving treatises, Google Scholar is the primary database cited in this instance. Additionally, one of the approaches researchers employed was locating graduate schools, universities, and independent organization that offered full-time, part-time, or remote learning social entrepreneurship courses. Desk investigation and analysis were used to accomplish this. Narration is created using the relevant documentation available on the appropriate website. In this research, content analysis techniques are used to compare the documents helpfully. To better understand the ratio of social entrepreneurship programmes in the existing curriculum, the researcher collected data on the social work curricula of 20 universities/institutions. This data is shown in Chart 1, along with wider images obtained from the institutions' websites that access the program's syllabus and curriculum.



Course Ratio in Gujarat (Chart 1)

Social Entrepreneurship Education and Pedagogy in India

Pedagogy is a core goal in education for designing the curriculum of any course, and for creating pedagogy for social entrepreneurship, there are many drawbacks and challenges. Pedagogy designed currently for social entrepreneurship education is to produce trained entrepreneurs with a wide range of teaching and learning methods to choose from the options available. These options are a blended mode of class lectures, group discussions within the classroom, fieldwork including onsite observation or interviewing social entrepreneurs, and, ideating a social business plan.

For a long time, the most common curriculum used by Indian universities to arrange post-graduation courses in social entrepreneurship is social work lectures, activities, and entrepreneurial topic discussions of the history and current situation of social entrepreneurship in India and abroad, field visits, panelists, and expert speakers' seminars. There is little research that also states that the other countries' theories highly influence the social entrepreneurship curriculum in India, so the need for Indian context social entrepreneurship education is required mainly in the social work sector.

Social Entrepreneurship Education and Pedagogy in Gujarat

Researchers have examined the curricula of 4 out of 20 universities, listed in Table 1 to understand social entrepreneurship education and pedagogy in Gujarat, specifically in the social work education curriculum. Four universities have social entrepreneurship as a separate course in their social work curricula.

Table 1 List of Universities Offering Social Entrepreneurship Courses in Social Work Curriculum		
University/Institution	Course Title	Course Objective
The Maharaja Sayajirao University, Baroda	Corporate Social Responsibility and Social Entrepreneurship (MSW)	The Course helps students to improve their skill set in social innovation, entrepreneurship in a CSR context.
Sardar Patel University	Social Enterprise (BSW)	The program is to make students involved with the emerging area of social enterprise and its effect on the social sector.
Ganpat University	Social Entrepreneurship (MSW)	This Programme is designed to cultivate entrepreneur skills among students having entrepreneurial ideas to get the network and right guidance to work in the social sector.
Saurashtra University	Entrepreneurship Development (MSW)	To teach students different concepts regarding social entrepreneurship and innovation

The social entrepreneurship course in the social work curriculum was taught by institutions using a variety of learning and teaching methodologies, as shown in Table 1. These methods include classroom instruction, online learning, case studies, practical projects, excursions to social enterprises, and a focus on social innovation. Institutions have implemented different pedagogies to teach social entrepreneurship in an easy-to-understand way. After reviewing the base year's curriculum and content, it can be concluded that to be a successful social entrepreneur, a person needs to be knowledgeable about both the business and social elements.

Data Analysis/Matrix

No.	University/Institution	Affiliated or Constituent Colleges/Dept	NGO management/Administration	Social Entrepreneurs as a Separate	Project Management	Economics or Aligned Subject	Social Leadership	Social Entrepreneurship as a concept
1	Bhakta Kavi Narshih Mehta University	07	Yes	Yes	No	Yes	No	Yes
2	Central University of Gujarat	01	No	Yes	Yes	No	Yes	No
3	Children's University	01	Yes	No	Yes	No	No	No
4	CU Shah University	01	Yes	No	No	Yes	No	No
5	CVM University	01	Yes	Yes	Yes	Yes	Yes	Yes
6	Ganpat University	01	Yes	Yes	Yes	Yes	Yes	Yes

7	Gujarat National Law University	01	Yes	Yes	No	No	No	Yes
8	Gujarat University	2	Yes	No	No	Yes	Yes	No
9	Gujarat Vidhyapith	1	No	No	Yes	No	Yes	No
10	Hemchandracharya North Gujarat University	26	Yes	No	No	Yes	Yes	No
11	Kadi Sharva Vishwavidhyalaya	01	Yes	No	Yes	No	No	No
12	Krantiguru Shyamji Krishn Verma Kachchh University	02	Yes	No	Yes	No	No	No
13	MK Bhavnagar University	16	No	No	Yes	No	Yes	No
14	The M S University of Baroda	01	Yes	Yes	Yes	No	No	Yes
15	Parul University	01	Yes	Yes	Yes	No	Yes	Yes
16	Sardar Patel University	05	Yes	Yes	Yes	Yes	Yes	Yes
17	Saurashtra University	08	Yes	Yes	Yes	Yes	No	Yes

18	Shri Govind Guru University	11	Yes	No	No	Yes	Yes	No
19	Silver Oak University	01	Yes	No	Yes	No	No	No
20	Veer Narmad South Gujarat University	03	Yes	No	No	No	Yes	No
	Total	91						

To understand how universities and institutions are incorporating social entrepreneurship as a course in the social work curriculum, the researcher evaluated all of the social work curricula at the graduation and postgraduate levels of all universities and institutions from Gujarat that have at least three years of social work curriculum existence in their university or institutions. The UGC's social work curriculum is created with the Indian job market in mind. The UGC's curriculum for social entrepreneurship is based on the LOCF (Learning Outcome-based Curriculum Framework), which suggests adding some foundational courses for the entrepreneurship course to the social work curriculum. Table 2 shows how the data was gathered and used to create the matrix of available courses. It is evident from the above table that only a small number of universities in the state of Gujarat provide undergraduate and graduate programs in social work. Similarly, very few universities include social entrepreneurship as a standalone subject in the social work curriculum; instead, many integrate it into other related courses like NGO management, Project Management, Economics, etc.

Challenges in Social Entrepreneurship Education

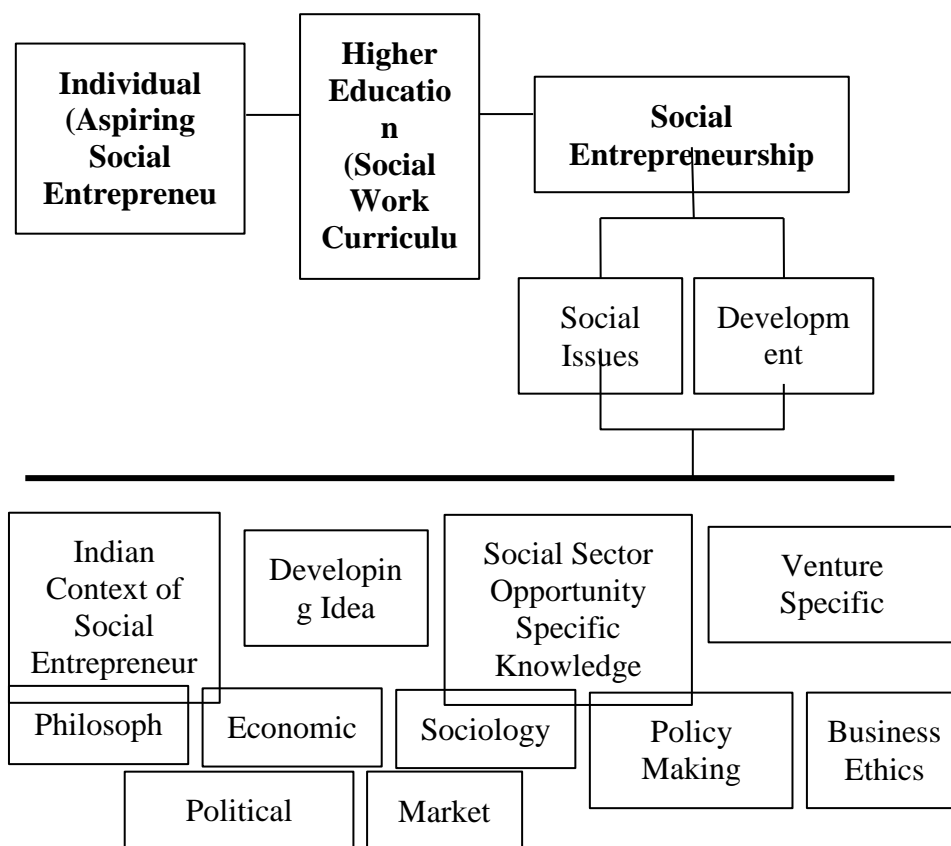
1. Traditional NGOs are not able to keep up with the pace of the fast-changing landscape of the third sector.
2. Very few educational institutions offer independent courses on social entrepreneurship, even if some offer, they are more theoretical and merely do not help to create social entrepreneurs.
3. There is orientation and awareness of students and parents regarding the potential of entrepreneurship in terms of career choices.

4. There is a lack of an adequate mix of social science and management courses in social entrepreneurship.

Discussion and Findings

In Gujarat, social entrepreneurship has primarily grown due to university professors' knowledge and students' interests. However, a focused approach is needed in developing countries like India because there are so many issues that social entrepreneurship models may address. However, this study was limited to the concept of social entrepreneurship within the Gujarat State only. A simple understanding of social entrepreneurship is an entrepreneurship principle to solve social challenges.

A different image is shown through content analysis, as seen in Table 1. The prevalent problem addressed in the course goals section calls for the training of applicants in knowledge, social approach, and administration of starting a social initiative. "These are important and experiential, but having a concept-wise transparency along with the philosophy in social entrepreneurship is core to enable individuals to apply the right tool & techniques in resolving social problems" (Salamzadeh et al., 2011). The curriculum of developed countries has a significant influence on social entrepreneurship courses. Despite India having the lowest percentage of women participating in economic development programs and social entrepreneurship courses offering great future opportunities for women, none of the four universities that offer social entrepreneurship as a course in the social work curriculum make this a priority. The following ideas should be implemented into the social entrepreneurship education model to improve the curriculum's effectiveness and create skilled social entrepreneurs for the market.



With this model, the burden on the government will be lessened as a result of the inclusion of the above-mentioned educational model in the social work curriculum to increase the participation of individuals in social change through social enterprises.

Conclusion

Gujarat's graduate and postgraduate programs in social entrepreneurship are in their infancy and are slowly gaining acceptance in universities and academies. The paper sheds light on social entrepreneurship education through curriculum, pedagogy, and teaching practices. Only a few colleges have kept some relevant subjects that are essential to promote social entrepreneurship among social work students.

The researcher has collected all data from all institutions in Gujarat that have existed for at least 3 years, indicating that there is no significant difference in course design or different educational inputs. There is a huge opportunity & significant space to mainstream social entrepreneurship through curriculum inversion in social work colleges in Gujarat.

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Exploring Parents' Attitude to Subscribe to the Ed-tech Services: Evidence from India

DOI: <https://zenodo.org/records/11229989>

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Abstract

There have been numerous Educational Technology (Ed-Tech) companies investing in the Online Teaching & Learning ecosystem in the last few years. Parents play a significant role in making academic decisions for their kids. However, the peer pressure of kids, the educational background of parents, and the academic performance of wards would play an essential role in intending to subscribe to Ed-tech services. The research design is based on a self-administered questionnaire is developed to collect data from the parents of school-going students of the age between 10 years to 16 years. Convenience sampling was used to manage the data from 208 samples. The findings of the study showed that parents' awareness of ed-tech (PAE), wards' peer influence (WPI), and academic performance of ward (APW) significantly affect attitude towards ed-tech (ATE), whereas peer influence of parents (PIP) has no significant impact on their attitude towards ed-tech. The study will help stakeholders make online learning platforms more effective, engaging, and reachable. Existing literature contributes regarding the digital facility, and satisfaction of online learning. However, very limited research has been done in the area of parents' subscribing attitude to Ed-tech services.

Keywords: Ed-Tech services, online learning, subscribing attitude, surrogate buying.

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1. Introduction

In the present technological era, where technology has colonized almost every sector, education is no exception. The education sector is further considerably impacted by the emergence of mobile and wireless technologies (So & Brush, 2008). EdTech (Education Technology) companies exploit these technologies to provide a comprehensive and accessible educational environment to the wards. Over time, the definition of EdTech has evolved. Today's definition of "EdTech" includes a wide range of startups and other organizations that are seeking to alter education and quality via the use of technology, as opposed to a decade ago when the term "EdTech" referred to the supply of computers in classrooms (Renz & Hilbig, 2020). Even the "Techlords" (Google, Microsoft, Netflix, Samsung, and Facebook) are attempting to create new data-based learning programs that enable new pedagogic tools in public institutions.

EdTech companies have flourished on online platforms thereby fostering e-learning or online education. E-learning has expanded immaculately since the advent of information technology (Yusnilita, 2020). After the pandemic, the growth of e-learning has not been restricted to developed countries, but it has now its grip on most developing countries also. Many E-Learning EdTech's, including Byju's, Extra Marks, Vedantu, and others, have emerged most successfully in the contemporary Indian environment post-pandemic. This might be used as a chance for entrepreneurship, creating e-learning through multiple internet platforms for emerging countries like India with diverse ethnicities and enormous marketplaces, creating a favourable climate for entrepreneurship (Dana, 2000). Many e-learning systems have profited from the expanded use of the internet to support e-learning. In this regard, the recent example of the phenomenal rise of "Zoom," "Google Meet," and other similar applications amid the pandemic outbreak is notable. Such Ed-tech companies flush a lot of money in advertisements across multiple channels, especially television. This may be due to the television viewing rate has increased to an average of one and a half hour (Vaidya et al., 2022) daily.

The paradigm shift from traditional to online education has generated changes in student's perception of teaching (Coman et al., 2020). Former studies about students' perceptions regarding online education highlighted certain benefits, which included flexibility and student-centredness (Dhawan, n.d.); fostering good interaction among peers using synchronous media (Adnan & Anwar, 2020; Marinoni et al., 2020);

facilitating control over time and content (Coman et al., 2020); knowledge up gradation (Jaganathan, 2021). Further, EdTechs at the primary level target mastering learning skills among pre-schoolers (Elofsson et al., 2016; Lovato & Waxman, 2016; Patchan & Puranik, 2016). It caters to the needs of specially-abled children entailing special educational needs (Bratitsis & Ziannas, 2015; Dulleck et al., 2011; Yun et al., 2016). There are also certain constraints addressed in different studies like infrastructural issues, financial bottlenecks, solitude, lack of personal touch, congestion on websites, poor awareness, and credibility issues (Fedina et al., 2017) Gudanescu, 2010; (Nisar, 2002); Fry, 2001). Besides, parental intervention is critical to a child's learning success. When the involvement of parents is found to be substantially high, the learning outcome seems to be intensified (Goodall & Montgomery, 2014). Many economic, social, and psychological forces play a critical role in the adaption of EdTechs by parents or guardians of the ward. Cultural and demographic differences also play a decisive role. Moreover, the customer (parents) and consumer (child), being different, may have conflicting interests in the perception and adoption rate of EdTech products. Thus, the present study primarily explores parents' perception and adaption rate of EdTech products for their wards.

2. Review of Literature

2.1 *EdTechs*

The term "EdTech" primarily refers to those seeking to improve education and quality via technology, especially startups and other similar organizations. It involves software companies providing technological solutions for educational institutions or businesses digitizing educational services and commercial models (Renz & Hilbig, 2020). It is the moral application of novel technology to facilitate learning by developing, utilizing, and controlling suitable technical procedures and resources for enhancing the educational ecosystem (Chen et al., 2019) describes EdTech as an innovation ecosystem aimed at developing, adopting, and implementing novel goods and services for enriching teaching and learning outcomes. In particular, fields related to computers, smartphones, and the Internet—have sparked a resurgence in education technology (EdTech), which describes any ICT application that seeks to enhance education (Escueta et al., 2017).

Owing to the present complexities, the domain of educational technology has also become intricate, encompassing a wide range of academic learning scientists, educators, course designers, educational technologists, managers,

and commercial businesses. Recent years have witnessed a growth in the networked and multisectoral nature of the EdTech ecosystem (Castañeda & Williamson, 2021). For the tremendous growth of these companies, one of the factors responsible could be the Perceived Ease of Use (PEOU) and Perceived Usefulness (PU), which exerts a certain influence on users' attitudes and, subsequently, the behavioural intention to use technology (Davis, 1987). The contributing factor, as seen in Antonenko et al., (2014) study, was that quite a good number of crowdfunding platforms (a method of supporting a project or business venture that involves soliciting funds from a large number of people, usually via the internet) like RocketHub, Kickstarter, and Indiegogo provide decent financial support (Antonenko et al., 2014). The popularity of EdTech's is also because that it is not just meant for students but also teachers and professors, as it substantially creates engaging and interactive learning experiences (Ravichandran & Shanmugam, 2023). By way of venture capital funding, Indian EdTech's have also gotten a boost of almost \$16.1B which is 32 times more than it had a decade ago. Further, the EdTech sector in India is anticipated to grow to \$30 billion during the following ten years (India Today, February 12, 2022).

2.2 Growth of E-learning

By 2026, the market for eLearning is projected to be worth USD 374.3 billion, expanding at a CAGR (Compound Annual Growth Rate) of 9.1% between 2021 and 2026 (Corporate Learning Advisor). To endure efficacy in education, e-learning uses various technologies, including the internet, email, chat, new groups and messages, audio, video conferencing, and the World Wide Web. It enables the learners to study at their own pace and convenience (Dhull & Arora, 2017).

The rapid improvement of technology in the realm of education is one of several elements that have contributed to the enlargement of e-learning. E-learning is now more accessible and practical than ever because of the high-speed internet, ubiquitous availability, and the escalation of smartphones and other such e-devices (Schweizer & Schweizer, 2004). Numerous gigantic companies like Tata and Reliance have commenced financing to aid the infrastructural setup of E-learning modules (Goyal, 2012). In addition, to accelerate the growth of e-learning, Scalable Vector Graphics (SVG), a high-performance graphics format, and semantic data have been integrated into a new version of the World Wide Web called Web 3.0 has been presented as an impending revolution in the field of education

and the Web 3.0 based software would further augment the development of EdTech's (Rana et al., 2014).

Most emerging nations have enormous requirements for education and training, which is presaged to be catered to by the mounting e-learning sources. This pertinent problem of the massive demand for secondary and tertiary education can be met by proliferating access to internet-based learning. Nationwide access to such learning sources would provide tutoring support to the masses (Capper, 2001).

* 2.3 *Students' Perceptive towards EdTech Products*

The study by Arkorful and Abaidoo (2015) emphasized certain advantages available to students by employing EdTech tools, including accessibility, improving the effectiveness of information, cost-effectiveness, and addressing learner variations individually. It offers the learner temporal flexibility (Hamid, 2002; Kimiloglu et al., 2017).

The acceptability of education technology tools also depends upon students' acceptance of the internet as a learning tool. It was observed that the students with a positive attitude toward e-tools had a more positive perception than those with a low acceptance rate. It is therefore crucial for universities using e-learning to research additional aspects, including instructor effectiveness, instructional materials, and technological readiness, that may affect students' perspectives toward EdTech products (Srichanyachon, 2014). Another factor that influences the perspective of the student is the capacity to communicate with other students as a valuable tool for formally networking, getting career guidance from other students, or locating employment (Warr et al., 2013). The academic performance of the ward escalated to a certain extent as it played a vital role in helping students develop self-efficacy (Rowbotham & Schmitz, 2013). Among educational technology tools, most wards have an affirmative response toward videoconferencing (Doggett, 2008; Fletcher, 2005).

In a gender-based study, it was witnessed that female students were less inclined toward technology which made them less confident in EdTech tools, while students belonging to the science and mathematics stream showed a greater rate of acceptance (Kahveci, 2010). Besides, m-learning is a widely welcomed step among students as it upsurges the plasticity of access to resources in learning (Al-Fahad, 2009). The two main components of students' views toward technology-based education are utility and ease of use (user-friendliness) (Edmunds et al., 2012).

(Galusha, 1998) chalked out specific ill results of technology-based learning where it was unearthed that the students' stress levels are raised by the absence of support services, technical help, and the potential for late course completion. Amongst the other tailbacks, Gudanescu, (2010) highlights technical difficulties and related issues as one of the main e-learning bottlenecks. In many studies, it was found that quite a sizeable portion of pupils still prefer traditional settings rather than e-learning (Gudanescu, 2010; Nisar, 2002; Fry, 2001). These hindrances resulted in peer pressure inwards connected with both technological factors (e.g., the openness of the web platform) and non-technological factors (e.g., the students' previous repertoire of knowledge and individual differences) (Zhang, 2023). To lessen the above-mentioned adverse effects, (Abou El-Seoud et al., 2014) offered Blended learning as a viable solution.

2.4 Parents' Perceptive Towards EdTech Products

Parents' attitudes toward technology also moulds children's involvement in technology (Cheng, 2017; Kong et al., 2019; Valcke et al., 2010). Parents' perceptions were typically found to be positive, where neither age nor education was connected to parents' attitudes toward media (Vittrup et al., 2016). Similar results about the demographic factors were observed in a Turkish study where it was also explored that economic factors also play an important role in parents' involvement in wards' education (Erdener & Knoepfel, 2018). Besides the above-cited constructs, awareness towards EdTech products also plays an instrumental role towards their perception and adoption (Crist, 2002).

Venkatesh & Davis (2000) presented a Technology Acceptance Model to explore the factors contributing to the parents' acceptance rate of technology. The study located a strong influence of cognitive instrumental processes (job relevance, result demonstrability, output quality, and perceived ease of use) and social influence processes (subjective norm, image, and voluntariness) on the adoption rate of technology in education. The above study was further extended to highlight the need for a unified view that consolidates existing models to understand better the factors influencing user acceptance which is essential for a comprehensive understanding of wards' and parents' peer influence (Venkatesh et al., 2003).

The parents of pre-schoolers and primary students exhibited a relatively favourable evaluation of attitudes, usage, and beliefs regarding the use of ICT in the teaching and learning process, with notably high scores in the opinion that the deployment of such resources would enhance the

teaching-learning process (Ramírez-Rueda et al., 2021). While many studies displayed affirmative results regarding parents' perceptions of academic growth, self-driven and motivated children, and successful work life through the involvement of EdTechs' in their child's life (Green, 2016; O'Hara, 2011; Vittrup et al., 2016), some studies highlighted the parents' concern regarding undesirable effects like the possible decline in writing ability or lack of concentration during courses (Keane & Keane, 2018; Lampard et al., 2013)

3. Methodology

The present research measures the attitude toward subscribing to Ed-tech services. The exploratory stage of the study determined the factors that may affect the attitude of the Parents towards the Ed-tech service subscription. The first phase explored Parents' awareness of Ed-Tech (PAE), Ward's Peer influence (WIP), and the Academic Performance of Ward. Further, a self-administered digital questionnaire was developed using Google Forms to collect the data from school-going students' parents. The data is collected from Surat, a city of Gujarat province of India. Surat City is divided into seven administrative zones by the Surat Municipal Corporation. These zones were treated as strata and one randomly selected one school from each zone. While selecting the school, it was made sure that the school had undertaken the online learning activity during the COVID-19 pandemic.

Hence, there was no inclusion or exclusion criterion exclusively for the respondent. The permission to conduct research was sought from schools in each zone, and research was conducted at those schools which permitted the researchers to engage with the parents for the study. The collection of data was scheduled in consultation with the respective principals of the schools, with specific dates and times designated for the purpose, spread over approximately 65 days. Schools communicated about the research study to parents. Before, undergoing the final survey, a pre-testing survey with 18 parents was undertaken with the help of final-year college students. The basic grammatical and physical appearance errors were corrected before the final survey. Further, for the final survey, parents were invited to participate in the study, and the first thirty parents who agreed to be a part of the research were chosen as sample units from each school. Consequently, a total of 210 parents (Al-Ammari & Hamad, 2008; Al-Ammari et al., 2014; Arenas Gaitán et al., 2010) from seven schools expressed their willingness to participate in the survey. Furthermore, parents were then asked to be present on a given date and time for the study, which

was conducted within the premises of their school. Ultimately, 208 parents showed up for the survey. The present study sought to cover parents from diverse classes from grade 5 to grade 10 (Ages 10 to 16), spanning disciplines such as commerce, humanities, and science. The data collection process was undertaken with the help of two final-year graduate (BBA) students. The items used in the analysis are exhibited in below table 1. Moreover, CFA and SEM were performed to test the hypothesized relationships of the proposed research model using AMOS version 21.

Table 1: Construct items and Sources

Sr. No.	Construct	Author(s)	Number of items selected	Remarks
1	Parent's awareness of Ed-tech Service	(Crist, 2002)	4	Adapted and Modified
2	Ward's Peer influence	(Venkatesh et al., 2003)	5	Adapted and Modified
3	Academic Performance of Ward	(Rowbotham & Schmitz, 2013)	4	Adapted and Modified
4	Peer Influence of Parent	(Venkatesh et al., 2003)	4	Adapted and Modified
5	Attitude towards Ed-tech	(Davis, 1987)	4	Adapted and Modified

Source: Author's Adaptation

4. Proposed Research Model with Hypotheses Development

H₁: Parents' awareness of Ed-Tech significantly influences their attitude towards Ed-Tech.

H₂: Wards' peer influence significantly influences parents' attitudes towards Ed-Tech.

H₃: Academic performance of ward significantly influences parents' attitude towards Ed-Tech.

H₄: The Peer influence of parents significantly influences parents' attitude towards Ed-Tech.

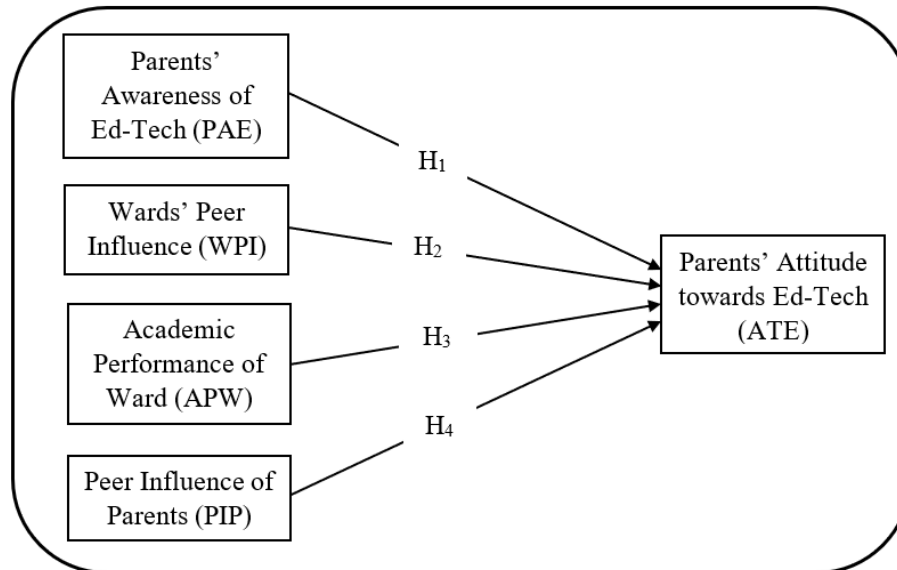


Figure I: Proposed Research Model for Parents' Attitude towards Ed-Tech

5. Data Analysis

5.1 Demographic Profile of the Respondents:

Table 1 summarizes the respondents' demographics. Of 208 respondents, 52.40% were females ($n = 109$). Most of the respondents were in the age group between 31 and 40 years (43.27%, $n = 90$). Respondents with a graduate ($n = 63$; 30.29%) dominated the sample, followed by those with high school level academic qualifications ($n = 50$, 24.04%). Income-wise, 52.88% ($n = 110$) of them have monthly family income between Rs. 25,001 – 50,000. In terms of relationship to the child, most of them have a mother-child relationship (46.63%, $n = 97$), followed by a father-child relationship (39.90%, $n = 83$).

Table_2: Demographic Profile of the Respondents (n = 208)

Demographic Variable	Category	Frequency	Percentage
Gender	Male	99	47.60
	Female	109	52.40
Age (in years)	21-30	79	37.98
	31-40	90	43.27
	41-50	20	9.62
	Above 50	19	9.13
Academic Qualification	Below 10	28	13.46
	High School (12 th Pass)	50	24.04
	Diploma	13	6.25
	Graduate	63	30.29
	Post Graduate	46	22.12
	Ph.D.	8	3.85
Monthly Family Income (in Rs.)	Less than 25,000	32	15.38
	25,001 - 50,000	110	52.88
	50,001 - 1,00,000	44	21.15
	More than 1,00,000	22	10.58
Relationship to the Child	Mother	97	46.63
	Father	83	39.90
	Legal Guardian	28	13.46

Source: Primary survey

5.2 Reliability of the Scale:

To evaluate the consistency of each latent variable's scale, the value of Cronbach's alpha coefficient (α) was calculated in the SPSS 20 version. For the survey-based research threshold, an alpha value of 0.600 was suggested (Hair et al., 2009). According to table_2, all values of Cronbach's alpha coefficient (α) ranging from 0.828 to 0.903 were greater than the thresholds, indicating internal consistency of scales.

5.3 Hypotheses Testing Results:

AMOS 21 version was used to perform structural equation modelling (SEM) in two steps (Anderson & Gerbing, 1988; Arbuckle, 2006). In stage one, confirmatory factor analysis (CFA), sometimes referred to as measurement model analysis, was used to assess reliability, convergent validity, and discriminant validity in order to examine the applicability and quality of the measurement model. Stage two focused on exploring the causal relationships between latent variables using structural model analysis.

5.4 Confirmatory Factor Analysis (CFA):

The measurement model was tested using CFA employing maximum likelihood estimation (MLE). The fit indices for the measurement model were found to be higher above the cut-off values: $\chi^2 = 246.914$, CMIN/df = 1.379, df = 179, p = 0.001, GFI = 0.900, IFI = 0.976, TLI = 0.971, CFI = 0.975, PNFI = 0.781 and RMSEA = 0.043. In CFA, convergent and discriminant validity were established to assess the constructs validity. Discriminant validity, as per Mostafa (2010), is the degree to which measures of two constructs are empirically distinct. Convergent validity measures how closely scale elements 'converge' on a given construct (Bagozzi et al. 1991).

Table 3: Reliability and Validity of Scale

Scale	Item	Corrected Item- Total Correlation	Cronbach's Alpha (α)	Standardized Factor Loadings (λ)*	Average Variance Extracted (AVE)	Compo- -site Reliabi- -lity
Parents' Awareness of Ed-Tech (PAE)	PAE1	0.731	0.873	0.758	0.633	0.873
	PAE2	0.704		0.757		
	PAE3	0.747		0.829		
	PAE4	0.739		0.835		
Wards' Peer Influence (WPI)	WPI1	0.730	0.903	0.764	0.651	0.903
	WPI2	0.735		0.772		
	WPI3	0.777		0.809		
	WPI4	0.787		0.856		
	WPI5	0.765		0.829		
Academic Performance of Ward (APW)	APW1	0.632	0.829	0.719	0.555	0.833
	APW2	0.668		0.732		
	APW3	0.717		0.815		
	APW4	0.617		0.709		
Peer Influence of Parents (PIP)	PIP1	0.630	0.828	0.693	0.550	0.829
	PIP2	0.628		0.696		
	PIP3	0.689		0.791		
	PIP4	0.678		0.779		
Attitude towards Ed-Tech (ATE)	ATE1	0.759	0.902	0.805	0.699	0.903
	ATE2	0.782		0.835		
	ATE3	0.791		0.845		
	ATE4	0.795		0.857		

Source: Research Output

Note: No rotation or output normalization was applied in CFA.

Convergent validity was obtained through two approaches: (a) all standardized factor loadings (λ) were significant and above 0.500 (Bagozzi et al., 1991) and (b) all Average Variance Extracted ("AVE") values were above 0.500 (Ruvio and Shogam, 2008; Fornell & Larcker, 1981) and composite reliabilities were above 0.700 (Hair et al., 1998). The results of CFA showed that all standardized factor loadings (λ) were higher than 0.500

and significant, which provides strong evidence for the convergent validity of the model (Bagozzi and Yi, 1988). Convergent validity is also indicated by composite reliability and average variance extracted (AVE) values that are higher than 0.700 (Fornell and Larcker 1981). All AVEs were higher than 0.500 (refer Table 3). In addition, all the composite reliabilities were also higher than 0.700. Discriminant validity was examined by comparing the square root of AVE ($\sqrt{\text{AVE}}$) for each construct with squared correlations between constructs (Fornell and Larcker, 1981). In table 3, it is shown that $\sqrt{\text{AVE}}$ is higher than squared correlations, demonstrating discriminant validity.

Table 4: Discriminant Validity of Constructs

Constructs		PAE	WPI	APW	PIP	ATE
Parents' Awareness of Ed-Tech	PAE	0.795				
Wards' Peer Influence	WPI	0.787	0.807			
Academic Performance of Ward	APW	0.750	0.786	0.745		
Peer Influence of Parents	PIP	0.750	0.743	0.680	0.741	
Attitude towards Ed-Tech	ATE	0.727	0.718	0.703	0.625	0.836

Source: Research Output

Note: Diagonal values display the AVE's square root for each construct.

5.5 Testing Structural Model:

Structural equation modelling (SEM), after having a reasonably well-fitting measurement model, was utilized to assess the structural model. The path coefficients of hypothesized relationships between constructs were evaluated for path analysis using AMOS. A structural model is a group of dependent relationships that interconnect the constructs of a hypothesized model (Hair et al. 1996). The fit indices of structural model are as follows: $\chi^2 = 246.914$, CMIN/df = 1.379, df = 179, p = 0.001, GFI = 0.900, IFI = 0.976, TLI = 0.971, CFI = 0.975, PNFI = 0.781 and RMSEA = 0.043 showed a reasonable model-fit. As shown in Figure II, the research model, which has a predictive power of 60.5% ($R^2 = 0.605$), was validated by the analytical findings. Table 4 contains the structural path coefficients for the research model used in this study.

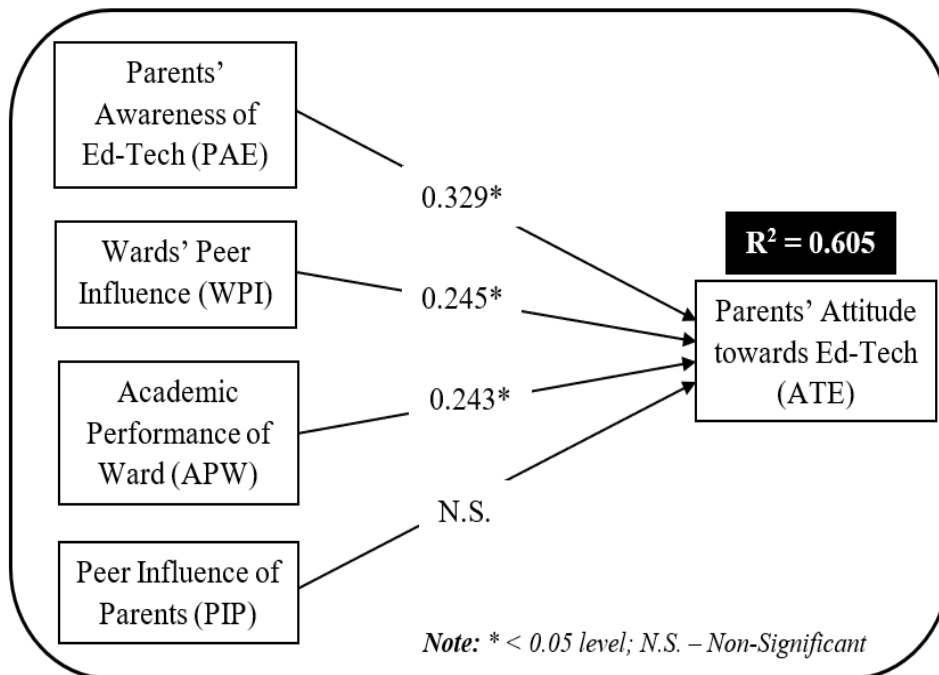
Table 5: Results of Path Analysis

Hypothesized Relationship	Standardized Coefficients (β)	t value	Hypothesis Supported
PAE → ATE	0.329	2.708*	Yes
WPI → ATE	0.245	1.967*	Yes
APW → ATE	0.243	2.089*	Yes
PIP → ATE	0.031	0.295	No

Source: Research Output

Note: * < 0.05 level

Parents' awareness of ed-tech was found to have a significant and positive impact on parents' attitudes towards ed-tech ($\beta = 0.329$, $t = 2.708$; $p < 0.05$). Moreover, wards' peer influence ($\beta = 0.245$, $t = 1.967$; $p < 0.05$) and academic performance of wards ($\beta = 0.243$, $t = 2.089$; $p < 0.05$) were discovered to be significantly and positively related to parents' attitude towards ed-tech (refer Table_4). However, the relationship between peer influence of parents and parents' attitude towards ed-tech—was not significant ($p > 0.05$).

**Figure II: Structural Model for Parents' Attitude towards Ed-Tech**

6. Discussion of Research Findings

This study attempts to measure parents' attitudes toward subscribing to Ed-tech services in the context of India. The results of this study provide good empirical support for the structural research model depicted in Figure II and for all the causal relationships among the model's variables, excluding one variable, namely peer influence of parents (PIP). The finding indicates that the research model of this study has good predictive power ($R^2 = 0.605$) and helps policymakers to better understand different factors affecting parents' attitudes to subscribe to the Ed-Tech services in India. The study's main contribution is that parents' awareness of Ed-Tech ($\beta = 0.329$) has a strong impact and appears to be the primary positive determinant of parents' attitudes to subscribe to Ed-Tech services, followed by wards' peer influence ($\beta = 0.245$) and academic performance of ward ($\beta = 0.243$). It implies that parents' awareness of Ed-Tech is the most crucial predictor of parents' attitude toward subscribing to Ed-Tech services, consistent with many previous studies (Vittrup et al., 2016, Cheng, 2017; Kong et al., 2019). This result demonstrates that parents will not sign up for Ed-Tech services if they are not adequately aware of it. Hence, to develop parents' and students' favourable attitudes regarding subscribing to Ed-Tech services, Ed-tech service providers should properly make their users aware of these services, and their associated benefits.

Besides this, following the research model of this study, wards' peer influence is the second most significant factor influencing parents' attitudes to subscribe to Ed-Tech services in India. This finding is also supported by Spaulding et al. (2002). It suggests that peer pressure from wards can impact parents' choices to subscribe to Ed-Tech services. In this situation, system designers and providers of Ed-Tech services must encourage the usage of these services among customers via word-of-mouth advertising.

Finally, an exciting finding of this study is that parents' peer influence had a considerable favourable influence on their attitudes towards subscribing to Ed-Tech services in India. This result was consistent with other empirical research studies (Venkatesh & Davis, 2000; Keane & Keane, 2018), which showed the dominating significance of parents' peer groups on their attitudes toward Ed-Tech subscriptions. As a result, the companies offering Ed-tech services must promote the need for Ed-Tech and its associated benefits, teach customers how to use Ed-tech services, and emphasize positive word-of-mouth marketing.

7. Major Scope of the Study

Ed-tech leaped in the late 2010s; however, the recent pandemic has left a significant influence on Ed-tech product-adoption. Many companies are investing heavily in Ed-Tech companies. The current study has only covered the school-going kid's parent; moreover, the present study has only measured the influence of awareness of Ed-tech, wards' peer influence, the academic performance of wards, and peer influence of parents on parents' attitude towards Ed-tech services. There can be many more constructs that can have an impact on the parents' intent to subscribe to Ed-Tech services.

8. Implications of the Study

The findings of this study will broaden the body of information previously accessible on the use of EdTech. Parents' attitudes toward subscribing to EdTech services in the education sector in India can have various implications, influencing both individual families and the education system as a whole. Positive parental attitudes toward EdTech subscriptions may lead to increased access to high-quality educational content and student resources. This can contribute to an overall improvement in the quality of education. If parents view EdTech services as practical tools for learning, students may experience improved learning outcomes. Interactive and engaging educational platforms can cater to different learning styles and reinforce classroom teachings. The study highlights the role of parents in supporting online learning through EdTech. This can aid in developing such strategies for involving parents in their children's virtual education.

The research further provides insights into EdTech services effectiveness in facilitating online learning. This information is valuable for educators and institutions seeking evidence-based strategies for improving educational outcomes through technology. These findings shed light on practical pedagogical approaches within online learning environments. Educators can use this information to enhance ~~their~~ teaching methods and design more engaging and interactive online courses. Insights into how technology keeps students motivated and actively participating in virtual classrooms can be leveraged by these EdTech companies. Teacher training programs and professional development initiatives can be accordingly undertaken. This might ease the integration of EdTech services with traditional teaching models. This information is crucial for educators and institutions navigating the transition from conventional to online learning. Understanding these implications can help stakeholders make informed

decisions, develop policies, and improve the design and delivery of online learning experiences through EdTech services.

9. Limitations and Future Scope of the Study

The data was collected only from the school students' parents and further studies can be carried out with more classes. Moreover, further studies can be extended to college-going students and working professionals also as there is a significant difference in courses (S Schmitz, 2013). The current study has only focused on specific variables and constructs; future studies can involve more constructs that can deepen the outcome. There can be other variables, such as availability, and recommendations by schools, that can impact the parent's attitude and intention to adopt the Ed-tech services (Morrison et al., 2019). Also, the study can be carried out with the government schemes for free online education and its adoption.

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Mobile Wallets Adoption by Younger Generation: With Reference to North Gujarat

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Abstract

Mobile Wallets are the modern technology produced by mobile technology in India. With the UTAUT Model (Unified Theory of Acceptance and Use of Technology) into account, this study aims to determine the factors that influence people's real intentions to use mobile wallets. For the study, primary data was collected through a scheduled questionnaire from Mobile Wallet users aged between 18 to 30 years from North Gujarat. Primary data were processed and analysed through Multiple Regression Analysis. The findings of the research provide keen insides to the service provider, system developer, and government for policy formulation and better implications.

Keywords: Mobile Wallets, North Gujarat, UTAUT Model, Multiple Regression Analysis, Younger Generation

1. Introduction

The online payment system is changing everybody's lifestyle drastically. Especially mobile wallets make online payments so fast and easy for all. Across the world, mobile wallets are gaining attention and swift adaptation among people. The availability of technology and resources (i.e., mobile phones, Internet connections, etc.) to use mobile

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wallets is also gradually increasing the use of mobile wallets. As a result, global mobile wallet service providers are also increasing gradually.

A Mobile Wallet is one type of virtual Wallet that consists of one's account details, such as debit card, credit card, bank information, etc. It is an application that integrates consumers' different bank account details with their smartphones. It is an app for mobile devices that lets users pay for things online with their phones (Shin, 2009). Using a mobile wallet, anyone do financial transactions anytime and anywhere. Several mobile Wallets exist in India, like Paytm, Google Pay (G pay), Amazon Pay, PhonePe, Yono SBI, Airtel Money, etc.

In the Indian context, literature on mobile wallets is limited but emerging. There is a need for research concerning mobile wallets. This study fills the gaps by recognizing the variables in the context of the actual intent to use mobile wallets in the young age group.

2. Objectives

- The main object is to cognize the variables in the context of actual intent to use mobile wallets by younger consumers (age group: 18 to 30 years), taking into account the UTAUT model (Unified Theory of Acceptance and Use Technology) as a base model.
- This study intends to develop a theoretical model that looks into the potential impact of many factors, including the prevalence of coronavirus illnesses and concerns regarding privacy and security issues, on the adaption of mobile wallets.
- To know the effect of coronavirus diseases on mobile wallet usage in North Gujarat.

The first section of this research paper consists of a theoretical framework, literature, and hypothesis. The following section includes the research method, analysis, final results, limitations, and future scope of the research.

3. Theoretical framework & Review of Literature

3.1 UTAUT model (Unified Theory of Acceptance and Use Technology)

There are several additional variables and theoretical models published in the past that pertain to information systems. There were also available different models regarding new technology adaptation in

literature, including the Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), and Innovation Diffusion Theory (IDT).

Aside from the UTAUT Model, there are other theoretical models and variables available in the context of information systems literature; other models that have been proposed for the adaptation of new technologies include the Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), and Innovation Diffusion Theory (IDT).

A proposed model for the study is formulated by researchers using the UTAUT model as a base model and includes new variables such as Privacy and Security Risk and Coronavirus disease from the review of previous literature. Various researchers have verified different research models and made various changes concerning adaptation.

3.2 Easy to Use

Easy to use is directly associated with how easily users can use technology and make comfortable use of it. Easy to use is seen as very similar to “Effort expectancy” and “Perceived Ease of Use” described simultaneously in the UTAUT model and TAM-Technology Acceptance Model (Davis, 1989, page 320, lines 70-72). Venkatesh et al. (2003) described Effort Expectancy as “the degree of ease associated with the use of the system” (Venkatesh et al., 2003). Effort expectancy is seen as a very influential determining factor for intending to adopt any technology (Venkatesh & Davis, 2000; Karim et al., 2020). Because of this, we arrived at the following hypothesis:

H1: Easy to use positively influencing Intend to use Mobile Wallet.

3.3 Usefulness

The utility of any technology is defined by the benefits that users obtain from utilizing it. Users are more likely to make use of technology regularly if they perceive that doing so will enhance their performance. Usefulness is seen as very similar to “Performance expectancy” and “Perceived usefulness” described simultaneously in the UTAUT model and TAM-Technology Acceptance Model (Davis, 1989, page 320). Venkatesh et al. (2003) described Performance expectancy as “the degree to which an individual believes that using the system will help him or her to attain gains in job performance”. Performance expectancy is a dominant

determining factor for intending to adopt any technology (Venkatesh & Davis, 2000; Karim et al., 2020). Because of this, we arrived at the following hypothesis:

H2: Usefulness positively influencing Intend to use Mobile Wallet.

3.4 Favorable Conditions

Favorable conditions mean that any person has an essential resource (internet connection, smartphone availability, information of use, etc.) to utilize technology. Favorable conditions very similar to “Facilitating conditions” described in the *UTAUT* model (Venkatesh et al., 2003). Venkatesh et al. (2003) elucidated facilitating conditions as “the degree to which an individual believes that a technical infrastructure exists to support the use of the technology.” Favorable conditions are a dominant determining factor for intending to adopt any technology (Kapoor et al., 2022). Whenever any person has enough resources to utilize a mobile wallet, it will lead more towards using a mobile wallet. Because of this, we arrived at the following hypothesis:

H3: Favorable conditions positively influencing Intend to use Mobile Wallet.

3.5 Privacy and Security Risk:

The desire to utilize a mobile wallet is closely linked to the security and privacy concerns that come with it. If any person does not feel secure while using the mobile wallet and worries about personal information, it will inversely affect their usage. Perceived security is “the extent to which a consumer believes that making payments online is secure,” as defined by Vijayasarathy (2004). Perceived privacy is “the consumers’ perception regarding their ability to monitor and control the information about themselves,” as Yousafzai et al. (2003) described. Privacy and security risks are seen as very dominant determining factors for intending to use any technology (Karim et al., 2020; Mombeuil, 2020; Kapoor et al., 2022). Because of this, we arrived at the following hypothesis:

H4: Privacy and negatively influencing Intend to use Mobile Wallet.

3.6 Coronavirus Disease

Due to the COVID-19 pandemic, people have shifted to online payment methods. According to Aji et al. (2020), people will use mobile wallets more frequently when the risk of transmitting the coronavirus is

high. In this study, this means that when the risk of contracting the disease is high, using a mobile wallet will be strongly encouraged. Coronavirus disease is the foremost determining factor for intent to use any technology (Kapoor et al., 2022). Because of this, we arrived at the following hypothesis:

H5: Coronavirus disease positively influencing Intend to use Mobile Wallet.

3.7 Intend to Use Mobile Wallet

Many terms are used to describe the intent to utilize, such as "intention to use" in the TAM model and "behavioural intention" in the UTAUT model. Behavioural intention is "the degree to which a person has formulated conscious plans to perform or not to perform some specified future behaviour" as defined by Davis, F. (1989).

Karim et al. (2020) concluded research on "Factors Influencing the Use of E-Wallet as a Payment Method among Malaysian Young Adults." The researchers utilized the TAM Model as a basis and hypothesized that the intent to use e-wallets was significantly influenced by privacy and security, usefulness, and ease of use. The primary data was gathered using a questionnaire method that was answered by 330 Malaysian E-Wallet users. The results and conclusions point out that intent to use an e-wallet was significantly influenced by perceived ease of use, usefulness, privacy, and security (Karim et al., 2020).

Mombeuil (2020) has done investigational research on "An exploratory investigation of factors affecting and best predicting the renewed adoption of mobile wallets.". The primary information was gathered from China (252 respondents). The study results confirm that relative convenience, privacy, relative advantage, and security were essential factors in the renewed adaptation of mobile wallets (Mombeuil, 2020).

Kapoor et al. (2022) ended experimental research on "Mobile wallet adoption intention amid COVID-19 pandemic outbreak: A novel conceptual framework". The vital primary information was assembled using a questionnaire method that was answered by 400 respondents from India. The result dictates the notable impact of relative advantage, Favorable infrastructural conditions, and security on Intent to adapt M-Wallets. There was also a marked moderating and mediating impact of relative advantage, Favorable infrastructural conditions, security, and age (Kapoor et al., 2022).

Shah and Bhatt (2023) concluded research on “Digital payment in rural Gujarat: Empirical Evidence for Atmanirbhar Bharat.” The essential primary information was gathered through the use of a questionnaire method that was filled out by 392 respondents from rural Gujarat (India). The data analysis was carried out using *MLR* (multiple linear regression) software. User’s evaluations are significantly affected by security, benefits, convenience of use, and reliability, according to the study’s conclusions (Shah and Bhatt, 2023).

The following is the suggested framework for this investigation, derived from the literature review:

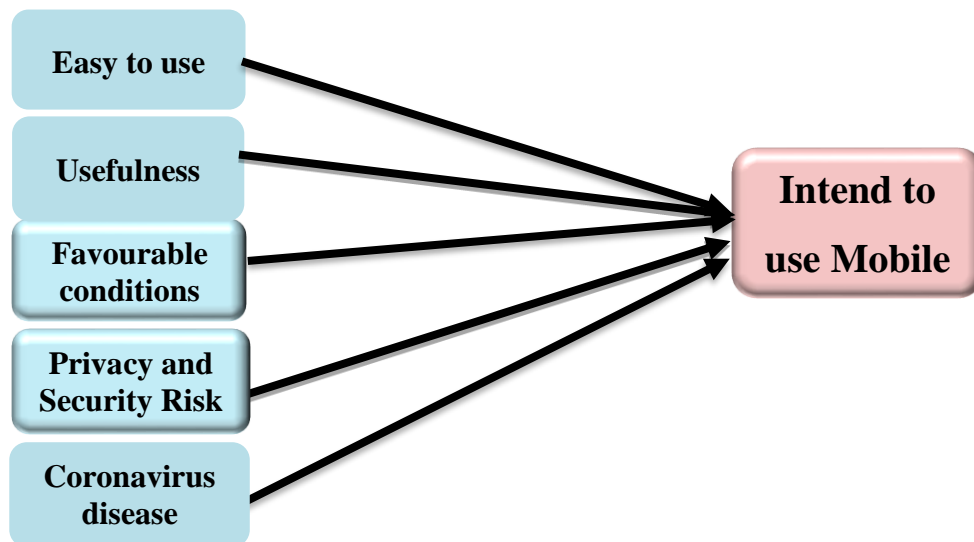


Figure 1: Proposed model of the study

4. Research Methodology

4.1 Survey Instrument

A well-structured questionnaire was utilized to gather primary data for the study. Several scale items have been adapted from earlier works of literature. A 5-point Likert Scale was applied to measure each constructed item. Suggestions from the pilot study were incorporated into the final questionnaire. A pilot study was carried out to gather valid responses.

Table 1: Questionnaire Items

Statements regarding use of Mobile wallet (MW)	Sources
Easy to Use:	(Balaji, 2020; Priyadarshini, 2018; Davis, 1989)
Installation, registration & login process is easy and hassle-free	
Learning the use of MW is easy	
Payment procedure is clear and understandable	
I can manage multiple bank accounts in a single MW	
Usefulness:	(Tamizhvani, 2020; Gayathiry, 2019)
MW is faster than offline mode of payment	
MW makes daily lifestyle easier	
MW is useful for a very small amount of transaction.	
MW helps to maintain transaction history	(Venkatesh, 2012; Tamizhvani, 2020; Balaji, 2020; Patel, 2016)
Favorable Conditions:	
I have the necessary knowledge and resources for the use of MW	
I get a solution of problems from customer care services	
Nowadays, so many vendors accept MW services.	(Tamizhvani, 2020; Gayathiry, 2019; Shin, 2009; Sinha and Singh, 2019;
Privacy and Security:	
I'm afraid of losing money due to transaction failure	
Fear of disconnection during mobile payments	
I worried about service providers may track my transactions	

I don't feel secure to share personal and financial information in MW	Kadalarasane, 2015)
Coronavirus Disease:	(Aji et al., 2020)
During COVID-19 Pandemic, The government motivated payment through MW	
During COVID-19 Pandemic, I preferred to use MW for payments	
I think the COVID-19 pandemic increased my MW usage	
Intent to use Mobile wallet:	(Venkatesh, 2012; Tamizhvani, 2020; Al-jabri, 2012; Lee & Chung, 2009)
I'll intend to continue use MW in daily life	
I will recommend my friends, relatives & colleagues to use MW	
I'm satisfied with the services received from MW	

4.2 Sample

For the study, responses were collected from Mobile Wallet users aged between 18 and 30 years from North Gujarat. The present research uses a non-probability sampling design and convenience sampling technique to collect information. The appropriate sample size was determined based on the number of scale items measured. To justify the sample size, the ratio ranges from 1:4 to 1:10, which means that to measure one item, four responses are necessary (Hinkin, 1995; Hair et al., 2006). In this research, 21 scale items are measured (21*4 = 84). Therefore, at least 84 responses are necessary for this research study. A total of 200 responses were gathered, and 178 valid responses were utilized for further analysis. Samples for the study were assembled from different regions of North Gujarat via Google Forms.

We calculated the requirement for a sample using Cochran's equation. Where Z shows the value for the selected alpha level (1.96), p shows the proportion of the population (0.4), q=(1-p) i.e. 0.6, and e shows the acceptable margin of error is 0.07.

$$n = \frac{Z^2 p(1-p)}{e^2} \quad n=189 \text{ approx.}$$

4.3 Demographic Profile of Respondents

Table 2: Descriptives

	Respondents	Frequency	Valid Percentage
Gender	Female	78	43.8
	Male	100	56.2
Age	Below 20	99	55.6
	21-30	79	44.4
Education	Uneducated	9	5.1
	School	30	16.9
	Graduate	96	53.9
	Postgraduate	33	18.5
	PhD	9	5.1
	Others	1	0.6
Occupation	Student	121	68
	Housewife	16	9
	Unemployed	1	0.6
	Private Employee	33	18.5
	Government Employee	1	0.6
	Business	6.0	3.4
Monthly Income (in Rs.)	Below 10,000	103	57.9
	10,001-20,000	25	14
	20,001-30,000	19	10.7
	30,001-40,000	7	3.9
	40,001-50,000	2	1.1
	Above 50,000	22	12.4
	Google Pay (G Pay)	99	55.6
	Paytm	38	21.3

Mostly used mobile Wallet	Phone Pe	28	15.7
	Vi (Vodafone)	8	4.5
	YONO SBI	2	1.1
	Others (please specify)	3	1.7
Time period of using mobile wallet	Less than 6 months	65	36.5
	6 months to 1 year	33	18.5
	1 to 2 year	32	18
	2 to 4 years	30	16.9
	More than 4 years	18	10.1
Monthly usage of mobile wallet	Less than 3 times	55	30.9
	3-5 times	37	20.8
	5-10 times	28	15.7
	More than 10 times	58	32.6
Average amount spends using a Mobile Wallet per month (in Rs.)	Less than 1,000	71	39.9
	1,001-3000	33	18.5
	3,001-5000	33	18.5
	5,001-10,000	13	7.3
	More than 10,000	28	15.7
Usage of Mobile Wallet for	Booking tickets	79	12.4
	Donation & charity	18	2.8
	Games/music/gifts	30	4.7
	IPO/Investment	30	4.7
	Money transfer	125	19.6
	Online shopping	133	20.8
	Pay bills/Recharge	143	22.4
	Retail stores	80	12.5
	Others	1	0.2

4.4 Data Analysis

4.4.1 Reliability Statistics

The instrument (value of Cronbach's alpha (α)) was utilized in the computation of the coefficient alpha (Cronbach 1951). The Cronbach's alpha (α) coefficient was found to be more than 0.7 in every instance (Hair et al., 2012), which shows that the scale presents good internal reliability.

Table 3 Reliability Statistics

Sr. No	Variable	No. of Items	Cronbach's Alpha
1	Easy to use	4	.842
2	Usefulness	4	.845
3	Favourable conditions	3	.769
4	Privacy and Security Risk	4	.880
5	Coronavirus disease	3	.859
6	Intent to use Mobile Wallet	3	.895

4.4.2 Multiple Regression Analysis

A multiple regression analysis was applied to check the impact of multiple predictors on the criterion. The multiple regression analysis also revealed which independent factor impacts the dependant factor most. The common objective of using multiple regression is to know about the relationship between various independent factors (predictors) and the dependent factors (criterion).

In the research study, intention to use (IU) is taken as the dependent variable, and ease to use, usefulness, Favourable conditions, privacy and security risk, and coronavirus disease are considered the independent variables.

It is observed that the proposed model is significant statistically as the R2 value is 0.701, which takes into consideration the goodness of fit. This shows that the independent

factors are very good determinants of intention to use. The R square value is 70.1% for the variation in intent to use mobile wallets (i.e., dependent variable), which can be determined from the independent factors of ease of use, Usefulness, Favourable conditions, Privacy and Security Risk, and Coronavirus disease).

A significance level is $p = .000$ (sig. $*p < .05$), which dictates that all the independent variables are found to be good determinants of the intent to utilize a mobile wallet. The model was shown to be statistically significant for the research after multiple regression analysis ($R^2 = 0.701$, $F(5, 170) = 92.837$).

Table 4: Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	Significance	Collinearity Statistics
	B	Beta(β)		VIF
Easy to use	-.019	-.017	.793	2.540
Usefulness	.194	.181	.004	2.234
Favourable conditions	.204	.189	.003	2.353
Privacy and Security Risk	-.055	-.065	.142	1.119
Coronavirus disease	.578	.563	.000	1.981

The above table shows the regression coefficients for the standardized (β) and unstandardized (B). The collinearity statistics value (VIF) of the regression model is between 2.540 and 1.119, which is < 10 , which shows no “collinearity” in the regression model (Hair et al., 1998).

From the above table, the equation can be built as follow:

$$\text{Intend to Use Mobile Wallet (IU)} = [\text{Easy to use (0.793)} + \text{Usefulness (0.004)} + \text{Favourable conditions (0.003)} + \text{Privacy and Security Risk (0.142)} + \text{Coronavirus disease (0.000)}]$$

The above table noted Usefulness explains the 18.1% variance, Favourable conditions 18.9% variance, and Coronavirus disease 56.3% variance in intending to use a mobile Wallet. The Usefulness, Favourable conditions, and Coronavirus disease have a significance level < 0.05 (sig. $*p < 0.05$), which shows a major influence on the Intend to use a mobile wallet.

Table 5: Multiple Regression Analysis Results

Hypothesis	Relationship	Standardized Coefficient(β)	p value	Decision
H1	E→IU	-.017(ns)	.793	Not significant
H2	U→IU	.181**	<0.05	Significant
H3	FA→IU	.189**	<0.05	Significant
H4	SP→IU	-.065(ns)	.142	Not significant
H5	CO→IU	.563***	< 0.001	Significant

Note: *** ($p < 0.001$), **($p < 0.05$), and (ns) hypothesis was not significant.

According to the study's findings, H1 and H4 are not significant; however, H2, H3, and H5 are supported, which means they are significant.

Table 6: Hypothesis Test Results

Hypothesis	Relationship	Significant/ Not Significant
H1	Easy to use positively, influencing Intend to use Mobile Wallet.	Not significant
H2	Usefulness positively influencing Intend to use Mobile Wallet.	Significant
H3	Favorable conditions positively influencing Intend to use Mobile Wallet.	Significant
H4	Privacy and Security Risk negatively influencing Intend to use Mobile Wallet.	Not significant
H5	Coronavirus disease positively influencing Intend to use Mobile Wallet.	Significant

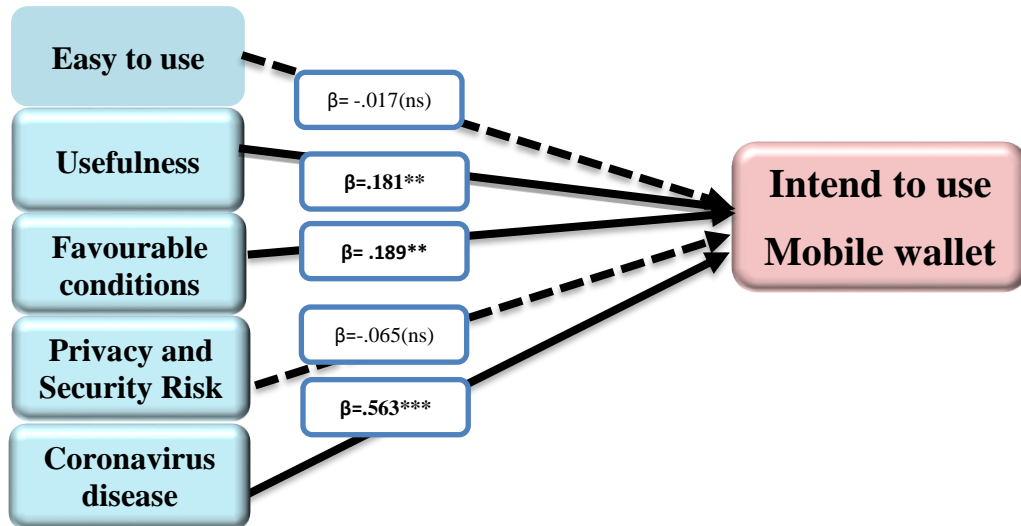


Figure 2: Findings from the proposed model

[***($p < 0.001$), **($p < 0.05$) and (ns) the hypothesis was not significant]

5. Findings

- Outcomes of the study dictate that there are three factors influencing the intent to use out of five factors. Usefulness(U), Favorable conditions (H3), and Coronavirus disease (H5) are the three factors that affect the intent to adopt a mobile Wallet. Other variables like, Easy to use and Privacy & Security are noted as insignificant for the Intent to use.
- Easy to use is noted as non-significant, this result does not comply with UTAUT theory and is unexpected for the study. In different studies, Easy to use (Slade et al., 2015; Madan & Yadav, 2016), and Privacy & Security (Mallat, 2007) were noted as insignificant for intent to adopt the technology.
- Usefulness is noted as effective, which means people found mobile wallets beneficial. When any user knows the benefits from the use of any technology, it will make his/her performance better, this will increase the use of technology.
- Favorable conditions found effective, which means people have enough resources to use a Mobile Wallet and that will lead more towards the usage of Mobile Wallet.

- Coronavirus disease is not a pleasant experience for anyone but when the Coronavirus disease risk is high, this will make strong intent to make use of Mobile Wallet.
- Most of the youngsters (55.6%) use Google Pay (G Pay) as a Wallet. Most of the People (39.9%) are spending less than 1,000 Rs. per month on average. In the last six months, most of the youngsters (36.5%) have started using mobile wallets.
- Most of the People (32.6%) are using Mobile Wallet more than 10 times in a month. Users are mostly using Mobile Wallet to Pay bills and do Recharge (22.4%), then for online shopping (20.8%) and money transfer (19.6%).

6. Discussion

The outcomes of the study dictate that there are three factors influencing the intent to use out of five factors. Usefulness (U), Favorable conditions (H3), and Coronavirus disease (H5) are the three factors that affect the intent to adopt Mobile Wallet. Other variables like 'Easy to Use' and Privacy & Security are noted as insignificant for the intent to use. Easy to use is noted as non-significant; this result does not comply with the UTAUT theory and is unexpected for the study. In different studies Easy to use (Slade et al.,2015; Madan & Yadav,2016), and Privacy & Security (Mallat, 2007) were noted as insignificant for intent to adopt the technology.

Usefulness is noted as an important determinant, which is in line with (Davis, 1989; Venkatesh & Davis, 2000; Karim et al., 2020). Favorable condition is seen as an important determinant for intent to adopt any technology in different studies, which is in line with (Kapoor et al., 2022; Venkatesh et al., 2003). Coronavirus disease is seen as the positive determining factor for intending to use mobile wallets, which is in line with (Kapoor et al., 2022).

7. Research Limitations and Implications for the Future

A limitation of this study is that samples were assembled from the north Gujarat region only. Thus, future research could be done in other regions of India as well. In the research study, respondents were only users of mobile wallets, so further study can be done by considering non-users of mobile wallets.

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